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**PERIODIC REVIEW REPORT**

**275 FRANKLIN STREET SITE (BCP SITE No. C915208)**  
**AND**  
**432 PEARL STREET SITE (BCP SITE No. C915237)**

**BUFFALO, NEW YORK**

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May 2020

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Prepared for:

**BUFFALO DEVELOPMENT CORPORATION**

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**PERIODIC REVIEW REPORT**  
**275 Franklin Street Site (BCP Site No. C915208) &**  
**432 Pearl Street Site (BCP Site No. C915237)**

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## 1.0 INTRODUCTION

Benchmark Environmental Engineering & Science, PLLC (Benchmark) has prepared this Periodic Review Report (PRR) to summarize the post-remedial status of New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) Site Nos. C915208 and C915237 located in the City of Buffalo, Erie County, New York.

This PRR has been prepared for the subject BCP Sites in accordance with NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation (Ref 1). Appendix A includes the Institutional and Engineering Control (IC/EC) Certification Forms completed based on the Site inspection performed April 1, 2020.

This PRR and associated certifications have been completed on behalf of the BCP Site owner, Buffalo Development Corporation (BDC), to document post-remedial activities covered by the Site Management Plan (SMP; Ref. 2). The post-remedial period covered by this PRR is April 28, 2019 to April 27, 2020 for the 275 Franklin Street Site and April 29, 2019 to April 28, 2020 for the 432 Pearl Street Site.

### 1.1 Site Background

In October 2006, BDC entered into a Brownfield Cleanup Agreement (BCA) with NYSDEC to investigate and remediate 275-277 Franklin Street and 279 Franklin Street, an approximate 0.27-acre property located in Buffalo, New York. Later, 267 Franklin Street and 432 Pearl Street, approximately 0.7 acres combined, were incorporated into the “432 Pearl Street Site” under BCP Site Number C915237. Both properties are in the County of Erie, New York and encompasses tax parcel numbers 111.38-2-22, 111.38-2-23, 111.38-2-20.1, and 111.38-2-4.1 per Erie County Tax Map records. The Sites are bounded by a restaurant and surface parking lot to the north, Pearl Street to the east, a mixed-use building to the south, and Franklin Street to the west (see Figures 1 and 2).

Neither Site has redevelopment plans outside of the current uses. The BCP Sites were remediated to NYSDEC Part 375 Track 4 restricted-residential soil cleanup objectives (RRSCOs).

## 1.2 Summary of Historical Investigation Findings

### *1.2.1 Preliminary Investigations*

In September 2004, a Limited Environmental Investigation was performed at 275-277 Franklin Street by Nature's Way Environmental Consultants & Contractors, Inc. The results of that investigation indicated that the 275 Franklin Street Site soils and groundwater were impacted by tetrachloroethene (PCE), a chlorinated volatile organic compound (cVOC) typically associated with dry cleaning operations.

In March-June 2006, Benchmark performed a Preliminary Site Investigation at the BCP Sites. The Preliminary Site Investigation was performed to assess soil/fill materials and soil vapor on-site, and to ascertain if subsurface environmental conditions on these parcels were likely to impact redevelopment of the BCP Sites. The results of the investigation indicated that the 275 Franklin Street Site soils had been impacted by semi-volatile organic compounds (SVOCs), mercury, and lead. In addition, soil vapor samples collected from both BCP Sites contained elevated concentrations of cVOCs. Field screening of soil samples using a photoionization detector (PID) did not indicate VOC concentrations above background concentration

### *1.2.2 Remedial Investigation (RI)*

RI activities were completed in November 2006, December 2006, and January 2007 for both BCP Sites. The following analytical results were obtained during the RI:

#### Soil/Fill

- Concentrations of pesticides, PCBs, and metals in subsurface soil were below Part 375 RRSCOs on the 275 Franklin Street Site.
- Concentrations of PCE were detected above RRSCOs on the 275 Franklin Street Site with the highest concentration (2,200 mg/kg) in the 8- to 10-foot interval in boring MW-6 during the April 2008 sampling event.
- Concentrations of VOCs, pesticides, and PCBs in subsurface soil were below Part 375 RRSCOs on the 432 Pearl Street Site.
- Concentrations of lead and mercury were detected slightly above their respective RRSCOs at one sample location on the 432 Pearl Street Site.
- PAHs, including benzo(a)anthracene, benzo(b)fluoranthene, benzo(k)pyrene, benzo(a)pyrene, chrysene, dibenz(a,h)anthracene, and indeno(1,2,3-cd)pyrene were

detected in subsurface soil above RRSCOs at one or two samples locations on the 432 Pearl Street Site.

- Soil samples collected by the NYSDEC and analyzed for VOCs during their 2009 Off-Site Investigation did not contain VOCs above Part 375 Unrestricted SCOs (USCOs).

### **Groundwater**

- Total inorganic compound (arsenic, chromium, copper, iron, lead, manganese, and/or sodium) concentrations exceeded NYSDEC Class GA groundwater quality standards/guidance values (GWQS/GVs) at sample locations PZ-5, PZ-6, MW-1, and/or MW-2. These compounds either slightly exceeded their respective GWQS/GVs and/or are naturally occurring minerals.
- PAHs were detected only in MW-2 (and/or its blind duplicate) at estimated concentrations that exceeded their respective Class GA GWQSs/GVs.
- cVOCs are the primary contaminants of concern in shallow groundwater with PCE and/or its chemical breakdown products, trichloroethene (TCE) and cis-1,2-dichloroethene (DCE), detected above GWQS/GVs on both BCP Sites and off-site.
- The highest cVOCs concentrations were generally observed in the shallow groundwater in the area of the former drycleaner on 275 Franklin Street Site and immediately downgradient on the 267 Franklin Street parcel on the 432 Pearl Street Site.
- Deep groundwater across both BCP Sites contains low (residual) concentrations of cVOCs.

### **Soil Vapor Intrusion**

- Soil vapor concentrations at the 432 Pearl Street Site ranged from non-detect to 140 ug/m<sup>3</sup> (PCE). Soil vapor results from the 275 Franklin Street Site reported PCE (14,000 ug/m<sup>3</sup>), TCE (70 ug/m<sup>3</sup>), and 1,1,1-trichloroethane (71 ug/m<sup>3</sup>) concentrations among other constituents.
- Soil vapor samples collected from the 267 Franklin Street apartment building (part of the 432 Pearl Street Site) by NYSDEC exceeded NYSDOH air matrix criteria, indicating the need for on-site sub-slab soil vapor mitigation to minimize current exposure.
- Soil vapor samples collected from 265 Franklin Street (off-site) did not exceed the NYSDOH air matrix criteria.

### **1.3 Compliance**

At the time of the annual Site inspection (04/1/2020), the Site was fully compliant with the NYSDEC-approved SMP (Ref 2).

### **1.4 Recommendations**

Based on observations recorded during the Site inspection and IC/EC certification, no modifications are recommended for these Sites.

## 2.0 SITE OVERVIEW

All remediated parcels included in the 275 Franklin Street Site and 432 Pearl Street Site are subject to a comprehensive, site-wide SMP that identifies requirements for monitoring and maintenance of IC/ECs and procedures for post-remedial excavation and related activities. Final remedial activities undertaken at both Sites are described below.

### 2.1 Summary of Remedial Actions

Benchmark Environmental Engineering & Science, PLLC in association with TurnKey Environmental Restoration, LLC (Benchmark-TurnKey) was retained by BDC to serve as the design-builder and Engineer of Record for the BCP activities with oversight provided by the NYSDEC.

#### *2.1.1 Interim Remedial Measures (IRMs)*

On July 1, 2008, the NYSDEC approved the IRM Work Plan (Ref. 3) prepared by Benchmark to identify the scope of the planned remedial measures for the 275 Franklin Street Site and the means by which they will be completed. Remedial measures were implemented from summer 2008 through fall 2009. The NYSDEC Division of Environmental Remediation monitored the remedial actions to verify the work was performed in accordance with the BCA, the approved IRM Work Plan, and DER-10 (Ref. 1). IRMs were implemented on behalf of BDC to promptly address on-site soil and groundwater on the 275 Franklin Street Site impacted by cVOCs to immediately mitigate public health and environmental concerns.

#### Soil Vapor Extraction System

A soil vapor extraction (SVE) system was installed on the 275 Franklin Street Site and operated continuously from December 8, 2008 until February 2009 when it was temporarily shut-down due to winter weather. The system was restarted on March 11, 2009 and ran continuously through September 2009. Post-IRM soil samples collected on September 17, 2009 were compared to pre-IRM data from April 2008 and Part 375 RRSCOs. The February 2009 data show significant reductions of cVOCs in unsaturated soils to well below RRSCOs and below unrestricted SCOs (USCOs). Toxicity Characteristic Leaching Procedure (TCLP) analysis also verified that these remediated soils were not characteristically hazardous.

### **In-Situ Groundwater Treatment**

In August 2008, in-situ enhanced bioremediation of cVOCs in groundwater was performed via injection of hydrogen release compound (HRC) into 14 delivery points at 275-277 Franklin and 21 delivery points at 279 Franklin. Following HRC injection, a groundwater sampling program, consisting of eight monitoring events conducted between October 2008 and June 2012, was implemented to evaluate the effectiveness of the in-situ groundwater treatment program. The data generally showed lower trending residual concentrations of total cVOCs in monitoring wells on both BCP Sites except for shallow well MW-5 (located on the 275 Franklin Street Site), which contained relatively high residual cVOC concentrations.

### **Active Sub-Slab Depressurization System**

Although not part of the IRM Work Plan, the NYSDEC installed an active sub-slab depressurization (ASD) system within the 267 Franklin Street apartment building (on the 432 Pearl Street Site) prior to BDC's ownership of that parcel. Malcolm Pirnie, Inc. performed initial communication testing of the sub-slab to evaluate the number of extraction points and type of exhaust fans required to optimize the systems performance under the specific Site conditions. The communication testing and system installation is detailed in the Immediate Investigation Work Assignment Summary Report, 275 Franklin Street Site, Buffalo, NY prepared by Malcolm Pirnie, Inc. in December 2009 for the NYSDEC (Ref. 4). Two separate ASD systems (one on the south side and one on the north side) were designed and installed by Mitigation Tech under contract to Malcolm Pirnie, Inc.:

- Each system is made up of a network of 3-inch and 4-inch diameter PVC piping that provides multiple suction points below the concrete basement floor. The systems provide continuous vacuum in the sub-slab through operation of in-line fans mounted at the end of the system above the roof line.
- System 1 has five suction points and two RadonAway RP-265 series centrifugal in-line fans. System 2 has three suction points and one RadonAway GP-501 series centrifugal in-line fan. U-tube monometers for each system are installed on vertical risers to provide evidence and measurement of system vacuum. Figure 4 shows the layout of the ASD system.
- Malcolm Pirnie performed pre-ASD system installation air sampling events in May and October 2008, and the system began operation in December 2008. Post-ASD system activation air sampling events were performed in February and September

2009. Following installation of the vapor mitigation system, measured concentrations of TCE and PCE were significantly reduced. Where detected in the September 2009 indoor air samples, TCE and PCE concentrations were well below the recommended DOH action levels.

The ASD is maintained and monitored in accordance with the NYSDEC-approved SMP. In the summer 2015, BDC replaced (in kind) the RadonAway GP-501 Series centrifugal in-line fan.

### ***2.1.2 Final Remedial Actions***

In April 2010, BDC submitted a RI/AA/IRM Report (Ref. 5) to NYSDEC that summarized the RI, supplemental remedial activities, and the IRM completed in 2008-2009. NYSDEC provided a comment letter to that report in February 2011 that, amongst other items, required additional groundwater remedial measures beyond the proposed in-situ HRC injections in the vicinity of MW-5 “source area” on the 275 Franklin Street Site in order to mitigate off-site migration of cVOCs.

The Revised RI/AA/IRM Report was submitted in January 2013. NYSDEC provided additional comments in July 2013 and prepared draft Proposed Decision Documents for each BCP Site. The final RI/AA/IRM Report was submitted to NYSDEC in July 2013 and approved September 30, 2013.

The following is a summary of the Remedial Actions performed at the BCP Sites:

1. Maintenance of the existing cover system to allow for continued commercial use of the Site.
2. Injection of a solution, zero valent iron (ZVI) and nutrients, into Site groundwater in April 2014 to enhance both abiotic and biological reductive processes.
3. Injection of a chemical oxidant into Site groundwater and saturated “smear zone” interval in March and April 2016 to destroy organic contaminants (Ref. 6).
4. Excavation of source area soil/fill in December 2016 with application of a chemical oxidant to excavation bottom to address residual impact prior to backfilling (Ref. 7). The area was backfilled with clean overburden soil followed by demarcation fabric then clean imported sand and stone. The asphalt cover system was reinstalled to match surrounding grade.
5. Execution of recording of an Environmental Easement to restrict groundwater and land use and prevent future exposure to any contamination remaining at the Site.

6. Development and implementation of a Site Management Plan for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) operation and maintenance and (4) reporting.

These additional final remedial actions were completed at the Site from April 2014 to December 2016; the asphalt repair was completed in September 2017. The remedial program was successful in achieving the remedial objectives for the Sites and are described in more detail in the NYSDEC-approved July 2017 Final Engineering Report (FER; Ref. 8). NYSDEC issued Certificates of Completion (COCs) for 275 Franklin Street Site on December 27, 2017 and 432 Pearl Street Site on December 28, 2017.

### 3.0 REMEDY PERFORMANCE

A post-remedial Site inspection involving a walk-over of both BCP Sites was performed on April 1, 2020 by Ms. Lori Riker, P.E. of Benchmark to visually observe and document the use of the Site for restricted-residential use, confirm absence of Site groundwater use, inspect the integrity of the cover system, confirm ASD system operation, and verify conformance with other requirements under the SMP. The Site inspection confirmed that the controls are in-place and functioning as intended in accordance with the SMP.

Appendix A includes the completed IC/EC Certification forms. Appendix B includes photographs taken during the April 1, 2020 inspection.

## 4.0 SITE MANAGEMENT PLAN

A site-wide SMP was prepared for the 275 Franklin Street and 432 Pearl Street Sites in July 2017 and approved by NYSDEC. Key components of the SMP are described below.

### 4.1 Institutional and Engineering Control (IC/EC) Plan

Since remaining contaminated soil/fill and groundwater exists beneath both 275 Franklin Street and 432 Pearl Street Sites, IC/ECs are required to protect public health and the environment. The IC/EC Plan describes the procedures for the implementation and management of all IC/ECs on the Sites.

#### 4.1.1 Institutional Controls

The following institutional controls apply to both Sites:

- The property may only be used for restricted-residential or commercial use provided that the long-term IC/ECs included in the SMP are employed.
- The property may not be used for a higher level of use, such as unrestricted and residential use, without additional remediation and amendment of the Environmental Easements, as approved by the NYSDEC.
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP.
- The use of groundwater underlying the property as a source of potable or process water is prohibited without necessary water quality treatment, as determined by the NYSDOH or County DOH, rendering it safe for intended use.
- The potential for vapor intrusion must be evaluated for any new buildings developed on the property, and any potential impacts that are identified must be monitored or mitigated.
- Compliance with the Operation & Maintenance Plan, included as Section 4 of the SMP (Ref. 2), for the maintenance and monitoring of the existing vapor intrusion ASD system within the 14-unit apartment building at 267 Franklin Street.
- Vegetable gardens and farming on the BCP Sites are prohibited.
- The Site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that (1) controls employed at the Controlled Property are unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that

constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time to evaluate the continued maintenance of controls. This certification shall be submitted annually, or an alternate period of time that NYSDEC may allow, and will be made by an expert that the NYSDEC finds acceptable.

#### ***4.1.2 Engineering Controls***

Engineering controls include:

- Cover System (both Sites): The cover system, including building foundations, concrete sidewalks, concrete or asphalt driveways, parking areas, and landscaped vegetated areas, must be maintained in compliance with the SMP.
- In-Situ Plume Reduction: On the 275-277 Franklin Street property, PersulfOx was added to the base of the 2016 excavation to address residual groundwater contamination in-situ.
- Vapor Intrusion Mitigation: Requires placement of a vapor barrier beneath newly installed building concrete floor slabs for both Sites and continued operation of the ASD system installed within the 267 Franklin Street apartment building (on the 432 Pearl Street Site).

At the time of the Site inspection, the Sites covered by this PRR were fully compliant with all IC/EC requirements except for minor repair needed on the cover system as discussed in Section 4.3.

#### **4.2 Excavation Work Plan**

An Excavation Work Plan (EWP) was included in Appendix B of the approved SMP. The EWP provides guidelines for the management of soil/fill material during any future intrusive activities. Any intrusive work that will penetrate the cover system, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system, must be performed in compliance with the EWP and conducted in accordance with a site-specific Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) included with the SMP.

There were no intrusive activities requiring management of on-site soil or fill material, placement of backfill materials, or disturbance of the cover system during the monitoring period. No repairs to the cover system were required during the reporting period.

### 4.3 Annual Inspection and Certification Program

The Annual Inspection and Certification Program outlines requirements for certifying and attesting that the IC/ECs employed on the Sites are unchanged from the original design and/or previous certification. The Annual Certification includes a Site inspection and completion of the NYSDEC's IC/EC Certification Form. The Site inspection is intended to verify that the IC/ECs:

- Are in place and effective.
- Are performing as designed.
- That nothing has occurred that would impair the ability of the controls to protect the public health and environment.
- That nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls.
- Access is available to the Site to evaluate continued maintenance of such controls.

Inspection of 275 Franklin Street Site and 432 Pearl Street Site was conducted by Ms. Lori Riker, P.E. of Benchmark on April 1, 2020. Ms. Riker is a licensed and registered NY State Professional Engineer, which meets the requirements of a Qualified Environmental Professional (QEP) per 6NYCRR Part 375.12. At the time of the inspection, no new redevelopment activities were noted on either the 275 Franklin Street or 432 Pearl Street Sites. The asphalt cover present on both Sites was intact and functioning as intended. No observable indication of intrusive activities was noted during the Site inspection.

Appendix A includes the completed Site Management PRR Notice – Institutional and Engineering Controls Certification Forms. Appendix B includes a PRR photo log.

### 4.4 Operation, Monitoring and Maintenance Plan

The Operation, Monitoring and Maintenance (OM&M) Plan describes the measures necessary to operate, monitor, and maintain the mechanical components of the remedy selected for the Site and is more fully described in Section 4.0 of the SMP.

Information on non-mechanical Engineering Controls (i.e., cover system) is provided in Section 4.1 of this PRR.

#### ***4.4.1 Sub-Slab Depressurization System***

The ASD system manometers and roof-top fans were inspected by Ms. Lori Riker, P.E. of Benchmark on April 1, 2020. The vacuum readings (in H<sub>2</sub>O) from each systems' u-tube manometers at the time of the inspection were 1.5 inches of water column (w.c.) at ASD System #1 and 0.5 inches of w.c. at ASD System #2. At the time of the inspection, readings confirmed adequate depressurization and fans were operating as designed. Monthly ASD system readings recorded by the apartment building maintenance manager confirm both systems continue to operate as designed. Appendix C includes the ASD logs for Systems #1 and #2.

Figure 4 provides a layout of the system depicting the piping, fan locations, and extraction points. ASD system installation and manual information is included in Appendix H of the SMP (Ref. 2).

## 5.0 GROUNDWATER MONITORING

Groundwater monitoring events were completed in general accordance with the SMP. Sampling of piezometers PZ-4R, PZ-5, PZ-6, PZ-11, PZ-12, PZ-13, PZ-14 and monitoring wells MW-5R, MW-23S, MW-24S and MW-24D was completed on November 20, 2019 and April 1, 2020.

Post-remedial groundwater and performance monitoring consisted of collecting groundwater samples using low-flow sampling procedures per Benchmark's Field Operating Procedure (FOP) contained in Appendix E of the SMP. Table 1 summarizes the monitoring well and piezometer construction details. Table 2 provides groundwater elevation data between October 2008 and April 2020. Figures 5 and 6 present the groundwater isopotential maps for the November 2019 and April 2020 sampling events. Groundwater flow is consistent with previous figures, flowing southwest across the Sites. Figures 7 and 8 present the isoconcentration maps for total cVOCs using the November 2019 and April 2020 groundwater data.

Groundwater samples from each of the sampled wells/piezometers were analyzed for TCL VOCs per USEPA Method 8260. Field parameters including pH, temperature, specific conductance, turbidity, dissolved oxygen, and oxidation-reduction potential were also collected. Groundwater samples were submitted under chain-of-custody command to Alpha Analytical, a NYSDOH ELAP laboratory, for analysis. Appendix D includes the laboratory analytical data packages and field notes. The November 2019 and April 2020 groundwater data were uploaded to the NYSDEC EQUIS database on April 14, 2020.

Table 3 summarizes analytical data from recent as well as historic groundwater monitoring events with comparison to Class GA GWQS/GVs as listed in NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) (1.1.1). Benchmark has performed six semi-annual groundwater sampling events at four monitoring wells and seven piezometers since the 2016 remedial excavation. On-site and off-site groundwater quality results are discussed below.

### **On-Site Groundwater Quality:**

Total cVOC (specifically cis-1,2-DCE, PCE and TCE) concentrations decreased following excavation except at piezometers PZ-4R and PZ-12. Piezometer PZ-13 showed an

initial decrease in cVOC concentrations after excavating; however, no apparent trend was observed in the six subsequent sampling events. Monitoring well MW-5R (former source area well) had a 99.99% reduction in both total cVOCs and PCE concentrations between the pre- and post-excavation sampling. Results indicate an overall decreasing trend in most of the monitoring locations. The November 2019 and April 2020 sampling events are summarized below with a comparison to historic sampling results:

- PCE was detected at concentrations ranging from 13 to 3,600 ppb. An overall concentration decrease was observed at piezometers PZ-5, PZ-6, PZ-11, PZ-12, PZ-13 and MW-5R over the six post-excavation sampling events.
- TCE was detected above the GWQS at piezometers PZ-4R, PZ-12, PZ-13, PZ-14 and monitoring well MW-5R, with concentrations ranging from 7.9 to 180 ppb. A steady concentration decrease was observed at piezometer PZ-4R. An overall concentration decrease was observed at piezometer PZ-12 with only the November 2019 result exceeding the GWQS.
- Cis-1,2-DCE was detected above the GWQS at piezometers PZ-4R, PZ-11, PZ-13, PZ-14 and monitoring well MW-5R, with concentrations ranging from 7.7 to 340 ppb. PZ-12 was reported as non-detect during both November 2019 and April 2020 sampling events; however, in both cases the method detection limits (MDLs) of 7 and 14 ug/L are greater than the GWQS. PZ-4R, PZ-11 and PZ-12 showed an overall concentration decrease since the initial post-excavation sampling event.
- Vinyl chloride (VC) was only detected in piezometers PZ-13 (38 ppb in November 2019 and 8.9 ppb in April 2020) and PZ-14 (35 ppb in November 2019 and 24 ppb in April 2020). Over the six post-excavation sampling events, a general concentration decrease was observed at PZ-13 and PZ-14.

#### **Off-Site Groundwater Quality:**

Off-site monitoring wells include MW-23S and MW-24S (sampled by Benchmark), MW-24D (sampled by Benchmark and NYSDEC), and MW-25S and MW-26S (sampled by NYSDEC). Total cVOC (specifically PCE) concentrations in shallow overburden well MW-24S have steadily decreased over the six post-excavation sampling events and only cis-1,2-DCE and PCE remain above GWQs. Shallow off-site groundwater results at well MW-24S suggest a continued degradation of cVOCs immediately downgradient from the Site. Well MW-23S showed an overall decreasing trend for total cVOCs (specifically PCE) over the first five post-excavation sampling events but increased during the April 2020 event; however, the only parameter exceeding GWQs at well MW-23S is PCE. An increase in cVOCs at well

MW-25S was observed during the NYSDEC's February 2019 sampling event. The PCE concentration at well MW-26S decreased between the 2017 and 2019 sampling events. As of this submittal, NYSDEC has not scheduled additional off-site groundwater monitoring.

Deep well MW-24D has experienced an overall slight increase in total cVOC (specifically cis-DCE and PCE). However, the overall cVOCs concentrations have decreased since November 2018.

## 5.1 Data Usability

Appendix E includes the data usability summary reports (DUSRs) completed by Data Validation Services. Table 3 has been updated to reflect the final accepted data. Results for the samples are usable either as reported or with minor qualification as estimated due to failure for calibration standard responses to meet validation guidelines. Results for 1,4-dioxane have been rejected due to low responses in the calibration standards; however, 1,4-dioxane was not detected about the method detection limit in any sample.

## 6.0 CONCLUSIONS AND RECOMMENDATIONS

At the time of the Site inspection:

- The cover system at 275 Franklin Street and 432 Pearl Street Sites complied with the SMP.
- The ASD systems within the apartment building at 267 Franklin Street have been monitored monthly and determined to be functioning properly.
- Most on-site groundwater monitoring locations indicate decreasing trends, affirming that remedial actions have been effective in removing source contamination and are continuing to degrade contaminants of concern.
- Continued decreasing trends were observed at off-site groundwater monitoring well MW-24S directly downgradient of the Site indicating effective remediation of the contaminant source. The total cVOCs in off-site well MW-23S increased during the last monitoring event indicating historic plume migration traveling in the direction of groundwater flow.

As outlined in the July 2017 SMP, the frequency of groundwater monitoring is semi-annual for two years then annual for two years. Since July 2017, four semi-annual groundwater sampling events have been performed and cVOCs have significantly decreased; therefore, we recommend moving into the annual groundwater monitoring phase with the next sampling occurring in April 2021. No additional modifications are recommended for the 275 Franklin Street and 432 Pearl Street Sites.

## 7.0 DECLARATION/LIMITATIONS

Benchmark Environmental Engineering & Science, PLLC personnel conducted the annual site inspection for BCP Site Nos. C915208 and C915237 in Buffalo, New York, according to generally accepted practices. This report complies with the scope of work provided to Buffalo Development Corporation by Benchmark Environmental Engineering & Science, PLLC.

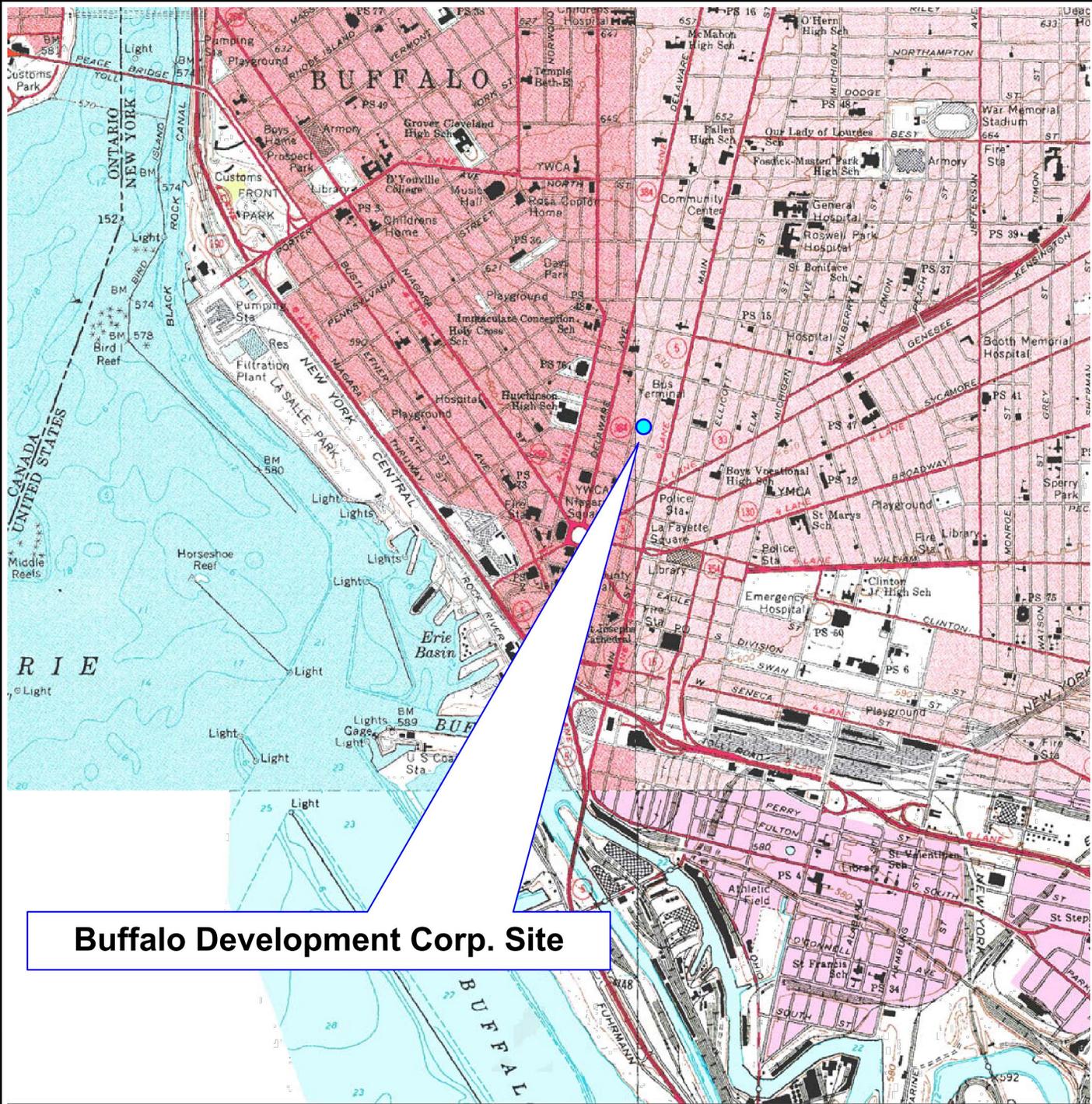
This PRR has been prepared for the exclusive use of Buffalo Development Corporation. The contents of this PRR are limited to information available at the time of the Site inspection. The findings herein may be relied upon only at the discretion of Buffalo Development Corporation. Use of or reliance upon this PRR or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC.

## 8.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10/ Technical Guidance for Site Investigation and Remediation*. May 3, 2013.
2. Benchmark Environmental Engineering & Science, PLLC. *Site Management Plan, 275 Franklin Street Site, BCP Site No. C915208 and 432 Pearl Street Site, BCP Site No. C915237, Buffalo, New York*. July 2017
3. Benchmark Environmental Engineering & Science, PLLC. *Interim Remedial Measures Work Plan, 275 Franklin Street Site, Buffalo, NY*. June 2008
4. New York State Department of Environmental Conservation. *Immediate Investigation Work Assignment Summary Report, 275 Franklin Street Site, Buffalo, New York*. December 2009.
5. Benchmark Environmental Engineering & Science, PLLC and TurnKey Environmental Restoration, LLC. *Remedial Investigation/ Alternatives Analysis/ Interim Remedial Measures Report, 275 Franklin Street & 432 Pearl Street Sites, Buffalo, New York, BCP Site Nos. C915208 & C915237*. April 2010. Revised January and July 2013.
6. Benchmark Environmental Engineering & Science, PLLC. *Additional Remedial Measure Work Plan, 275 Franklin Street Site, Buffalo, New York, BCP Site No. C915208*. January 14, 2016.
7. Benchmark Environmental Engineering & Science, PLLC. *Remedial Action Work Plan – Revision 1, 275 Franklin Street Site, Buffalo, New York, BCP Site No. C915208*. November 22, 2016
8. Benchmark Environmental Engineering & Science, PLLC. *Final Engineering Report, 275 Franklin Street Site, BCP Site No. C915208 and 432 Pearl Street Site, BCP Site No. C915237, Buffalo, New York*. October 2017.

# FIGURES

**FIGURE 1**



**Buffalo Development Corp. Site**



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2558 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0599

**SITE LOCATION AND VICINITY MAP**

PERIODIC REVIEW REPORT

275 FRANKLIN STREET & 432 PEARL STREET SITES  
BUFFALO, NEW YORK  
BCP NO. C915208 & C915237

PREPARED FOR

**BUFFALO DEVELOPMENT CORPORATION**

PROJECT NO.: 0156-019-002

DATE: MAY 2020

DRAFTED BY: BCH

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DATE: MAY 2020  
DRAFTED BY: CMC

LEGEND:

- 275 FRANKLIN STREET BCP SITE (BCP NO. C915208)
- 432 PEARL STREET BCP SITE (BCP NO. C915237)
- EXISTING BUILDING
- PARCEL LINE
- FENCE
- MW-1  DEEP (1) / INTERMEDIATE (2) MONITORING WELL
- MW-23S  OFF-SITE SHALLOW MONITORING WELL (5)
- MW-22S  OFF-SITE SHALLOW MONITORING WELL - DECOMMISSIONED 2018 (2)
- MW-23D  OFF-SITE DEEP MONITORING WELL (2)
- MW-22D  OFF-SITE DEEP MONITORING WELL - DECOMMISSIONED 2018 (2)
- MW-5R  SHALLOW MONITORING WELL
- PZ-4  SHALLOW PIEZOMETER



**SITE PLAN (AERIAL)**  
 PERIODIC REVIEW REPORT

275 FRANKLIN STREET SITE  
 BUFFALO, NEW YORK  
 BCP NO. C915208

PREPARED FOR

**BUFFALO DEVELOPMENT CORPORATION**



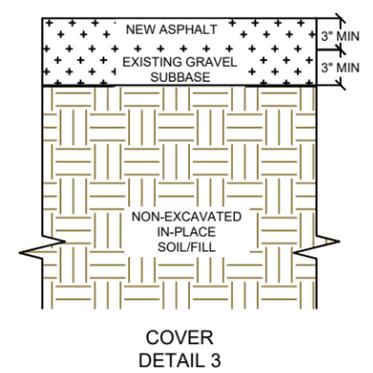
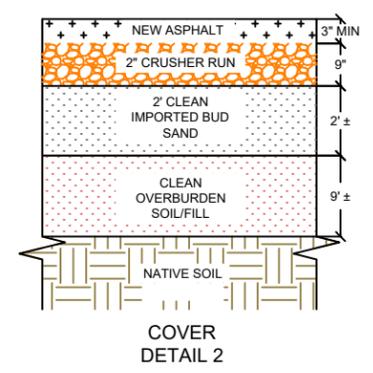
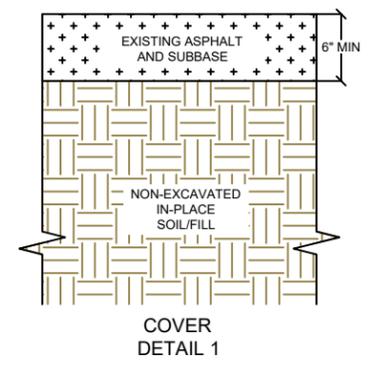
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**FIGURE 2**

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**LEGEND:**

- 275 FRANKLIN STREET BCP SITE (BCP NO. C915208)
- 432 PEARL STREET BCP SITE (BCP NO. C915237)
- EXISTING BUILDING
- SEE COVER SYSTEM DETAIL 1
- SEE COVER SYSTEM DETAIL 2 (REMEDIAL EXCAVATION AREA)
- SEE COVER SYSTEM DETAIL 3 (NEW ASPHALT AREA)
- PARCEL LINE



SCALE: 1 INCH = 50 FEET  
SCALE IN FEET  
(approximate)



**SITE WIDE COVER SYSTEM**  
PERIODIC REVIEW REPORT  
275 FRANKLIN STREET & 432 PEARL STREET SITES  
BUFFALO, NEW YORK  
BCP NO. C915208 & C915237  
PREPARED FOR  
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SCIENCE, PLLC  
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SUITE 300  
BUFFALO, NY 14218  
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**FIGURE 3**

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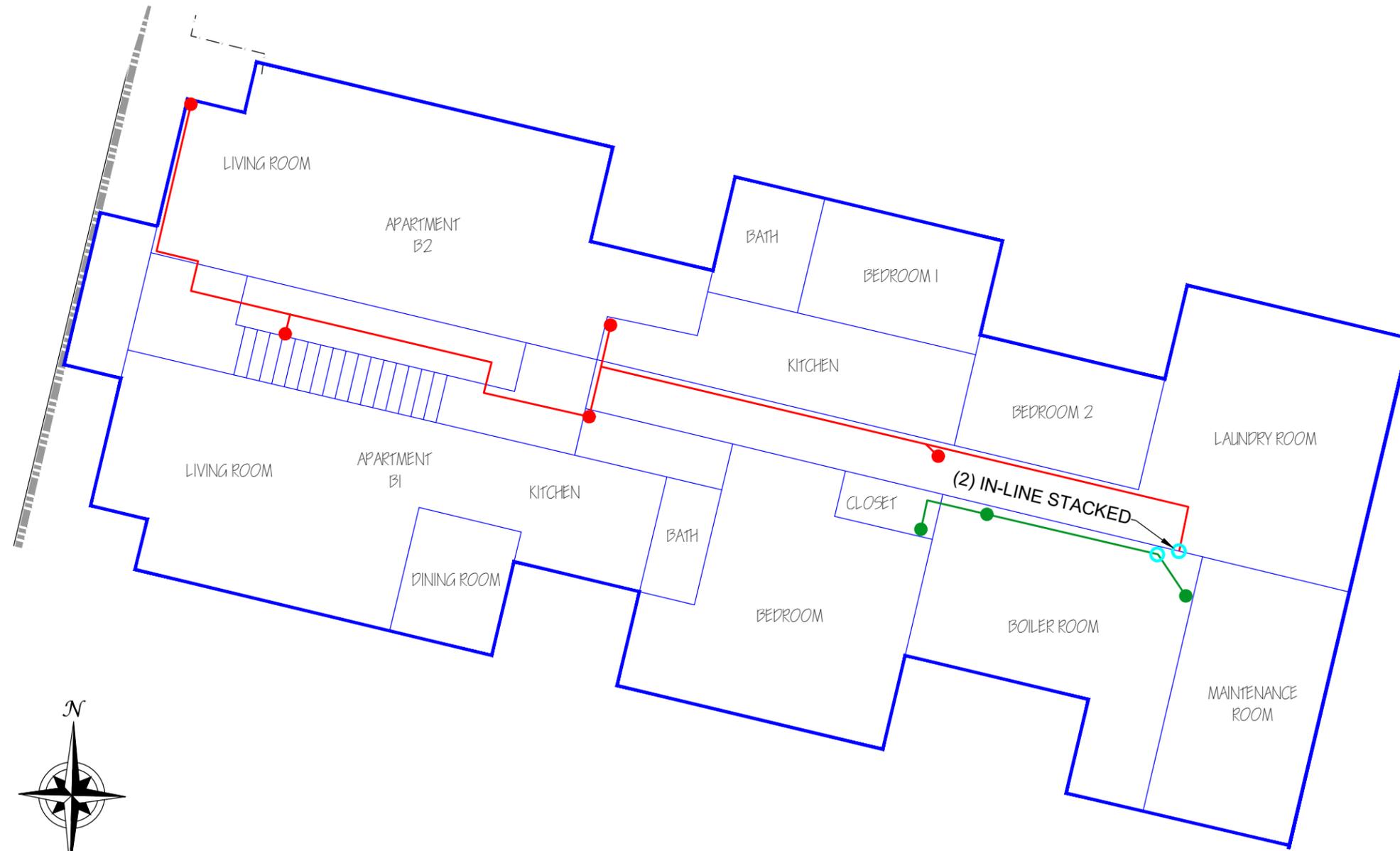
DATE: MAY 2020  
DRAFTED BY: CMC

LEGEND:

- ▭ 267 FRANKLIN STREET APARTMENT BUILDING (432 PEARL STREET BCP SITE)
- ASD SYSTEM 1 (5 SUBSLAB SUCTION POINTS): RP-265 Series Centrifugal In-Line Fans (2)
- ASD SYSTEM 2 (3 SUBSLAB SUCTION POINTS): GP-501 Series Centrifugal In-Line Fan (1)
- RADONAWAY IN-LINE FAN (3)

NOTES:

1. THIS FIGURE WAS DERIVED FROM THE MALCOLM PIRNIE IMMEDIATE INVESTIGATION WORK ASSIGNMENT SUMMARY REPORT DATED DECEMBER 2009.



10' 0' 10' 20'

SCALE: 1 INCH = 10 FEET  
SCALE IN FEET  
(approximate)

DATE: MAY 2020  
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**ASD SYSTEM LAYOUT**

PERIODIC REVIEW REPORT

275 FRANKLIN STREET & 432 PEARL STREET SITES  
 BCP NO. C915208 & C915237  
 BUFFALO, NEW YORK  
 PREPARED FOR  
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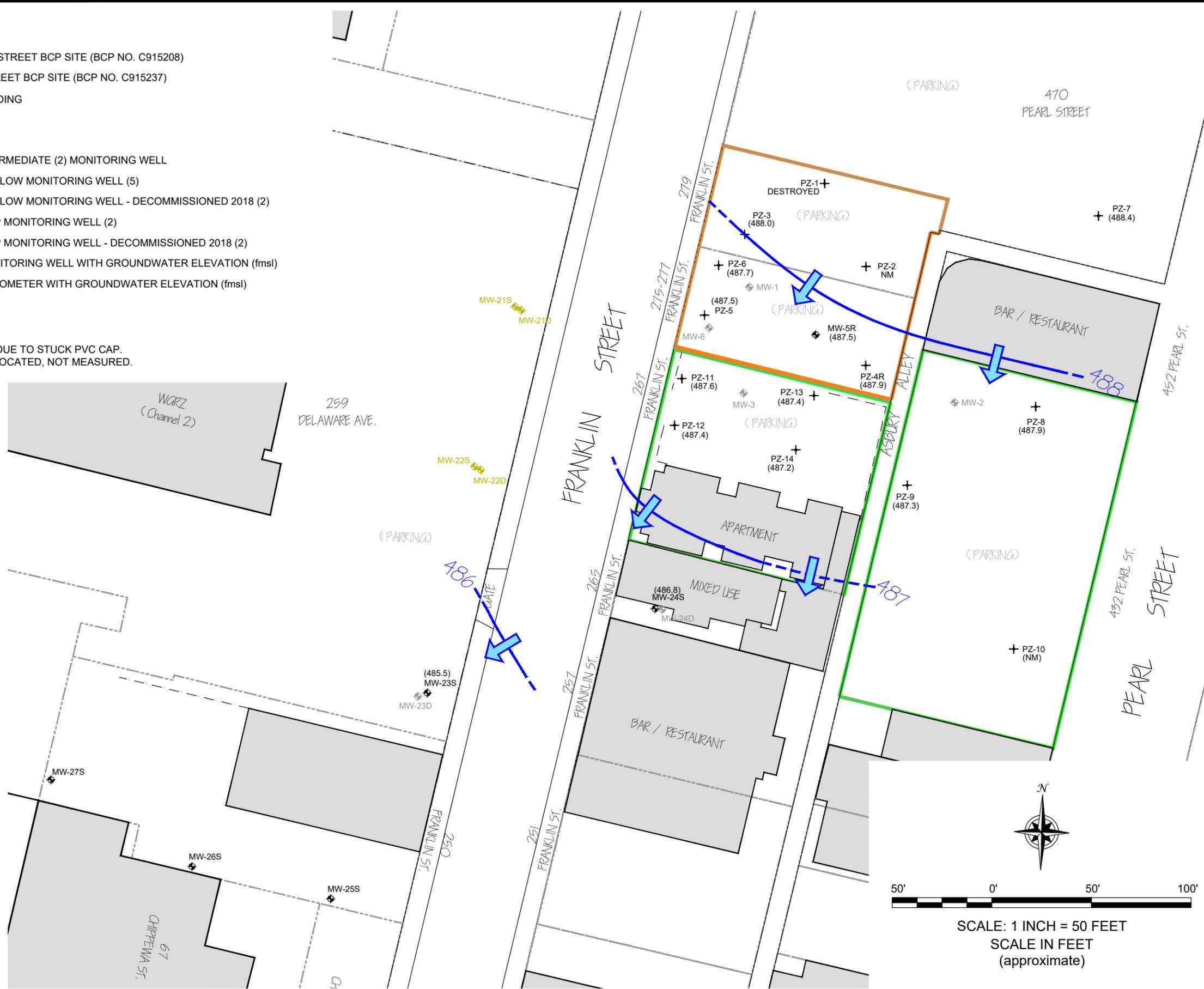
**FIGURE 4**

**LEGEND:**

- 275 FRANKLIN STREET BCP SITE (BCP NO. C915208)
- 432 PEARL STREET BCP SITE (BCP NO. C915237)
- EXISTING BUILDING
- PARCEL LINE
- FENCE
- MW-1 + DEEP (1) / INTERMEDIATE (2) MONITORING WELL
- MW-23S + OFF-SITE SHALLOW MONITORING WELL (5)
- MW-22S + OFF-SITE SHALLOW MONITORING WELL - DECOMMISSIONED 2018 (2)
- MW-23D + OFF-SITE DEEP MONITORING WELL (2)
- MW-22D + OFF-SITE DEEP MONITORING WELL - DECOMMISSIONED 2018 (2)
- MW-5R + SHALLOW MONITORING WELL WITH GROUNDWATER ELEVATION (fmsl)
- PZ-5 + SHALLOW PIEZOMETER WITH GROUNDWATER ELEVATION (fmsl)

**Note**

1. PZ-2 NOT MEASURED DUE TO STUCK PVC CAP.
2. PZ-10 UNABLE TO BE LOCATED, NOT MEASURED.



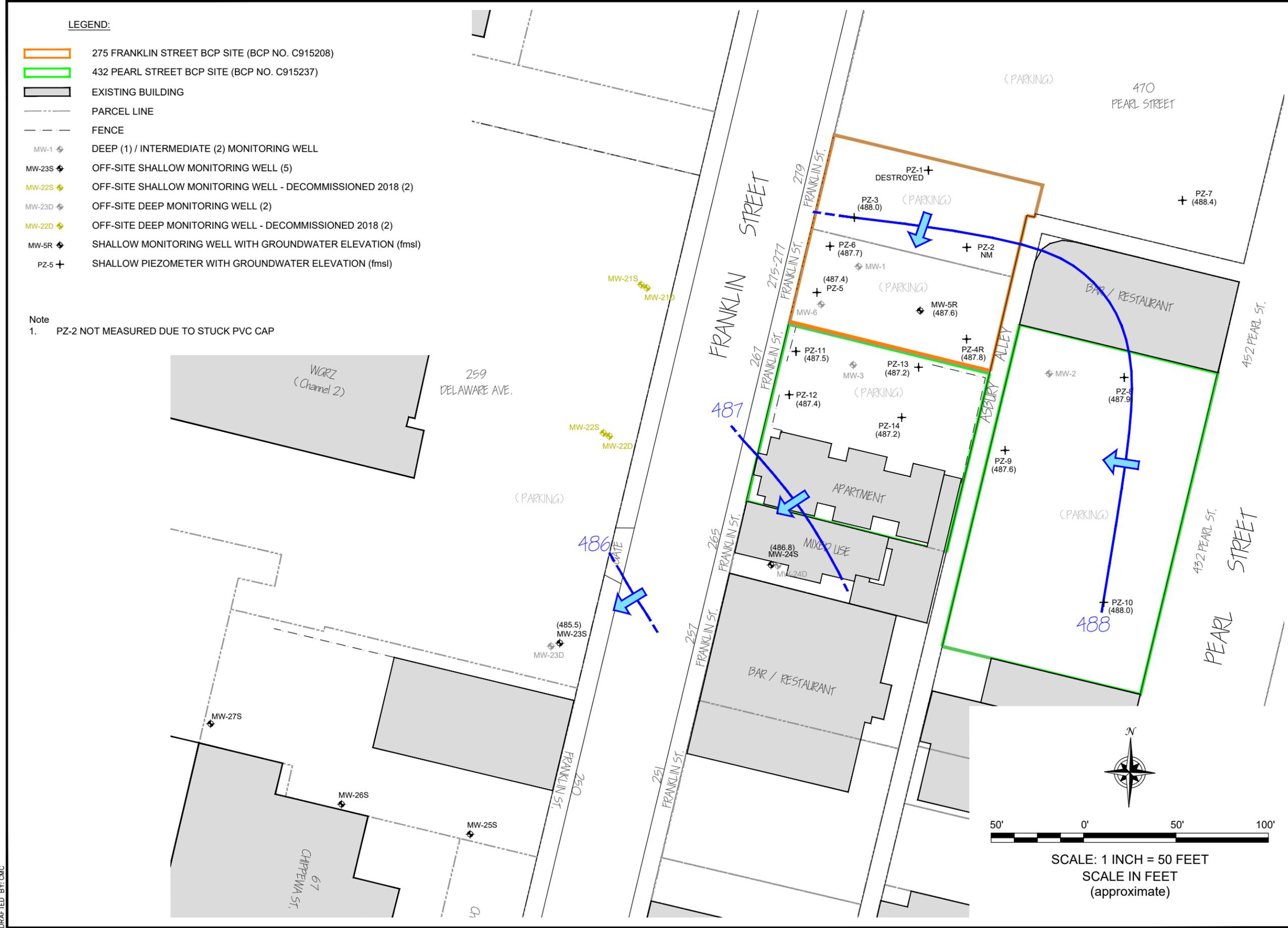
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**SHALLOW OVERBURDEN ISOPOTENTIAL MAP (11/20/19)**  
 PERIODIC REVIEW REPORT  
 275 FRANKLIN STREET SITE  
 BUFFALO, NEW YORK  
 BCP NO. C915208  
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**FIGURE 5**

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**LEGEND:**

- 275 FRANKLIN STREET BCP SITE (BCP NO. C915208)
- 432 PEARL STREET BCP SITE (BCP NO. C915237)
- EXISTING BUILDING
- PARCEL LINE
- - - FENCE
- MW-1 + DEEP (1) / INTERMEDIATE (2) MONITORING WELL
- MW-23S + OFF-SITE SHALLOW MONITORING WELL (5)
- MW-22S + OFF-SITE SHALLOW MONITORING WELL - DECOMMISSIONED 2018 (2)
- MW-23D + OFF-SITE DEEP MONITORING WELL (2)
- MW-22D + OFF-SITE DEEP MONITORING WELL - DECOMMISSIONED 2018 (2)
- MW-5R + SHALLOW MONITORING WELL WITH GROUNDWATER ELEVATION (fmsl)
- PZ-5 + SHALLOW PIEZOMETER WITH GROUNDWATER ELEVATION (fmsl)

Note  
 1. PZ-2 NOT MEASURED DUE TO STUCK PVC CAP

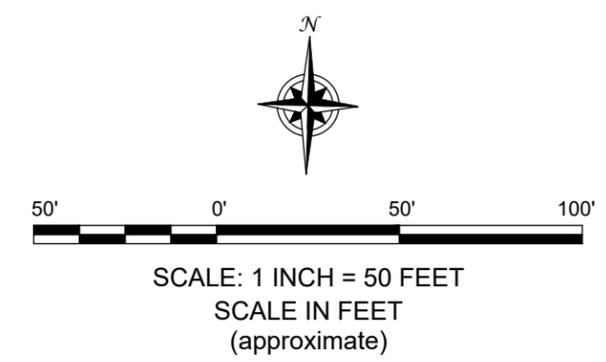
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**SHALLOW OVERBURDEN ISOPOTENTIAL MAP (4/1/20)**  
 PERIODIC REVIEW REPORT  
 275 FRANKLIN STREET SITE  
 BUFFALO, NEW YORK  
 BCP NO. C915208  
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**FIGURE 6**



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**SHALLOW OVERBURDEN  
 TOTAL cVOCs ISOCONCENTRATION MAP (11/20/19)**  
 PERIODIC REVIEW REPORT

275 FRANKLIN STREET & 432 PEARL STREET SITES  
 BUFFALO, NEW YORK  
 BCP NO. C915208 & C915237  
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**FIGURE 7**

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**SHALLOW OVERBURDEN TOTAL cVOCs ISOCONCENTRATION MAP (4/1/2020)**  
 PERIODIC REVIEW REPORT  
 275 FRANKLIN STREET & 432 PEARL STREET SITES  
 BUFFALO, NEW YORK  
 BCP NO. C915208 & C915237  
 PREPARED FOR  
 BUFFALO DEVELOPMENT CORPORATION

**FIGURE 8**

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# TABLES

TABLE 1

SUMMARY OF MONITORING WELL / PIEZOMETER CONSTRUCTION DETAILS <sup>1,2</sup>

275 Franklin Street & 432 Pearl Street Sites  
BCP Sites No. C915208 & C915237  
Buffalo, New York

Location <sup>3</sup>	Groundwater Unit	Installation Date	Well Diameter (inches)	Well Construction Material (screen/riser)	TOR Elevation (fmsl)	Ground Elevation (fmsl)	Stick-up (fbgs)	Construction Details (approx.)				Total Depth March 2010 (fbTOR)
								Bentonite Seal (fbgs)	Sand Pack Interval (fbgs)	Screened Interval (fbgs)	Sump Interval (fbgs)	
<b>MONITORING WELLS:</b>												
MW-1	intermediate	11/27/06	2.0	PVC / PVC	499.22	499.51	-0.29	1.00 - 26.67	26.67 - 38.67	28.67 - 38.67	none	38.67
MW-2	intermediate	11/28/06	2.0	PVC / PVC	499.81	500.08	-0.27	1.00 - 26.37	26.37 - 38.37	28.37 - 38.37	none	38.37
MW-3	intermediate	11/29/06	2.0	PVC / PVC	498.13	498.38	-0.25	1.00 - 25.92	25.92 - 37.92	27.92 - 37.92	none	37.92
MW-4	deep	04/22/08	2.0	PVC / PVC	499.56	499.93	-0.37	1.00 - 30.27	30.27 - 47.27	32.27 - 47.27	47.27 - 50.27	50.27
MW-5R	shallow	01/18/17	2.0	PVC / PVC	499.20	499.50	-0.30	1.00 - 6.79	6.79 - 18.79	8.79 - 18.79	none	18.79
MW-6	deep	04/24/08	2.0	PVC / PVC	498.72	499.03	-0.31	1.00 - 31.10	31.10 - 48.10	33.10 - 48.10	48.10 - 50.10	50.10
MW-7	deep	05/30/12	2.0	PVC / PVC	497.96	498.31	-0.35	26.28 - 31.28	31.28 - 48.28	33.28 - 48.28	48.28 - 50.28	50.28
<b>PIEZOMETERS:</b>												
PZ-1	<i>Destroyed</i>											
PZ-2	shallow	11/14/06	1.0	PVC / PVC	499.70	499.84	-0.14	1.00 - 3.52	3.52 - 15.52	5.52 - 15.52	none	15.52
PZ-3	shallow	11/14/06	1.0	PVC / PVC	499.32	499.44	-0.12	1.00 - 3.48	3.48 - 15.48	5.48 - 15.48	none	15.48
PZ-4	shallow	11/14/06	1.0	PVC / PVC	499.42	499.66	-0.24	1.00 - 3.47	3.47 - 15.47	5.47 - 15.47	none	15.47
PZ-4R	shallow	11/05/18	1.0	PVC / PVC	499.21	499.60	-0.39	1.00 - 2.79	2.79 - 14.79	4.79 - 14.79	none	14.79
PZ-5	shallow	11/14/06	1.0	PVC / PVC	498.44	498.92	-0.48	1.00 - 3.37	3.37 - 15.37	5.37 - 15.37	none	15.37
PZ-6	shallow	11/14/06	1.0	PVC / PVC	498.69	499.21	-0.52	1.00 - 3.42	3.42 - 15.42	5.42 - 15.42	none	15.42
PZ-7	shallow	11/15/06	1.0	PVC / PVC	500.95	501.13	-0.18	1.00 - 3.32	3.32 - 15.32	5.32 - 15.32	none	15.32
PZ-8	shallow	11/15/06	1.0	PVC / PVC	500.16	500.37	-0.21	1.00 - 3.17	3.17 - 15.17	5.17 - 15.17	none	15.17
PZ-9	shallow	11/15/06	1.0	PVC / PVC	498.79	499.01	-0.22	1.00 - 3.27	3.27 - 15.27	5.27 - 15.27	none	15.27
PZ-10	shallow	11/15/06	1.0	PVC / PVC	498.80	499.03	-0.23	1.00 - 2.37	2.37 - 14.37	4.37 - 14.37	none	14.37
PZ-11	shallow	12/27/06	1.0	PVC / PVC	497.79	498.18	-0.39	1.00 - 3.37	3.37 - 15.37	5.37 - 15.37	none	15.37
PZ-12	shallow	12/27/06	1.0	PVC / PVC	497.60	498.14	-0.54	1.00 - 3.37	3.37 - 15.37	5.37 - 15.37	none	15.37
PZ-13	shallow	12/27/06	1.0	PVC / PVC	497.88	498.47	-0.59	1.00 - 2.87	2.87 - 14.87	4.87 - 14.87	none	14.87
PZ-14	shallow	12/27/06	1.0	PVC / PVC	497.56	498.26	-0.70	1.00 - 2.72	2.72 - 14.72	4.72 - 14.72	none	14.72
<b>OFF-SITE MONITORING WELLS (INSTALLED BY NYSDEC):</b>												
MW-21S	shallow	05/13/09	2.0	PVC / PVC	497.36	497.88	-0.52	9.50 - 11.50	11.50 - 23.50	13.50 - 23.50	none	23.50
MW-21D	deep	05/12/09	2.0	PVC / PVC	497.58	497.90	-0.32	34.50 - 36.50	36.50 - 48.50	38.50 - 48.50	none	48.50
MW-22S	shallow	05/15/09	2.0	PVC / PVC	496.21	497.23	-1.02	3.00 - 5.00	5.00 - 17.70	7.70 - 17.70	none	17.70
MW-22D	deep	05/14/09	2.0	PVC / PVC	496.92	497.21	-0.29	33.50 - 36.00	36.00 - 48.00	38.00 - 48.00	none	48.00
MW-23S	shallow	05/19/09	2.0	PVC / PVC	496.91	497.46	-0.55	4.56 - 6.56	6.56 - 18.56	8.56 - 18.56	none	18.56
MW-23D	deep	05/19/09	2.0	PVC / PVC	497.18	497.52	-0.34	34.30 - 36.30	36.30 - 48.30	38.30 - 48.30	none	48.30
MW-24S	shallow	05/21/09	2.0	PVC / PVC	497.32	497.91	-0.59	4.63 - 6.63	6.63 - 18.63	8.63 - 18.63	none	18.63
MW-24D	deep	05/20/09	2.0	PVC / PVC	497.63	497.94	-0.31	33.53 - 35.53	35.53 - 47.53	37.53 - 47.53	none	47.53
MW-25S	shallow	09/27/12	2.0	PVC / PVC	496.21	496.46	-0.25	5.60 - 7.60	7.60 - 19.10	9.10 - 19.10	none	19.10
MW-26S	shallow	09/26/12	2.0	PVC / PVC	496.02	496.39	-0.37	4.80 - 6.80	6.80 - 18.80	8.80 - 18.80	none	18.80
MW-27S	shallow	09/27/12	2.0	PVC / PVC	496.24	497.10	-0.86	5.10 - 7.10	7.10 - 19.10	9.10 - 19.10	none	19.10

Notes:

- Top of riser elevation based upon an assumed datum of 500.00 fmsl.
- TOR = top of riser.
- fmsl = feet above mean sea level.
- fbgs = feet below ground surface.
- MW-5 removed 12/1/16 during source area excavation and replaced 1/18/17 (MW-5R).
- PZ-11, PZ-12, and PZ-13 were cut down to sit flush with ground surface on 4/21/17. TOR Elevation was recalculated and used in calculating water elevations for sampling on 4/24/17.
- Off-site monitoring wells MW-21S, MW-21D, MW-22S, and MW-22D were decommissioned by NYSDEC in early 2018.
- PZ-4 removed 11/5/2018 and replaced by PZ-4R on 11/5/2018. The piezometer TOR was measured on 11/12/2018.
- PZ-5, PZ-6, and PZ-14 were cut down to sit flush with ground surface on 11/5/18. TOR Elevation was recalculated and used in calculating water elevations for sampling on 11/12/18.





**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																														
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)								
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)		
GWQS <sup>2</sup>	50	-	7	5	5	5	5	5	5	2	-	-	-	-	-	300	300	10	250	-	-	250	6.5 - 8.5	-	-	-	-	-	-		
<b>Shallow Overburden Wells</b>																															
PZ-4	11/16/06	< 10	< 10	< 10	< 10	< 10	< 10	530	3 J	< 10	533	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.54	16.3	3782	< 1000	49	5.92		
	04/24/08	< 25	< 5	< 5	<5.0	46	< 5	< 5	1,900 D	19	< 5	1,965	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.29	13.4	6293	< 1000	158	7.63		
	08/18/08	<b>HRC INJECTION</b>																													
	10/02/08	< 5	< 1	< 1	ND	56	0.82 J	< 1	2,800 D	30	< 1	2,888	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40	15.7	5898	< 1000	85	7.33		
	12/18/08	< 200	< 40	< 40	<40	99	< 40	< 40	2,800	42	< 40	2,941	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.38	9.3	10502	< 1000	147	8.97		
	02/11/09	< 5	< 1	< 1	<1.0	16	< 1	< 1	540 D,H	9.4	< 1	565	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.61	10.7	7079	17	48	9.22		
	04/21/09	< 5	< 1	< 1	<1.0	6	< 1	< 1	520 D	6.3	< 1	532	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.37	11.7	18510	206	99	9.58		
	07/17/09	< 5	< 1	< 1	<1.0	0.93 J	< 1	< 1	180 D	1.6	< 1	183	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.61	16.7	12	6.5	-46	6.69		
	03/29/10	< 50	< 1.9	< 3.4	< 2.9	< 10	< 10	< 4.4	46 D	< 10	< 2.4	46	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.61	9.0	6934	13	0	9.37		
	06/02/11	< 10	< 0.19	< 0.34	< 0.29	9.1	< 1	< 0.44	390 D	8.1	< 1	407	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49	13.5	9095	9.0	36	8.02		
	06/05/12	< 50	< 0.95	< 1.7	< 1.5	15	< 1	< 2.2	950 D	24	< 4.5	989	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.63	14.0	8812	16	289	7.71		
	04/16/14	<b>IET INJECTION</b>																													
	06/18/14	< 26	< 3.8	< 6.8	< 5.8	39	< 18	< 8.8	1,200	35	< 18	1,274	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.46	14.9	11710	30	71	4.95
	09/03/14	< 26	< 3.8	< 6.8	< 5.8	190	< 18	11 J	1,200	60	< 18	1,450	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1.3 J	7.44	18.9	9106	3.2	-77	3.20
	04/16/15	< 26	< 3.8	< 6.8	< 5.8	110	< 18	< 8.8	940	59	< 18	1,109	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.40	11.9	7306	9.9	-37	7.73
	08/13/15	< 26	< 3.8	< 6.8	< 5.8	160	< 18	11 J	480	61	< 18	701	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	13	7.47	22.0	12.82	> 1000	-143	2.79
	12/18/15	< 19	< 10	< 7	< 1.4	29	< 7	< 7	780	30	< 0.7	839	NA	NA	NA	NA	COD=64	0.04 J	NA	NA	94.6	NA	NA	NA	7.67	11.4	5925	63	22	5.96	
	Mar & Apr 2016	<b>PERSULFOX INJECTIONS</b>																													
	06/13/16	< 39	< 20	< 14	< 2.8	64	< 14	< 14	1,100	46	< 1.4	1,210	NA	NA	NA	NA	COD=240	0.026 J	NA	NA	572	NA	NA	NA	7.07	16.5	10	217	197	5.45	
	09/21/16	< 39	< 20	< 14	< 3.4	34 J	< 14	< 14	630	34	< 1.4	698	NA	NA	NA	NA	COD=170	< 0.191	NA	NA	273	NA	NA	NA	7.75	26.3	5784	510	321	5.27	
12/1-12/6/16	<b>ON-SITE EXCAVATION</b>																														
01/23/17	< 39	< 20	< 14	< 3.4	58	< 14	< 14	1,000	52	< 1.4	1,110	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40	10.9	8883	159	184	7.51		
04/24/17	< 39	< 20	< 14	< 3.4	52	< 14	< 14	1,200	44	< 1.4	1,296	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.71	15.7	7520	47	155	7.96		
PZ-4R	11/12/18	< 19	< 10	< 7	< 1.7	17 J	< 7	< 7	1,400	23	< 0.71	1,423	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.30	13.8	6990	> 1000	143	6.05		
	04/05/19	< 19	< 10	< 7	< 1.7	38	< 7	< 7	1,200 D	24 D	< 0.71	1,262	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.32	7.9	5409	620	196	11.28		
	11/20/19	< 19	< 10	< 7	< 1.7	21 D J	< 7	< 7	1,100 D	21 D	< 0.71	1,142	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.47	15.4	7111	--	82	6.6		
04/01/20	< 19	< 10	< 7	< 1.7	29 D	< 7	< 7	1,100 D	23 D	< 0.71	1,152	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.72	10.0	5525	900	37	9.2			



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																														
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)								
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)		
<b>GWQS<sup>2</sup></b>	<b>50</b>	<b>--</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		<b>300</b>	<b>300</b>	<b>10</b>	<b>250</b>	<b>--</b>	<b>--</b>	<b>250</b>	<b>6.5 - 8.5</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>	<b>--</b>		
11/20/06	< 10	< 10	< 10	<10	42	< 10	< 10	9,700	11	< 10	<b>9,753</b>	NA	NA	NA	NA	NA	NA	7.6 J	125	NA	NA	NA	7.22	10.9	3722	< 1000	111	5.42			
04/24/08	< 20	< 4	< 4	<4.0	160	< 4	< 4	3,100 DJ	20	< 4	<b>3,280</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.22	12.1	3710	< 1000	122	4.4			
<b>08/18/08</b>	<b>HRC INJECTION</b>																														
10/02/08	< 5	< 1	< 1	<1.0	38	< 1	< 1	3,000 D	7.3	< 1	<b>3,045</b>	25.2	0.308 J	0.905	< 0.463	NA	ND	ND	5.2	117	0.0021	ND	0.01	7.33	16.4	3773	< 1000	-37	4.51		
12/18/08	< 200	< 40	< 40	<40	120	< 40	< 40	5,600 D	< 40	< 40	<b>5,720</b>	0.8	< 0.667	< 0.667	< 0.667	NA	ND	ND	5.7	120	0.0021	ND	0.014	7.42	11.0	4622	< 1000	-10	5.07		
02/11/09	< 5	< 1	< 1	<1.0	< 1	< 1	< 1	150 D	< 1	< 1	<b>150</b>	1.4	< 5	< 5	< 5	NA	< 0.05	0.00783	4.65	102	< 0.0015	< 0.0015	0.00329	7.48	11.2	2872	15	35	4.74		
04/21/09	< 5	< 1	0.41 J	<1.0	54	0.4 J	< 1	760 D	8.7	< 1	<b>823</b>	0.8	< 0.5	< 0.5	9060	NA	< 0.05	< 0.003	6.4 D	110 D	< 0.0015	< 0.0015	< 0.001	7.41	12.6	3905	38	60	3.11		
07/17/09	< 5	< 1	< 1	<1.0	33	< 1	< 1	6,000 D	9.3	< 1	<b>6,044</b>	2.8	< 0.5	< 0.5	< 0.5	16.6	0.135	1.37	4.44 D	130 D	< 0.0015	< 0.0015	< 0.001	7.26	16.5	4255	44	28	2.95		
03/29/10	< 5	< 0.19	< 0.34	< 0.29	8	< 1	< 0.44	1,300 D	3.1	< 0.24	<b>1,311</b>	2.5	< 5	< 5	< 5	NA	< 0.05	0.0064	8.97	114	< 1.5	< 1.5	1	7.32	8.8	4341	4.5	0	4.32		
06/29/11	< 10	< 0.19	< 0.34	< 0.29	11	< 1	< 0.44	3,200 D	4.3	< 0.9	<b>3,215</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.26	16.6	4802	7.8	50	3.89			
06/05/12	< 10	< 4.8	< 8.5	< 7.3	< 1	< 1	< 11	1,600	< 1	< 23	<b>1,600</b>	NA	NA	NA	NA	NA	NA	NA	4.7	135	0.87 J	NA	0.55 BJ	7.34	14.2	3469	13	57	4.73		
<b>04/16/14</b>	<b>IET INJECTION</b>																														
06/18/14	< 33	< 4.8	< 8.5	< 7.3	< 20	< 23	< 11	3,800 D	< 12	< 23	<b>3,800</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.50	15.3	4135	21	163	5.91	
09/03/14	< 33	< 4.8	< 8.5	< 7.3	< 20	< 23	14 J	2,300	< 12	< 23	<b>2,314</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.48	17.6	4985	7.1	179	3.67	
04/16/15	< 1.3	< 0.19	< 0.34	< 0.29	33	< 0.9	< 0.44	5.8	2.8	< 0.9	<b>42</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	9.3	7.29	11.8	3790	19	-49	7.07	
08/13/15	< 1.3	< 0.19	3	< 0.29	29	< 0.9	< 0.44	1,100 D	3	< 0.9	<b>1,132</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.54	16.3	4251	8.7	20	5.44	
<b>12/1-12/6/16</b>	<b>ON-SITE EXCAVATION</b>																														
01/24/17	< 19	< 10	< 7	< 1.7	< 7	< 7	< 7	880 D	2.7 J	< 0.71	<b>883</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.32	11.5	2752	1.4	237	4.54
04/24/17	< 19	< 10	< 7	< 1.7	28	< 7	< 7	740	3.4 J	< 0.71	<b>771</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.48	10.8	2976	7.0	148	5.09
11/12/18	< 7.8	< 4	< 2.8	< 0.68	< 2.8	< 2.8	< 2.8	340 J	< 0.7	< 0.28	<b>340</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.31	13.8	2952	3.7	91	4.92
04/05/19	< 3.9	< 2	6.5 D	< 0.34	< 1.4	< 1.4	< 1.4	160 D	0.62 J D	< 0.14	<b>167</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.61	11.1	2259	4.3	91	7.18
11/20/19	< 4.8	< 2.5	< 1.8	< 0.42	< 1.8	< 1.8	< 1.8	220 D	< 0.44	< 0.18	<b>220</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.38	15.1	4616	--	153	4.53
04/01/20	< 1.9	< 1	0.89 J	< 0.17	1.1 J	< 0.7	< 0.7	280 D	1.1	< 0.07	<b>283</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.46	11.2	3722	1.99	143	5.62



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																												
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)						
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)
<b>GWQS<sup>2</sup></b>	<b>50</b>	<b>-</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		<b>300</b>	<b>300</b>	<b>10</b>	<b>250</b>	<b>-</b>	<b>-</b>	<b>250</b>	<b>6.5 - 8.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
11/16/06	< 10	< 10	< 10	<10	26	< 10	< 10	1,000	5 J	< 10	<b>1,031</b>	NA	NA	NA	NA	NA	NA	3.4	114 J	NA	NA	NA	7.75	16.0	3679	< 1000	32	6.17	
04/24/08	< 20	< 4	< 4	<4.0	11	< 4	< 4	390	2.5 J	< 4	<b>404</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.45	13.1	3998	< 1000	137	4.95	
<b>08/18/08</b>	<b>HRC INJECTION</b>																												
10/02/08	< 5	< 1	< 1	< 1.0	20	1.3	< 1	1,400 D	8.7	< 1	<b>1,430</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.45	15.1	3851	< 1000	88	4.99	
12/18/08	< 10	< 2	< 2	< 2.0	1.7	< 2	< 2	92	< 2	< 2	<b>94</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49	10.4	3600	< 1000	100	5.28	
02/11/09	< 5	< 1	< 1	< 1.0	< 1	< 1	< 1	12	< 1	< 1	<b>12</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.48	11.6	2560	140	72	4.49	
04/21/09	< 5	< 1	< 1	< 1.0	2.5	< 1	< 1	200	2.1	< 1	<b>205</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.36	11.4	4471	31	80	2.98	
07/17/09	< 5	< 1	< 1	< 1.0	0.9 J	< 1	< 1	90	0.52 J	< 1	<b>91</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.33	16.1	3894	21	28	3.52	
03/29/10	< 5	< 0.19	< 0.34	< 0.29	2	< 1	< 0.44	590 D	1.2	< 0.24	<b>593</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.26	10.0	4044	39	-64	4.58	
06/29/11	< 10	< 0.19	< 0.34	< 0.29	7	< 1	< 0.44	1,200 D	3.6	< 0.9	<b>1,211</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.26	16.0	3261	10	63	3.7	
06/05/12	< 10	< 1.5	< 2.7	< 2.3	< 1	< 1	< 3.5	390	< 1	< 7.2	<b>390</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.39	14.4	2719	23	146	4.31	
<b>04/16/14</b>	<b>IET INJECTION</b>																												
06/18/14	<11	< 1.5	< 2.7	< 2.3	<6.5	<7.2	< 3.5	390	<3.7	< 7.2	<b>390</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.48	15.1	5029	33	161	6.68
09/03/14	<6.6	< 0.95	< 1.7	< 1.5	85	<4.5	< 2.2	280	5.6	< 4.5	<b>371</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.42	17.7	4164	7.6	145	4.07
04/16/15	<6.6	< 0.95	< 1.7	< 1.5	12	<4.5	< 2.2	210	<2.3	< 4.5	<b>222</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.30	13.1	2087	6.8	112	5.31
08/13/15	< 6.6	< 0.95	3.6 J	< 1.5	37	< 4.5	2.2 J	800 D	9.6	< 4.5	<b>847</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.69	15.2	3905	15	129	5.42
<b>12/1-12/6/16</b>	<b>ON-SITE EXCAVATION</b>																												
01/23/17	< 19	< 10	< 7	< 1.7	< 7	< 7	< 7	500	8.2	< 0.71	<b>508</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.30	12.4	2833	2.7	239	5.04	
04/24/17	< 1.9	< 1	< 0.7	< 0.17	5.8	< 0.7	< 0.7	46	1.3	< 0.07	<b>53</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.10	10.6	2889	6.0	172	5.23	
11/12/18	< 4.8	< 2.5	< 1.8	< 0.42	2.4 J	< 1.8	< 1.8	250	2.7	< 0.18	<b>255</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40	12.7	2656	3.4	121	4.99	
04/05/19	< 1.9	< 1.0	2.4 J	< 0.17	1.5 J	< 0.7	< 0.7	200	2.7	< 0.07	<b>207</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.92	11.3	3243	7.0	228	7.66	
11/20/19	< 3.9	< 2.0	< 1.8	< 0.42	2.1 D J	< 1.8	< 1.8	170 D	1.8 D	< 0.18	<b>174</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.50	15.3	3184	--	169	3.95	
04/01/20	< 1.9	< 1.0	1.2 J	< 0.17	1.3 J	< 0.7	< 0.7	190 D	2.2	< 0.07	<b>195</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.57	11.4	3864	8.2	130	5.96	



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																													
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)							
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)	
<b>GWQS<sup>2</sup></b>	<b>50</b>	<b>-</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>300</b>	<b>300</b>	<b>10</b>	<b>250</b>	<b>-</b>	<b>-</b>	<b>250</b>	<b>6.5 - 8.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>PZ-11</b>	01/05/07	< 50	<50	<50	<50	94	< 50	<50	18,000 D	< 50	< 50	<b>18,094</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.22	11.2	2865	< 1000	110	5.46	
	04/24/08	< 2000	< 400	< 400	<400	170	< 400	< 400	22,000 D	34	< 400	<b>22,204</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.18	12.0	7975	< 1000	187	5.17	
	<b>08/18/08</b>	<b>HRC INJECTION</b>																												
	03/30/10	< 20	< 4	< 4	< 1.5	12 D	< 4	< 4	6,800 D	5.9 D	< 4	<b>6,818</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.25	8.3	9696	54	5	6	
	06/02/11	< 10	< 0.19	< 0.34	< 0.29	17	< 1	< 0.44	5,400 D	5.6	< 0.9	<b>5,423</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.46	13.2	6102	47	99	4.08	
	06/04/12	< 500	< 9.5	< 17	< 15	< 50	< 50	< 22	3,400	< 50	< 45	<b>3,400</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.51	14.4	4076	< 1000	564	4.36	
	<b>04/16/14</b>	<b>IET INJECTION</b>																												
	06/18/14	< 26	< 3.8	< 6.8	< 5.8	< 16	< 18	< 8.8	1,500	< 9.2	< 18	<b>1,500</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.75	17.8	4937	43	125	3.35
	09/03/14	< 6.6	< 0.95	< 1.7	< 1.5	14	< 4.5	< 2.2	480	5.8	< 4.5	<b>500</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.41	18.0	4627	46	84	3.25
	04/16/15	< 6.6	< 0.95	< 1.7	< 1.5	95	< 4.5	< 2.2	16,000 D	34	< 4.5	<b>16,129</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.30	11.7	5334	11	110	5.7
	08/13/15	< 260	< 38	< 68	< 58	< 160	< 180	100 J	4,300	< 92	< 180	<b>4,300</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.51	20.3	5909	30	7	3.45
	<b>12/1-12/6/16</b>	<b>ONSITE EXCAVATION</b>																												
	01/24/17	< 190	< 100	< 70	< 17	< 70	< 70	< 70	5,500	< 18	< 7.1	<b>5,500</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49	10.8	3815	9.0	241	2.42	
	04/24/17	< 190	< 100	< 70	< 17	< 70	< 70	< 70	5,600	< 18	< 7.1	<b>5,600</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.50	11.2	6943	9.4	120	5.19	
	11/12/18	< 19	< 10	< 7	< 1.7	18 J	< 7	< 7	1,300	14	< 0.71	<b>1,332</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.39	13.7	3248	2.7	72	4.57	
04/05/19	< 78	< 40	< 28	< 6.8	< 28	< 28	< 28	4,100 D	21 D	< 2.8	<b>4,121</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.51	9.8	3331	1.9	83	5.85		
11/20/19	< 4.8	< 2.5	< 1.8	< 0.42	7.7 D	< 1.8	< 1.8	440 D	4 D	< 0.18	<b>452</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.35	14.5	4360	--	51	4.06		
04/01/20	< 19	< 10	< 7	< 1.7	< 7	< 7	< 7	1,000 D	2.5 J D	< 0.71	<b>1,003</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.31	10.8	5718	< 100	98	4.41		



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																													
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)							
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)	
<b>GWQS<sup>2</sup></b>	<b>50</b>	<b>-</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		<b>300</b>	<b>300</b>	<b>10</b>	<b>250</b>	<b>-</b>	<b>-</b>	<b>250</b>	<b>6.5 - 8.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>PZ-12</b>	01/05/07	< 200	<200	<200	<200	< 200	<200	7,200 D	< 200	< 200	<b>7,200</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.03	11.5	3083	< 1000	103	4.00	
	04/24/08	< 25	< 5	< 5	<5.0	230	< 5	23,000 D	23	< 5	<b>23,253</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.21	13.0	4004	< 1000	201	3.34	
	<b>08/18/08</b>	<b>HRC INJECTION</b>																												
	03/30/10	< 50	< 10	< 10	< 2.9	7.4 DJ	< 10	< 10	1,100 D	12 D	<10	<b>1,119</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.30	9.4	3741	< 1000	7	2.38	
	06/02/11	< 10	< 0.19	< 0.34	< 0.29	5.7	< 1	< 0.44	4,300 D	4.3	< 0.9	<b>4,310</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.38	13.6	3294	100	89	2.57	
	06/04/12	< 100	< 1.9	< 3.4	< 2.9	56	< 10	< 4.4	700	14	< 9	<b>770</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.51	14	3324	268	431	2.61	
	<b>04/16/14</b>	<b>IET INJECTION</b>																												
	06/18/14	< 13	< 1.9	< 3.4	< 2.9	< 8.1	< 9	< 4.4	3,700 D	< 4.6	< 9	<b>3,700</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.48	15.3	3177	36	157	2.89
	09/03/14	< 26	< 3.8	< 6.8	< 5.8	< 16	< 18	< 8.8	2,200 D	< 9.2	< 18	<b>2,200</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.44	18.0	3564	9.9	68	1.97
	04/16/15	< 53	< 7.6	< 14	< 12	75	< 36	< 18	6,200 D	20 J	< 36	<b>6,295</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.22	10.9	3877	22	127	5.09
	08/13/15	< 66	< 9.5	< 17	< 15	66	< 45	25 J	1,900 D	< 23	< 45	<b>1,991</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.52	19.8	3552	74	15	2.12
	<b>12/1-12/6/16</b>	<b>ONSITE EXCAVATION</b>																												
	01/24/17	< 48	< 25	< 18	< 4.2	26 J	< 18	< 18	2,500	8.8 J	< 1.8	<b>2,535</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.46	11.2	3403	15	244	3.35	
	04/24/17	< 39	< 20	< 14	< 3.4	14 J	< 14	< 14	1,900	7.8 J	< 1.4	<b>1,922</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.60	12.8	3197	12	99	3.38	
	11/12/18	< 19	< 10	< 7	< 1.7	< 7	< 7	< 7	830 J	< 1.8	< 0.71	<b>830</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.48	14.1	2538	1	69	4.6	
04/05/19	< 3.9	< 2	9 D	< 0.34	3.2 J D	< 1.4	< 1.4	250 D	0.91 J D	< 0.14	<b>263</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.70	10.2	1883	1	45	7.01		
11/20/19	< 39	< 20	< 14	< 3.4	< 14	< 14	< 14	3,600 D	7.9 J D	< 1.4	<b>3,608</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.36	15.8	4539	--	12	2.83		
04/01/20	< 19	< 10	< 7	< 1.7	< 7	< 7	< 7	1,000 D	3.3 J D	< 0.71	<b>1,003</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.42	10.6	4236	< 100	71	3.72		



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																													
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)							
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)	
<b>GWQS<sup>2</sup></b>	<b>50</b>	<b>-</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		<b>300</b>	<b>300</b>	<b>10</b>	<b>250</b>	<b>-</b>	<b>-</b>	<b>250</b>	<b>6.5 - 8.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>PZ-13</b>	01/05/07	< 10	< 10	< 10	<10	1 J	< 10	< 10	180	< 10	< 10	<b>181</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.11	11.9	3304	< 1000	68	5.18	
	04/24/08	< 20	< 4	< 4	<4.0	78	< 4	< 4	1,900 D	25	< 4	<b>2,003</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.28	12.8	2487	< 1000	131	5.7	
	<b>08/18/08</b>	<b>HRC INJECTION</b>																												
	03/30/10	< 5	< 1	< 1	< 0.29	20	< 1	<1.0	98	11	1.2	<b>130</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.11	10.1	3721	87	-91	2.24	
	06/02/11	< 5	< 0.19	< 0.34	< 0.29	9.6	< 1	< 0.44	120	4.5	< 0.9	<b>134</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.54	14.3	3130	469	-79	2.36	
	06/04/12	< 20	< 0.38	< 0.68	< 0.58	7.4	< 2	< 0.88	280 D	7.1	< 1.8	<b>295</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49	13.8	4080	667	344	3.5	
	<b>04/16/14</b>	<b>IET INJECTION</b>																												
	06/18/14	< 10	< 0.19	0.54 J	< 0.29	6.4	< 1	< 0.44	78	0.94 J	< 0.9	<b>86</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	10	7.98	18.7	3762	55	78	2.05
	09/03/14	< 1.3	< 0.19	< 0.34	< 0.29	4.7	< 0.9	< 0.44	15	2.0	< 0.9	<b>22</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	4.8	7.52	17.8	3256	9.6	-95	1.77
	04/16/15	53	0.27 J	0.62 J	3.7	1300 D	1.4	< 0.44	55,000 D	490 E	< 0.9	<b>56,845</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 15	< 15	510	7.31	11.4	4266	22	105	5.45
	08/13/15	53 J	< 1.9	< 3.4	< 2.9	450	< 9	< 4.4	44 D	< 4.6	52	<b>546</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 75	< 75	6,400	7.42	19.1	6651	12	-143	1.25
	<b>12/1-12/6/16</b>	<b>ONSITE EXCAVATION</b>																												
	01/24/17	< 3.9	< 2	< 1.4	< 0.34	50	5.0	< 1.4	79	19	18	<b>171</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.13	11.3	5482	8.1	-10	2.28	
	04/24/17	< 19	< 10	< 7	< 1.7	500	10 J	< 7	14	20	110	<b>654</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.50	14.9	4829	14	0	2.98	
	11/12/18	< 1.9	< 1	< 0.7	< 0.17	< 0.7	0.73 J	< 0.7	16	3.6	32	<b>52</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.31	14.8	2991	83.2	-89	2.81	
04/05/19	< 3.9	< 2	< 1.4	1.8 J D	280 D	1.8 J D	< 1.4	93 D	76 D	53 D	<b>506</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.15	10.4	4253	20.4	-7	2.5		
11/20/19	< 1.9	< 1	< 0.7	0.23 J	52	6.6	< 0.70	13	14	38	<b>124</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.56	16.0	2443	--	-90	1.34		
04/01/20	< 1.9	< 1	< 0.7	< 0.17	44	1.5 J	< 7	21	9.6	8.9	<b>85</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.62	11.2	2522	30.3	39	2.17		



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																													
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)							
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)	
<b>GWQS<sup>2</sup></b>	<b>50</b>	<b>-</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		<b>300</b>	<b>300</b>	<b>10</b>	<b>250</b>	<b>-</b>	<b>-</b>	<b>250</b>	<b>6.5 - 8.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>PZ-14</b>	01/05/07	< 10	<10	<10	< 10	6 J	< 10	<10	3,000 D	< 10	< 10	<b>3,007</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40	11.3	1798	< 1000	56	5.5	
	04/24/08	< 20	< 4	< 4	< 4.0	28	< 4	< 4	5,300 D	20	< 4	<b>5,348</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40	11.6	1985	< 1000	124	5.61	
	<b>08/18/08</b>	<b>HRC INJECTION</b>																												
	04/08/10	< 25	< 5	< 5	< 5.0	30	< 5	0.55 J	1,100 D	10	< 5	<b>1,140</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.18	11.8	4756	46	64	2.49	
	06/02/11	< 10	< 0.19	< 0.34	< 0.29	9.2	< 1	< 0.44	2,100 D	5.8	< 0.9	<b>2,115</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.81	13.3	3861	< 1000	104	6.1	
	06/04/12	< 250	< 4.8	< 8.5	< 7.3	26	< 25	< 11	1,200	12 J	< 23	<b>1,238</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.73	13	4500	16	555	8.07	
	<b>04/16/14</b>	<b>IET INJECTION</b>																												
	06/19/14	< 26	< 3.8	< 6.8	< 5.8	< 16	< 18	< 8.8	910	15 D J	< 18	<b>925</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	8.19	16.8	2230	36	108	4.00
	09/03/14	< 26	< 3.8	< 6.8	< 5.8	89	< 18	8.9 J	1300	61	< 18	<b>1,450</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.80	18.7	3397	87	-142	4.66
	04/16/15	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NA	NA	NA	NA	NA	NA	NA	NA	NA	NS	NS	NS	NS	NS	NS	NS	NS	NS
	08/13/15	< 26	< 3.8	< 6.8	< 5.8	270	< 18	10 J	590	36	< 18	<b>896</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 75	< 75	560	7.62	20.8	4894	736	-126	1.58
	<b>12/1-12/6/16</b>	<b>ONSITE EXCAVATION</b>																												
	01/24/17	< 1.9	< 1	< 0.7	0.34 J	290 D	14	< 0.7	4.8	12	130	<b>451</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.32	10.9	4397	8.9	-70	2.47	
	04/24/17	< 7.8	< 4	< 2.8	0.68 J	180	8.5 J	< 2.8	4.7	140	140	<b>473</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.08	15.0	4276	35	-126	1.81	
	11/12/18	< 1.9	< 1	< 0.7	< 0.17	50	1.8 J	< 0.7	32	9.8	20	<b>114</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.39	14.0	2820	6.8	-137	1.95	
04/05/19	< 3.9	< 2	< 1.4	0.5 J D	170 D	4.2 J D	< 1.4	150 D	32 D	30 D J	<b>387</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.48	10.0	2196	8.9	-52	2.01		
11/20/19	< 1.9	< 1	0.71 J	0.34 J	100	4.2	< 0.70	33	12	35	<b>185</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.48	15.3	2319	--	-121	1.72		
04/01/20	< 4.8	< 2.5	< 1.8	0.74 J D	340 D	5.4 J D	< 1.8	98 D	28 D	24 D	<b>496</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.48	10.7	4111	11.1	-118	1.78		



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																														
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)								
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)		
<b>GWQS<sup>2</sup></b>	<b>50</b>	<b>-</b>	<b>7</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>300</b>	<b>300</b>	<b>10</b>	<b>250</b>	<b>-</b>	<b>-</b>	<b>250</b>	<b>6.5 - 8.5</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>		
	<b>HRC INJECTION</b>																														
04/25/08	< 5	< 1	< 1	<1.0	16	< 1	< 1	19,000 D J	5.1	< 1	<b>19,022</b>	<0.5	NA	NA	<0.5	NA	ND	0.1	5.7	87.4	ND	ND	0.0022	7.33	13.8	3070	< 1000	-51	4.92		
08/18/08	<b>HRC INJECTION</b>																														
10/02/08	< 5	< 1	< 1	ND	20	< 1	< 1	50,000 D	7.2	< 1	<b>50,032</b>	5.23	0.116 J	5.8	< 0.461	NA	ND	0.0099	8.1	85.8	ND	ND	ND	7.27	13.7	3454	2213	-40	6.27		
12/18/08	< 2500	<500	<500	< 500	< 500	< 500	<500	34,000 D	< 500	< 1	<b>34,000</b>	0.6	< 0.8	< 0.8	< 0.8	NA	ND	1.2	4.4	58.8	ND	ND	ND	6.99	10.4	4089	NA	-76	2.87		
02/11/09	4.9 J	< 1	< 1	< 1.0	66	< 1	< 1	36,000 D,H	19	< 1	<b>36,088</b>	2.6	< 1.6	< 1.6	7.7	NA	< 0.05	0.91	5.57	84.4	< 0.0015	< 0.0015	< 0.001	7.17	13.4	5153	13	-71	2.14		
04/21/09	11	0.82 J	0.53 J	< 1.0	1	0.64 J	< 1	37,000 D	27	< 1	<b>37,032</b>	2.2	< 1	< 1	< 1	NA	< 0.05	1.8	5.19 D	98 D	< 0.0015	< 0.0015	2.2	7.22	13.7	4730	2.6	-115	1.23		
07/17/09	< 5	< 1	0.54 J	< 1.0	800	1	< 1	31,000 D	86	< 1	<b>31,890</b>	0.5 J	< 0.7	< 0.7	< 0.7	1.8	0.557	0.246	6.57 D	110 D	< 0.0015	< 0.0015	< 0.001	7.02	15.5	5656	2.0	-100	1.98		
03/29/10	< 500	< 97	< 170	< 150	< 500	< 500	< 220	25,000 D	< 500	< 120	<b>25,000</b>	4	< 5	< 5	< 5	NA	< 0.05	0.495	7.35	89.2 B	< 1.5	< 1.5	1	6.81	11.3	6748	3.3	-71	4.26		
06/02/11	< 10	< 0.19	< 0.34	< 0.29	4.8	< 1	< 0.44	49,000 D	12	< 1	<b>49,021</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.26	13.1	5350	6.0	-23	6		
06/05/12	< 10	< 150	< 270	< 230	< 1	< 1	< 350	70,000	< 1	< 720	<b>70,000</b>	NA	NA	NA	NA	NA	NA	4.5	NA	126	NA	NA	0.38 BJ	7.20	13.4	4892	3.4	593	4.58		
04/16/14	<b>IET INJECTION</b>																														
06/19/14	< 260	< 38	< 68	< 58	< 160	< 180	< 88	17,000	170 D J	< 180	<b>17,170</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.66	18.9	4929	60	-169	1.65
09/03/14	< 260	< 38	< 68	< 58	6300	< 180	< 88	38,000 D	2700	< 180	<b>47,000</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	1.7 J	210 D	7.41	17.0	4462	9.6	-156	0.81
04/16/15	< 1300	< 190	< 340	< 290	1700	< 900	< 440	43,000	670 J	< 900	<b>45,370</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 15	< 15	520	7.32	12.9	4335	22	-132	1.5
08/13/15	< 1300	< 190	< 340	< 290	870 J	< 900	< 440	120,000 D	< 460	< 900	<b>120,870</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 75	< 75	1,600	7.46	17.7	4964	39	-122	1.29
12/18/15	< 1900	< 1000	< 700	< 140	910 J	< 700	< 700	190,000	350 J	< 70	<b>191,260</b>	NA	NA	NA	NA	COD=62	2.9	NA	NA	75	NA	NA	NA	7.57	11.4	3642	> 100	-51	1.12		
Mar & Apr 2016	<b>PERSULFOX INJECTIONS</b>																														
06/13/16	< 9700	< 5000	< 3500	< 710	< 3500	< 3500	< 3500	180,000	< 880	< 350	<b>180,000</b>	NA	NA	NA	NA	COD=87	0.017 J	NA	NA	312	NA	NA	NA	7.18	17.3	6387	96.4	17	1.02		
09/21/16	< 3900	< 2000	< 1400	< 340	< 1400	< 1400	< 1400	110,000	470 J	< 140	<b>110,470</b>	NA	NA	NA	NA	COD=78	< 0.191	NA	NA	810	NA	NA	NA	7.17	21.6	6903	60.2	-130	1.38		
12/1-12/6/16	<b>ON-SITE EXCAVATION</b>																														
01/23/17	< 39	< 20	< 14	< 3.4	< 14	< 14	< 14	990	20	< 1.4	<b>1,010</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.97	12.1	6444	24.2	361	1.18	
04/24/17	< 97	< 50	< 35	< 8.4	160	< 35	< 35	3,600	55	< 3.6	<b>3,815</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.08	15.3	6542	83.2	319	1.31	
11/12/18	< 19	< 10	< 7	< 1.7	270	< 7	< 7	740	150	< 0.71	<b>1,160</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.22	14.3	4384	74.4	2.55	82	
04/05/19	< 39	< 20	< 14	< 3.4	270 D	< 14	< 14	1,900 D	300 D	< 1.4	<b>2,470</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.10	10.8	6110	15.1	37	2.9	
11/20/19	< 7.8	< 4	< 2.8	< 0.68	160 D	< 2.8	< 2.8	380 D	120 D	< 0.28	<b>660</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.04	15.6	4140	--	7	1.42	
04/01/20	< 19	< 10	< 7	< 1.7	170 D	< 7	< 7	980 D	180 D	< 0.71	<b>1,330</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.12	11.1	5826	31.2	92	1.23	



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																																																		
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)																												
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)																						
GWQS <sup>2</sup>	50	-	7	5	5	5	5	5	5	2	-	-	-	-	-	300	300	10	250	-	-	250	6.5 - 8.5	-	-	-	-	-	-																						
<b>Off-Site NYSDEC Wells (S = shallow, D = deep)<sup>3</sup></b>																																																			
MW-23S	08/18/08	<b>HRC INJECTION</b>																																																	
	05/28/09	< 5	< 1	0.64 J	< 1	47	< 1	< 1	560 D	3.6	< 1	611	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(4)	(4)	(4)	(4)	(4)	(4)																
	06/07/11	< 50	< 50	< 50	< 5.0	< 50	< 50	< 50	650	< 50	< 50	650	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(4)	(4)	(4)	(4)	(4)													
	06/04/12	< 10	< 0.19	< 0.34	< 0.29	11	< 1	< 0.44	1800 D	4.1	< 0.9	1,815	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.63	11.8	3366	47	482	2.35										
	04/16/14	<b>IET INJECTION</b>																																																	
	09/03/14	< 1.3	< 0.19	0.47 J	< 0.29	5.7	< 0.9	< 0.44	1400 D	3.4	< 0.9	1,409	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.32	17.2	2755	51	26	0.82									
	04/16/15	< 66	< 9.5	17	< 15	250	< 45	< 22	1200	72	< 45	1,522	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	9.4	7.41	9.6	3441	25	45	3.17																
	08/14/15	< 66	< 9.5	< 17	< 15	60	< 45	33 J	1300	93	< 45	1,486	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	5.2	7.25	17.4	4791	16	150	1.18																	
	12/1-12/6/16	<b>ON-SITE EXCAVATION</b>																																																	
	01/23/17	< 19	< 10	< 7	< 1.7	7.1 J	< 7	< 7	470	10	< 0.71	487	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.20	13.1	4083	0.87	186	3.11										
	04/24/17	< 19	< 10	< 7	< 1.7	26	< 7	< 7	660	15	< 0.71	701	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.31	11.8	2792	15.2	71	1.49										
	11/12/18	< 9.7	< 5	< 3.5	< 0.84	< 3.5	< 3.5	< 3.5	590	3	< 0.36	593	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.19	17.1	2887	11.7	56	1.58										
	04/05/19	< 4.8	< 2.5	2.1 J D	< 0.42	< 1.8	< 1.8	< 1.8	310 D	1.1 J D	< 0.18	313	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.29	9.4	3571	8.0	36	1.86										
	11/20/19	< 4.8	< 2.5	2.4 J D	< 0.42	5.4 J	< 1.8	< 1.8	230 D	1.2 D	< 0.18	239	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.34	17.2	3852	--	62	1.04										
04/01/20	< 9.7	< 5	< 3.5	< 0.84	< 3.5	< 3.5	< 3.5	820 D	3.5 D	< 0.36	824	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.36	11.6	3161	10.2	48	1.29											
MW-24S	08/18/08	<b>HRC INJECTION</b>																																																	
	05/28/09	< 5	< 1	< 1	< 1	5.8	< 1	< 1	180 D	35	< 1	221	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(4)	(4)	(4)	(4)	(4)	(4)						
	06/07/11	< 100	< 50	< 50	< 50	< 50	< 50	< 50	1300	< 50	< 50	1,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(4)	(4)	(4)	(4)	(4)	(4)		
	06/04/12	< 10	< 0.19	< 0.34	< 0.29	2.2	< 1	< 0.44	2900 D	1.1	< 0.9	2,903	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.51	13.1	3198	60	300	1.74	
	04/16/14	<b>IET INJECTION</b>																																																	
	09/03/14	< 1.3	0.55 J	4.5	2.6 J	15	< 0.9	< 0.44	68,000	420 J	< 0.9	68,436	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.39	15.9	2592	19	80	0.73	
	04/16/15	< 1300	< 190	< 340	< 290	< 810	< 900	< 440	24000 D	< 460	< 900	24,000	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	< 1	7.33	13.0	2477	21	36	1.77															
	08/14/15	< 1300	< 190	< 340	< 290	< 810	< 900	590 J	22,000	< 460	< 900	22,590	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	2.6 J	< 1	7.31	16.2	2408	12	-16	1.63																
	12/1-12/6/16	<b>ON-SITE EXCAVATION</b>																																																	
	01/23/17	< 190	< 100	< 70	< 17	< 70	< 70	< 70	9,000	35 J	< 7.1	9,035	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.40	13.0	2425	4.1	81	1.97		
	04/24/17	< 390	< 200	< 140	< 34	< 140	< 140	< 140	9,300	< 35	< 14	9,300	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.49	15.0	2785	19.7	20	1.31	
	11/12/18	< 39	< 20	< 14	< 3.4	< 14	< 14	< 14	3,900	5.7 J	< 1.4	3,906	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.42	14.3	2781	30.6	8	4.96	
	04/05/19	< 19	< 10	25 D	< 1.7	66 D	< 7	< 7	890 D2	29 D	< 0.71	1,010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.72	9.8	1554	766	66	2.31	
	11/20/19	< 19	< 10	7.6 J D	< 1.7	< 7	< 7	< 7	1,100 D	< 1.8	< 0.71	1,108	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.50	13.7	2804	--	17	17
04/01/20	< 19	< 10	10 J D	< 1.7	15 J D	< 7	< 7	990 D	3.8 J D	< 0.71	1,019	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.51	11.0	3490	3.97	130	4.48



**TABLE 3**  
**SUMMARY OF PRE- AND POST-REMEDIAL GROUNDWATER ANALYTICAL RESULTS**  
**275 Franklin Street & 432 Pearl Street Sites**  
**BCP Sites No. C915208 & C915237**  
**Buffalo, New York**

Monitoring Location & Sample Date	Parameter <sup>1</sup>																												
	TCL Volatile Organic Compounds (ug/L)											Microbial Parameters (cells/mL)				Water Quality Parameters (mg/L)							Field Measurements (units as indicated)						
	2-Butanone (MEK)	Carbon disulfide	Chloroform	1,1-Dichloroethene	cis-1,2-Dichloroethene	trans-1,2-Dichloroethene	Methylene chloride	Tetrachloroethene	Trichloroethene	Vinyl chloride	Total TCL cVOCs	Dehalococoides	TCE R-Dase	BAV1 VC R-Dase	Vinyl Chloride Reductase (VC R-Dase)	Total Organic Carbon (TOC)	Iron- Soluble	Manganese- Soluble	Nitrate, mg/L-N	Sulfate	Ethane	Ethene	Methane	pH (units)	Temperature (°C)	Specific Conductance (uS)	Turbidity	ORP (mV)	DO (ppm)
<b>GWQS <sup>2</sup></b>	50	-	7	5	5	5	5	5	5	2	-	-	-	-	-	300	300	10	250	-	-	250	6.5 - 8.5	-	-	-	-	-	-
<b>MW-24D</b>	<b>08/18/08 HRC INJECTION</b>																												
	05/28/09	< 5	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	< 1	0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(4)	(4)	(4)	(4)	(4)	(4)
	06/07/11	< 10	< 5	< 5	< 5	11	< 5	< 5	3 J	< 5	< 5	14	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(4)	(4)	(4)	(4)	(4)	(4)
	06/04/12	< 10	< 0.19	< 0.34	< 0.29	100 D	< 1	< 0.44	1.1	< 1	< 0.9	101	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.60	13.6	2400	35	-69	1.68
	<b>04/16/14 IET INJECTION</b>																												
	09/03/14	< 1.3	< 0.19	< 0.34	< 0.29	26	< 0.9	< 0.44	1.3	0.52 J	< 0.9	28	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.35	15.5	2097	17	-102	1.02
	04/16/15	< 6.6	< 0.95	< 1.7	< 1.5	33	< 4.5	< 2.2	180	6.1	< 4.5	219	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	39	7.30	9.1	2821	17	30	3.07
	07/30/15	< 1.3	< 0.19	< 0.34	< 0.29	160	< 0.9	< 0.44	15	3.2	< 0.9	178	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	(4)	(4)	(4)	(4)	(4)	(4)
	08/14/15	< 2.6	< 0.38	< 0.68	< 0.58	89	< 1.8	1.2 J	45	3.2	< 1.8	137	NA	NA	NA	NA	NA	NA	NA	NA	< 1.5	< 1.5	40	7.16	16.1	2275	15	-51	1.55
	<b>12/1-12/6/16 ON-SITE EXCAVATION</b>																												
	01/23/17	< 1.9	< 1	< 0.7	0.19 J	48	< 0.7	< 0.7	4.0	2.2	< 0.07	54	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.32	12.3	2315	3.2	47	1.76
	04/24/17	< 1.9	< 1	< 0.7	0.3 J	83	< 0.7	< 0.7	2.7	4.9	< 0.07	91	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.33	15.9	2210	27	-92	1.20
	11/12/18	< 7.8	< 4	< 2.8	< 0.68	250	< 2.8	< 2.8	450	120	< 0.28	820	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.20	12.5	2290	4.1	-96	1.01
	02/18/19	< 13	< 1.9	< 3.4	< 2.9	200	< 9.0	9.3 J	420	110	< 9.0	730	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	5.62	13.5	2.412	62.4	-84.2	3.37
	04/05/19	< 9.7	< 5	< 3.5	< 0.84	290 D	< 3.5	< 3.5	480 D	130 D	< 0.36	900	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.23	11.9	2451	4.5	-88	1.60
11/20/19	< 1.9	< 1	< 0.7	0.58	170	1.2 J	< 0.7	180 D	66	< 0.07	418	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.29	13.1	2603	--	-68	1.00	
04/01/20	< 3.9	< 2	< 1.4	0.73 J D	220 D	1.4 J D	< 1.4	270 D	95 D	< 0.14	587	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.28	12.1	2555	2.0	-30	1.57	

- Notes:**
- Only those parameters detected above their specific GWQS at a minimum of one sample location are presented. Some additional parameters were detected but not included due to low concentrations and sporadic detection.
  - Groundwater Quality Standard (GWQS) per NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.1.1.
  - Groundwater data for the May 2009, June 2011, October 2012, and July 2015 events obtained from NYSDEC. The additional sampling events were performed by Benchmark.
  - Field parameter results were not provided by the NYSDEC.

- Definitions:**
- < 0.19 = Parameter not detected above laboratory method detection limit.
  - NA = Sample not analyzed for parameter.
  - "--" = No groundwater quality standard available.
  - J = Estimated value; result is less than the sample quantitation limit but greater than zero.
  - b = Analyte was detected in the associated blank as well as in the sample. Value is above the action level for consideration as being external contamination.
  - B = Indicates a value greater than or equal to the instrument detection limit, but less than the quantitation limit.
  - D = Concentration of analyte was quantified from a diluted analysis.
  - NS = Not sampled due to car parked over well; several attempts to sample were made over a 2-week period.

- \* = Indicates the spike or duplicate analysis is not within the quality control limits.
- D2 = Concentration of analyte was quantified at a secondary dilution.
- N = Indicates spike sample recovery is not within the quality control limits.
- E = Result exceeds calibration range.
- P = Detected concentrations between the two GC columns is greater than 25%; lower value is reported and flagged (for CLP methodology only).
- H = Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
- \*+ = Additional analytes detected but not included in this table are: 2-hexanone (31 J ug/L) and acetone (920 ug/L)
- F1 = MS and/or MSD recovery is outside acceptable limits.

  Insufficient sample to collect final field parameter measurements; values measured before sample collected.

# APPENDIX A

## INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORMS

# APPENDIX A1

SITE No. C915208



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
<b>Site No.</b>	<b>C915208</b>		
<b>Site Name 275 Franklin Street</b>			
Site Address: 275 Franklin Street		Zip Code: 14202	
City/Town: Buffalo			
County: Erie			
Site Acreage: 0.260			
Reporting Period: <del>December 27, 2017 to April 27, 2019</del> April 27, 2019 to April 27, 2020			
		YES	NO
1.	Is the information above correct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>			
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
		<b>Box 2</b>	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

**Box 2A**

YES NO

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

 YES  NO

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  
(The Qualitative Exposure Assessment must be certified every five years)

 YES  NO

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

**SITE NO. C915208****Box 3****Description of Institutional Controls**ParcelOwnerInstitutional Control**111.38-2-22**

Buffalo Development Corporation

Ground Water Use Restriction  
Landuse Restriction  
Site Management Plan  
IC/EC Plan

Soil Management Plan  
Building Use Restriction  
Monitoring Plan

- Prohibition against well installation (or use of gw without treatment)
- Compliance with the Site Management Plan
- Compliance with the Soils Management Plan
- Annual monitoring of groundwater
- Highest land use is restricted to restricted residential

**111.38-2-23**

Buffalo Development Corporation

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Building Use Restriction  
Monitoring Plan  
Site Management Plan  
IC/EC Plan

- Prohibition against well installation (or use of gw without treatment)
- Compliance with the Site Management Plan
- Compliance with the Soils Management Plan
- Annual monitoring of groundwater
- Highest land use is restricted to restricted residential

**Box 4****Description of Engineering Controls**ParcelEngineering Control**111.38-2-22**

Vapor Mitigation  
Cover System

- Cover consisting of hardscape or clean soil
- In-situ plume reduction measure
- Vapor intrusion mitigation for new structures

**111.38-2-23**

Cover System

Parcel

Engineering Control

Vapor Mitigation

- Site cover consisting of hardscape or clean soil
- In-situ plume reduction measure
- Vapor intrusion mitigation for existing and new structures

**Box 5**

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. C915208

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jessica Croce at 432 Pearl Street  
print name print business address

am certifying as President of Buffalo Development Corp. (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Jessica R. Croce  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

5/26/2020  
Date

IC/EC CERTIFICATIONS

Box 7

Qualified Environmental Professional Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Lori Riker, P.E. at 2558 Hamburg Turnpike, Suite 300  
Buffalo, New York 14218,  
print name print business address

I am certifying as a Qualified Environmental Professional for the Owner  
(Owner or Remedial Party)

*Lori Riker*



Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification

Stamp  
(Required for PE)

05/27/2020  
Date

## APPENDIX A2

SITE NO. C915237



**Enclosure 2**  
**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**Site Management Periodic Review Report Notice**  
**Institutional and Engineering Controls Certification Form**



	Site Details	Box 1	
<b>Site No.</b>	<b>C915237</b>		
<b>Site Name 432 Pearl Street</b>			
Site Address: 432 Pearl Street		Zip Code: 14202	
City/Town: Buffalo			
County: Erie			
Site Acreage: 0.700			
Reporting Period: <del>December 28, 2017 to April 28, 2019</del> April 28, 2019 to April 28, 2020			
		YES	NO
1.	Is the information above correct?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If NO, include handwritten above or on a separate sheet.			
2.	Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3.	Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.	Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b>			
5.	Is the site currently undergoing development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

		Box 2	
		YES	NO
6.	Is the current site use consistent with the use(s) listed below? Restricted-Residential, Commercial, and Industrial	<input checked="" type="checkbox"/>	<input type="checkbox"/>
7.	Are all ICs/ECs in place and functioning as designed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.</b>			
<b>A Corrective Measures Work Plan must be submitted along with this form to address these issues.</b>			
_____ Signature of Owner, Remedial Party or Designated Representative		_____ Date	

**Box 2A**

8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?

YES NO

**If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.**

9. Are the assumptions in the Qualitative Exposure Assessment still valid?  
(The Qualitative Exposure Assessment must be certified every five years)

**If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.**

**SITE NO. C915237**

**Box 3**

**Description of Institutional Controls**

Parcel

Owner

Institutional Control

111.38-2-20.1

Buffalo Development Corporation

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Building Use Restriction  
Monitoring Plan  
Site Management Plan  
IC/EC Plan

- Prohibition against well installation (or use of gw without treatment)
- Compliance with the Site Management Plan
- Compliance with the Soils Management Plan
- Compliance with the Operations Management plan for the vapor mitigation system
- Annual monitoring of groundwater
- Highest land use is restricted to restricted residential

111.38-2-4.1

Buffalo Development Corporation

Site Management Plan  
Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Monitoring Plan  
IC/EC Plan

- Prohibition against well installation (or use of gw without treatment)
- Compliance with the Site Management Plan
- Compliance with the Soils Management Plan
- Annual monitoring of groundwater
- Highest land use is restricted to restricted residential

Building Use Restriction

**Box 4**

**Description of Engineering Controls**

Parcel

Engineering Control

111.38-2-20.1

Vapor Mitigation  
Cover System

- Cover consisting of hardscape or clean soil
- In-situ plume reduction measure
- Vapor intrusion mitigation for existing and new structures

111.38-2-4.1

Cover System

Parcel

Engineering Control

- Cover consisting of hardscape or clean soil
- Vapor intrusion mitigation for new structures

**Box 5**

**Periodic Review Report (PRR) Certification Statements**

1. I certify by checking "YES" below that:

a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the certification;

b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

2. If this site has an IC/EC Plan (or equivalent as required in the Decision Document), for each Institutional or Engineering control listed in Boxes 3 and/or 4, I certify by checking "YES" below that all of the following statements are true:

(a) the Institutional Control and/or Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;

(b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;

(c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;

(d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and

(e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

**IF THE ANSWER TO QUESTION 2 IS NO, sign and date below and DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**A Corrective Measures Work Plan must be submitted along with this form to address these issues.**

\_\_\_\_\_  
Signature of Owner, Remedial Party or Designated Representative

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. C915237

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

I certify that all information and statements in Boxes 1, 2, and 3 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Jessica Croce at 275 Franklin Street  
print name print business address

am certifying as President of Buffalo Development Corp. (Owner or Remedial Party)

for the Site named in the Site Details Section of this form.

Jessica R. Croce  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

5/26/2020  
Date

IC/EC CERTIFICATIONS

Box 7

Signature

I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I Lori Riker, P.E. at 2558 Hamburg Turnpike, Suite 300  
Buffalo, New York 14218,  
print name print business address

am certifying as a Owner  
(Owner or Remedial Party)

Lori Riker  
Signature of , for the Owner or Remedial Party,  
Rendering Certification



Stamp  
(Required for PE)

05/27/2020  
Date

# APPENDIX B

## PHOTOGRAPHIC LOG

## SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



### 432 PEARL STREET

- Photo 1: Asphalt cover system along eastern property boundary (looking southwest)
- Photo 2: Asphalt cover system, from southwest corner of property (looking northeast)
- Photo 3: Asphalt cover system along western property boundary and Asbury Alley (looking south)
- Photo 4: Asphalt cover system in center of property (looking east)

## SITE PHOTOGRAPHS

Photo 5:

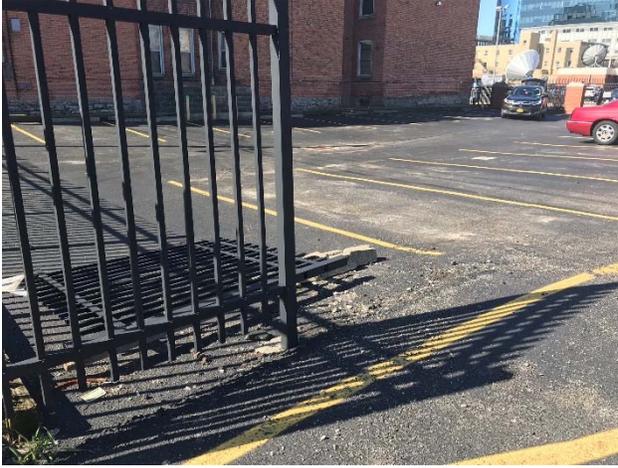


Photo 6:



Photo 7:



Photo 8:



### 267 FRANKLIN STREET

Photo 5: Asphalt cover system from northeast corner of property (looking west)

Photo 6: Asphalt and landscape cover system (looking west)

Photo 7: Asphalt cover system from western property boundary (looking east)

Photo 8: Hardscape and landscape cover system along Franklin Street (looking east)

## SITE PHOTOGRAPHS

Photo 9:

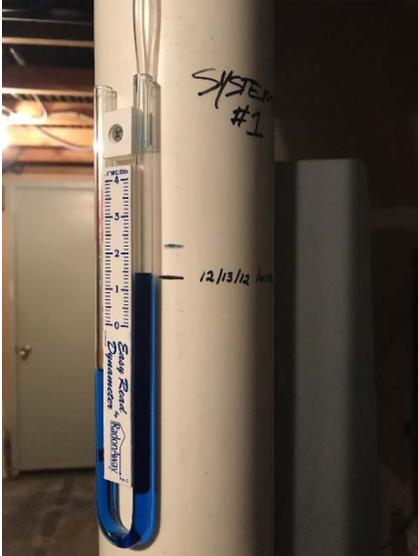


Photo 10:



Photo 11:



Photo 12:



### 267 FRANKLIN STREET APARTMENT ASD SYSTEM

Photo 9: System #1 manometer in basement

Photo 10: System #2 manometer in basement

Photo 11: System #1 RP265 fans on roof

Photo 12: System #2 GP501 series fan on roof

## SITE PHOTOGRAPHS

Photo 13:



Photo 14:



Photo 15:



Photo 16:



### 275 FRANKLIN STREET

Photo 13: Asphalt cover system from southeast corner of property (looking northwest)

Photo 14: Asphalt cover along the western property boundary (looking southeast)

Photo 15: Asphalt cover (looking northeast)

Photo 16: Asphalt cover looking south from the northern boundary

# APPENDIX C

## ASD SYSTEM LOGS

# System 2

Active Subslab Depressurization (ASD) System Log  
ASD System #1 (5 Sub-Slab Suction Points)  
Radonaway RP-265 Series (2 in-line)

Buffalo Development Corporation  
432 Pearl Street Site (BCP Site No. C915237)

Date	Monometer Reading (in. wc)	Initials	Comments
April 2019	1 1/2"	K.N	
May 2019	1 1/2"	KN	
June 2019	1 1/2"	KN	
July 2019	1 1/2"	K.N	
August 2019	1 1/2"	K.N	
Sept 2019	1 1/2"	KN	
<del>OCT</del> 2019	1 1/2"	KN	
NOV 2019	1 1/2"	KN	
Dec 2019	1 1/2"	KN	
Jan 2020	1 1/2"	KN	
Feb 2020	1 1/2"	KN	
march 2020	1 1/2"		

# System 2

Active Subslab Depressurization (ASD) System Log  
ASD System #2 (3 Sub-Slab Suction Points)  
Radonaway GP-501 Series

Buffalo Development Corporation  
432 Pearl Street Site (BCP Site No. C915237)

Date	Monometer Reading (in. wc)	Initials	Comments
April 2019	1/2"	KN	
May 2019	1/2"	KN	
June 2019	1/2"	KN	
July 2019	1/2"	KN	
August 2019	1/2"	KN	
Sept 2019	1/2"	KN	
Oct 2019	1/2"	KN	
Nov 2019	1/2"	KN	
Dec 2019	1/2"	KN	
Jan 2020	1/2"	KN	
Feb 2020	1/2"	KN	
March 2020	1/2"	KN	

# APPENDIX D

## GROUNDWATER ANALYTICAL DATA & FIELD NOTES



## ANALYTICAL REPORT

Lab Number:	L1955797
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Lori Riker
Phone:	(716) 856-0599
Project Name:	275 FRANKLIN ST. SITE
Project Number:	B0156-019-002-001
Report Date:	11/27/19

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).

---

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: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1955797-01	PZ-6	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 08:55	11/20/19
L1955797-02	PZ-5	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 09:16	11/20/19
L1955797-03	PZ-4R	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 11:40	11/20/19
L1955797-04	MW-5R	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:55	11/20/19
L1955797-05	PZ-13	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:38	11/20/19
L1955797-06	PZ-14	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:58	11/20/19
L1955797-07	PZ-11	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:05	11/20/19
L1955797-08	PZ-12	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 11:28	11/20/19
L1955797-09	MW-24D	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 12:55	11/20/19
L1955797-10	MW-24S	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 13:15	11/20/19
L1955797-11	MW-23S	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 13:55	11/20/19
L1955797-12	BLIND DUP	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 08:00	11/20/19
L1955797-13	TRIP BLANK	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 08:00	11/20/19

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

### Case Narrative

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

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

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

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

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

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

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**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

### Case Narrative (continued)

#### Report Submission

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

#### Volatile Organics

The WG1314137-6/-7 MS/MSD recoveries, performed on L1955797-10, are outside the acceptance criteria for tetrachloroethene (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the native sample.

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

Authorized Signature:  Melissa Sturgis

Title: Technical Director/Representative

Date: 11/27/19

# ORGANICS

# VOLATILES

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-01 D  
 Client ID: PZ-6  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 08:55  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/25/19 23:57  
 Analyst: NLK

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	170		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	1.8		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-01 D

Date Collected: 11/20/19 08:55

Client ID: PZ-6

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	ND		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	2.1	J	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	ND		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		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
Bromochloromethane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	500	120	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	86		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	94		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-02 D  
 Client ID: PZ-5  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 09:16  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 00:23  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	ND		ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	220		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	ND		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	ND		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Trichloroethene	ND		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-02 D

Date Collected: 11/20/19 09:16

Client ID: PZ-5

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
Freon-113	ND		ug/l	6.2	1.8	2.5
Methyl cyclohexane	ND		ug/l	25	0.99	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	94		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-03 D  
 Client ID: PZ-4R  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 11:40  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 00:48  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	1100		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	21		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

## SAMPLE RESULTS

Lab ID: L1955797-03 D

Date Collected: 11/20/19 11:40

Client ID: PZ-4R

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	21	J	ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	86		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	94		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-04 D  
 Client ID: MW-5R  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 10:55  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 01:13  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	10	2.8	4
1,1-Dichloroethane	ND		ug/l	10	2.8	4
Chloroform	ND		ug/l	10	2.8	4
Carbon tetrachloride	ND		ug/l	2.0	0.54	4
1,2-Dichloropropane	ND		ug/l	4.0	0.55	4
Dibromochloromethane	ND		ug/l	2.0	0.60	4
1,1,2-Trichloroethane	ND		ug/l	6.0	2.0	4
Tetrachloroethene	380		ug/l	2.0	0.72	4
Chlorobenzene	ND		ug/l	10	2.8	4
Trichlorofluoromethane	ND		ug/l	10	2.8	4
1,2-Dichloroethane	ND		ug/l	2.0	0.53	4
1,1,1-Trichloroethane	ND		ug/l	10	2.8	4
Bromodichloromethane	ND		ug/l	2.0	0.77	4
trans-1,3-Dichloropropene	ND		ug/l	2.0	0.66	4
cis-1,3-Dichloropropene	ND		ug/l	2.0	0.58	4
Bromoform	ND		ug/l	8.0	2.6	4
1,1,2,2-Tetrachloroethane	ND		ug/l	2.0	0.67	4
Benzene	ND		ug/l	2.0	0.64	4
Toluene	ND		ug/l	10	2.8	4
Ethylbenzene	ND		ug/l	10	2.8	4
Chloromethane	ND		ug/l	10	2.8	4
Bromomethane	ND		ug/l	10	2.8	4
Vinyl chloride	ND		ug/l	4.0	0.28	4
Chloroethane	ND		ug/l	10	2.8	4
1,1-Dichloroethene	ND		ug/l	2.0	0.68	4
trans-1,2-Dichloroethene	ND		ug/l	10	2.8	4
Trichloroethene	120		ug/l	2.0	0.70	4
1,2-Dichlorobenzene	ND		ug/l	10	2.8	4

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-04 D

Date Collected: 11/20/19 10:55

Client ID: MW-5R

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	10	2.8	4
1,4-Dichlorobenzene	ND		ug/l	10	2.8	4
Methyl tert butyl ether	ND		ug/l	10	2.8	4
p/m-Xylene	ND		ug/l	10	2.8	4
o-Xylene	ND		ug/l	10	2.8	4
cis-1,2-Dichloroethene	160		ug/l	10	2.8	4
Styrene	ND		ug/l	10	2.8	4
Dichlorodifluoromethane	ND		ug/l	20	4.0	4
Acetone	ND		ug/l	20	5.8	4
Carbon disulfide	ND		ug/l	20	4.0	4
2-Butanone	ND		ug/l	20	7.8	4
4-Methyl-2-pentanone	ND		ug/l	20	4.0	4
2-Hexanone	ND		ug/l	20	4.0	4
Bromochloromethane	ND		ug/l	10	2.8	4
1,2-Dibromoethane	ND		ug/l	8.0	2.6	4
1,2-Dibromo-3-chloropropane	ND		ug/l	10	2.8	4
Isopropylbenzene	ND		ug/l	10	2.8	4
1,2,3-Trichlorobenzene	ND		ug/l	10	2.8	4
1,2,4-Trichlorobenzene	ND		ug/l	10	2.8	4
Methyl Acetate	ND		ug/l	8.0	0.94	4
Cyclohexane	ND		ug/l	40	1.1	4
1,4-Dioxane	ND		ug/l	1000	240	4
Freon-113	ND		ug/l	10	2.8	4
Methyl cyclohexane	ND		ug/l	40	1.6	4

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	94		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-05  
 Client ID: PZ-13  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 10:38  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/25/19 23:06  
 Analyst: NLK

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	13		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	38		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.23	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	6.6		ug/l	2.5	0.70	1
Trichloroethene	14		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-05

Date Collected: 11/20/19 10:38

Client ID: PZ-13

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	52		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	84		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	94		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-06  
 Client ID: PZ-14  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 10:58  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/25/19 23:31  
 Analyst: NLK

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	0.71	J	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	33		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	35		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.34	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	4.2		ug/l	2.5	0.70	1
Trichloroethene	12		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

## SAMPLE RESULTS

Lab ID: L1955797-06

Date Collected: 11/20/19 10:58

Client ID: PZ-14

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	100		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	1.9	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
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	96		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-07 D  
 Client ID: PZ-11  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 10:05  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/27/19 03:45  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	ND		ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	440		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	ND		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	ND		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Trichloroethene	4.0		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-07 D

Date Collected: 11/20/19 10:05

Client ID: PZ-11

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	7.7		ug/l	6.2	1.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
Freon-113	ND		ug/l	6.2	1.8	2.5
Methyl cyclohexane	ND		ug/l	25	0.99	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	111		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-08 D  
 Client ID: PZ-12  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 11:28  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/27/19 04:21  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	50	14.	20
1,1-Dichloroethane	ND		ug/l	50	14.	20
Chloroform	ND		ug/l	50	14.	20
Carbon tetrachloride	ND		ug/l	10	2.7	20
1,2-Dichloropropane	ND		ug/l	20	2.7	20
Dibromochloromethane	ND		ug/l	10	3.0	20
1,1,2-Trichloroethane	ND		ug/l	30	10.	20
Tetrachloroethene	3600		ug/l	10	3.6	20
Chlorobenzene	ND		ug/l	50	14.	20
Trichlorofluoromethane	ND		ug/l	50	14.	20
1,2-Dichloroethane	ND		ug/l	10	2.6	20
1,1,1-Trichloroethane	ND		ug/l	50	14.	20
Bromodichloromethane	ND		ug/l	10	3.8	20
trans-1,3-Dichloropropene	ND		ug/l	10	3.3	20
cis-1,3-Dichloropropene	ND		ug/l	10	2.9	20
Bromoform	ND		ug/l	40	13.	20
1,1,2,2-Tetrachloroethane	ND		ug/l	10	3.3	20
Benzene	ND		ug/l	10	3.2	20
Toluene	ND		ug/l	50	14.	20
Ethylbenzene	ND		ug/l	50	14.	20
Chloromethane	ND		ug/l	50	14.	20
Bromomethane	ND		ug/l	50	14.	20
Vinyl chloride	ND		ug/l	20	1.4	20
Chloroethane	ND		ug/l	50	14.	20
1,1-Dichloroethene	ND		ug/l	10	3.4	20
trans-1,2-Dichloroethene	ND		ug/l	50	14.	20
Trichloroethene	7.9	J	ug/l	10	3.5	20
1,2-Dichlorobenzene	ND		ug/l	50	14.	20

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

**SAMPLE RESULTS**

Lab ID: L1955797-08 D  
 Client ID: PZ-12  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 11:28  
 Date Received: 11/20/19  
 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	50	14.	20
1,4-Dichlorobenzene	ND		ug/l	50	14.	20
Methyl tert butyl ether	ND		ug/l	50	14.	20
p/m-Xylene	ND		ug/l	50	14.	20
o-Xylene	ND		ug/l	50	14.	20
cis-1,2-Dichloroethene	ND		ug/l	50	14.	20
Styrene	ND		ug/l	50	14.	20
Dichlorodifluoromethane	ND		ug/l	100	20.	20
Acetone	ND		ug/l	100	29.	20
Carbon disulfide	ND		ug/l	100	20.	20
2-Butanone	ND		ug/l	100	39.	20
4-Methyl-2-pentanone	ND		ug/l	100	20.	20
2-Hexanone	ND		ug/l	100	20.	20
Bromochloromethane	ND		ug/l	50	14.	20
1,2-Dibromoethane	ND		ug/l	40	13.	20
1,2-Dibromo-3-chloropropane	ND		ug/l	50	14.	20
Isopropylbenzene	ND		ug/l	50	14.	20
1,2,3-Trichlorobenzene	ND		ug/l	50	14.	20
1,2,4-Trichlorobenzene	ND		ug/l	50	14.	20
Methyl Acetate	ND		ug/l	40	4.7	20
Cyclohexane	ND		ug/l	200	5.4	20
1,4-Dioxane	ND		ug/l	5000	1200	20
Freon-113	ND		ug/l	50	14.	20
Methyl cyclohexane	ND		ug/l	200	7.9	20

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	110		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-09  
 Client ID: MW-24D  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 12:55  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/27/19 04:58  
 Analyst: NLK

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	240	E	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	0.58		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	1.2	J	ug/l	2.5	0.70	1
Trichloroethene	66		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-09

Date Collected: 11/20/19 12:55

Client ID: MW-24D

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	170		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	121		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	113		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-09 D  
 Client ID: MW-24D  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 12:55  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 02:29  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
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Tetrachloroethene	180		ug/l	1.2	0.45	2.5
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	95		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-10 D  
 Client ID: MW-24S  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 13:15  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 02:55  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	7.6	J	ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	1100		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	ND		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-10 D

Date Collected: 11/20/19 13:15

Client ID: MW-24S

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	83		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	93		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-11 D  
 Client ID: MW-23S  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 13:55  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 03:21  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	2.4	J	ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	230		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	ND		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	ND		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Trichloroethene	1.2		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-11 D

Date Collected: 11/20/19 13:55

Client ID: MW-23S

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

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	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	5.4	J	ug/l	6.2	1.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
Freon-113	ND		ug/l	6.2	1.8	2.5
Methyl cyclohexane	ND		ug/l	25	0.99	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	94		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**SAMPLE RESULTS**

Lab ID: L1955797-12 D  
 Client ID: BLIND DUP  
 Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Date Collected: 11/20/19 08:00  
 Date Received: 11/20/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 03:46  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	2.4	J	ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	210		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	ND		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	ND		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	ND		ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	ND		ug/l	6.2	1.8	2.5
Trichloroethene	1.1	J	ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

## SAMPLE RESULTS

Lab ID: L1955797-12 D

Date Collected: 11/20/19 08:00

Client ID: BLIND DUP

Date Received: 11/20/19

Sample Location: 275 FRANKLIN STREET, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	5.3	J	ug/l	6.2	1.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
Freon-113	ND		ug/l	6.2	1.8	2.5
Methyl cyclohexane	ND		ug/l	25	0.99	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	96		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

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

Analytical Method: 1,8260C  
Analytical Date: 11/25/19 21:18  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,09-12 Batch: WG1314137-5					
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:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

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

Analytical Method: 1,8260C  
Analytical Date: 11/25/19 21:18  
Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,09-12 Batch: WG1314137-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 11/25/19 21:18  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06,09-12 Batch: WG1314137-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	85		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	95		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

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

Analytical Method: 1,8260C  
Analytical Date: 11/26/19 20:36  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07-09 Batch: WG1314542-5					
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:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

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

Analytical Method: 1,8260C  
Analytical Date: 11/26/19 20:36  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07-09 Batch: WG1314542-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19

**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 11/26/19 20:36  
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 07-09 Batch: WG1314542-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	112		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,09-12 Batch: WG1314137-3 WG1314137-4								
Methylene chloride	85		86		70-130	1		20
1,1-Dichloroethane	86		87		70-130	1		20
Chloroform	82		84		70-130	2		20
Carbon tetrachloride	83		84		63-132	1		20
1,2-Dichloropropane	89		91		70-130	2		20
Dibromochloromethane	80		80		63-130	0		20
1,1,2-Trichloroethane	84		83		70-130	1		20
Tetrachloroethene	82		81		70-130	1		20
Chlorobenzene	83		83		75-130	0		20
Trichlorofluoromethane	75		74		62-150	1		20
1,2-Dichloroethane	81		81		70-130	0		20
1,1,1-Trichloroethane	78		80		67-130	3		20
Bromodichloromethane	81		81		67-130	0		20
trans-1,3-Dichloropropene	83		82		70-130	1		20
cis-1,3-Dichloropropene	85		87		70-130	2		20
Bromoform	75		77		54-136	3		20
1,1,2,2-Tetrachloroethane	80		81		67-130	1		20
Benzene	87		89		70-130	2		20
Toluene	82		82		70-130	0		20
Ethylbenzene	79		80		70-130	1		20
Chloromethane	75		78		64-130	4		20
Bromomethane	46		61		39-139	28	Q	20
Vinyl chloride	86		86		55-140	0		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,09-12 Batch: WG1314137-3 WG1314137-4								
Chloroethane	74		77		55-138	4		20
1,1-Dichloroethene	84		84		61-145	0		20
trans-1,2-Dichloroethene	86		86		70-130	0		20
Trichloroethene	86		86		70-130	0		20
1,2-Dichlorobenzene	86		88		70-130	2		20
1,3-Dichlorobenzene	85		88		70-130	3		20
1,4-Dichlorobenzene	85		87		70-130	2		20
Methyl tert butyl ether	82		83		63-130	1		20
p/m-Xylene	80		80		70-130	0		20
o-Xylene	80		80		70-130	0		20
cis-1,2-Dichloroethene	90		89		70-130	1		20
Styrene	80		80		70-130	0		20
Dichlorodifluoromethane	57		55		36-147	4		20
Acetone	84		89		58-148	6		20
Carbon disulfide	80		81		51-130	1		20
2-Butanone	82		90		63-138	9		20
4-Methyl-2-pentanone	83		87		59-130	5		20
2-Hexanone	75		77		57-130	3		20
Bromochloromethane	94		90		70-130	4		20
1,2-Dibromoethane	84		84		70-130	0		20
1,2-Dibromo-3-chloropropane	81		84		41-144	4		20
Isopropylbenzene	81		85		70-130	5		20
1,2,3-Trichlorobenzene	87		89		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Project Number: B0156-019-002-001

Lab Number: L1955797

Report Date: 11/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,09-12 Batch: WG1314137-3 WG1314137-4								
1,2,4-Trichlorobenzene	85		88		70-130	3		20
Methyl Acetate	86		87		70-130	1		20
Cyclohexane	88		90		70-130	2		20
1,4-Dioxane	76		84		56-162	10		20
Freon-113	83		83		70-130	0		20
Methyl cyclohexane	83		85		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		84		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	104		104		70-130
Dibromofluoromethane	96		97		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-09 Batch: WG1314542-3 WG1314542-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	120		120		63-132	0		20
1,2-Dichloropropane	99		99		70-130	0		20
Dibromochloromethane	99		99		63-130	0		20
1,1,2-Trichloroethane	96		93		70-130	3		20
Tetrachloroethene	100		99		70-130	1		20
Chlorobenzene	96		98		75-130	2		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	100		110		67-130	10		20
trans-1,3-Dichloropropene	96		94		70-130	2		20
cis-1,3-Dichloropropene	100		100		70-130	0		20
Bromoform	90		91		54-136	1		20
1,1,2,2-Tetrachloroethane	93		91		67-130	2		20
Benzene	100		100		70-130	0		20
Toluene	95		94		70-130	1		20
Ethylbenzene	100		99		70-130	1		20
Chloromethane	100		100		64-130	0		20
Bromomethane	94		90		39-139	4		20
Vinyl chloride	110		110		55-140	0		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-09 Batch: WG1314542-3 WG1314542-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		97		61-145	3		20
trans-1,2-Dichloroethene	100		100		70-130	0		20
Trichloroethene	110		110		70-130	0		20
1,2-Dichlorobenzene	94		93		70-130	1		20
1,3-Dichlorobenzene	92		94		70-130	2		20
1,4-Dichlorobenzene	92		92		70-130	0		20
Methyl tert butyl ether	110		100		63-130	10		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	100		98		36-147	2		20
Acetone	110		110		58-148	0		20
Carbon disulfide	94		100		51-130	6		20
2-Butanone	110		110		63-138	0		20
4-Methyl-2-pentanone	95		88		59-130	8		20
2-Hexanone	100		100		57-130	0		20
Bromochloromethane	100		99		70-130	1		20
1,2-Dibromoethane	100		95		70-130	5		20
1,2-Dibromo-3-chloropropane	89		92		41-144	3		20
Isopropylbenzene	94		94		70-130	0		20
1,2,3-Trichlorobenzene	98		96		70-130	2		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L1955797

Project Number: B0156-019-002-001

Report Date: 11/27/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 07-09 Batch: WG1314542-3 WG1314542-4								
1,2,4-Trichlorobenzene	93		93		70-130	0		20
Methyl Acetate	110		110		70-130	0		20
Cyclohexane	100		110		70-130	10		20
1,4-Dioxane	108		128		56-162	17		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	114		117		70-130
Toluene-d8	97		96		70-130
4-Bromofluorobenzene	99		99		70-130
Dibromofluoromethane	111		104		70-130

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 275 FRANKLIN ST. SITE

**Lab Number:** L1955797

**Project Number:** B0156-019-002-001

**Report Date:** 11/27/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,09-12 QC Batch ID: WG1314137-6 WG1314137-7 QC Sample: L1955797-10 Client ID: MW-24S												
Methylene chloride	ND	100	93	93		93	93		70-130	0		20
1,1-Dichloroethane	ND	100	97	97		95	95		70-130	2		20
Chloroform	7.6J	100	98	98		96	96		70-130	2		20
Carbon tetrachloride	ND	100	95	95		95	95		63-132	0		20
1,2-Dichloropropane	ND	100	99	99		98	98		70-130	1		20
Dibromochloromethane	ND	100	84	84		84	84		63-130	0		20
1,1,2-Trichloroethane	ND	100	87	87		86	86		70-130	1		20
Tetrachloroethene	1100	100	1100	0	Q	1100	0	Q	70-130	0		20
Chlorobenzene	ND	100	89	89		89	89		75-130	0		20
Trichlorofluoromethane	ND	100	85	85		86	86		62-150	1		20
1,2-Dichloroethane	ND	100	86	86		86	86		70-130	0		20
1,1,1-Trichloroethane	ND	100	90	90		91	91		67-130	1		20
Bromodichloromethane	ND	100	86	86		88	88		67-130	2		20
trans-1,3-Dichloropropene	ND	100	84	84		85	85		70-130	1		20
cis-1,3-Dichloropropene	ND	100	87	87		88	88		70-130	1		20
Bromoform	ND	100	78	78		78	78		54-136	0		20
1,1,2,2-Tetrachloroethane	ND	100	81	81		83	83		67-130	2		20
Benzene	ND	100	98	98		98	98		70-130	0		20
Toluene	ND	100	90	90		89	89		70-130	1		20
Ethylbenzene	ND	100	87	87		87	87		70-130	0		20
Chloromethane	ND	100	86	86		86	86		64-130	0		20
Bromomethane	ND	100	40	40		54	54		39-139	30	Q	20
Vinyl chloride	ND	100	97	97		97	97		55-140	0		20

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 275 FRANKLIN ST. SITE

**Lab Number:** L1955797

**Project Number:** B0156-019-002-001

**Report Date:** 11/27/19

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,09-12 QC Batch ID: WG1314137-6 WG1314137-7 QC Sample: L1955797-10 Client ID: MW-24S												
Chloroethane	ND	100	85	85		87	87		55-138	2		20
1,1-Dichloroethene	ND	100	98	98		99	99		61-145	1		20
trans-1,2-Dichloroethene	ND	100	99	99		97	97		70-130	2		20
Trichloroethene	ND	100	97	97		98	98		70-130	1		20
1,2-Dichlorobenzene	ND	100	90	90		91	91		70-130	1		20
1,3-Dichlorobenzene	ND	100	91	91		92	92		70-130	1		20
1,4-Dichlorobenzene	ND	100	89	89		91	91		70-130	2		20
Methyl tert butyl ether	ND	100	86	86		86	86		63-130	0		20
p/m-Xylene	ND	200	180	90		180	90		70-130	0		20
o-Xylene	ND	200	170	85		170	85		70-130	0		20
cis-1,2-Dichloroethene	ND	100	100	100		100	100		70-130	0		20
Styrene	ND	200	170	85		170	85		70-130	0		20
Dichlorodifluoromethane	ND	100	64	64		63	63		36-147	2		20
Acetone	ND	100	99	99		98	98		58-148	1		20
Carbon disulfide	ND	100	90	90		91	91		51-130	1		20
2-Butanone	ND	100	91	91		94	94		63-138	3		20
4-Methyl-2-pentanone	ND	100	79	79		81	81		59-130	3		20
2-Hexanone	ND	100	80	80		82	82		57-130	2		20
Bromochloromethane	ND	100	98	98		97	97		70-130	1		20
1,2-Dibromoethane	ND	100	87	87		87	87		70-130	0		20
1,2-Dibromo-3-chloropropane	ND	100	81	81		86	86		41-144	6		20
Isopropylbenzene	ND	100	92	92		91	91		70-130	1		20
1,2,3-Trichlorobenzene	ND	100	80	80		87	87		70-130	8		20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06,09-12 QC Batch ID: WG1314137-6 WG1314137-7 QC Sample: L1955797-10 Client ID: MW-24S												
1,2,4-Trichlorobenzene	ND	100	83	83		88	88		70-130	6		20
Methyl Acetate	ND	100	92	92		90	90		70-130	2		20
Cyclohexane	ND	100	100	100		100	100		70-130	0		20
1,4-Dioxane	ND	5000	4000	80		4400	88		56-162	10		20
Freon-113	ND	100	94	94		92	92		70-130	2		20
Methyl cyclohexane	ND	100	95J	95		94J	94		70-130	1		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	91		85		70-130
4-Bromofluorobenzene	104		103		70-130
Dibromofluoromethane	95		97		70-130
Toluene-d8	97		96		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L1955797**Project Number:** B0156-019-002-001**Report Date:** 11/27/19**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>
L1955797-01A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-01B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-01C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-02A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-02B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-02C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-03A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-03B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-03C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-04A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-04B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-04C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-05A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-05B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-05C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-06A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-06B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-06C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-07A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-07B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-07C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-08A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-08B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

Serial\_No:11271913:09  
**Lab Number:** L1955797  
**Report Date:** 11/27/19

**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>
L1955797-08C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-09A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-09B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-09C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10A1	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10A2	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10B1	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10B2	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10C1	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-10C2	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-11A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-11B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-11C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-12A	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-12B	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-12C	Vial HCl preserved	A	NA		3.9	Y	Absent		NYTCL-8260-R2(14)
L1955797-13A	Vial HCl preserved	A	NA		3.9	Y	Absent		ARCHIVE()
L1955797-13B	Vial HCl preserved	A	NA		3.9	Y	Absent		ARCHIVE()

\*Values in parentheses indicate holding time in days



**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### Footnotes

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

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

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

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

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**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. If a 'Total' result is requested, the results of its individual components will also be reported.

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

**Data Qualifiers**

- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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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

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

**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, 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, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**

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

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

#### Non-Potable Water

**SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**

Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,**

**SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.

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

**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

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

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

### Mansfield Facility:

#### Drinking Water

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

**EPA 522.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

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

**EPA 245.1** Hg.

**SM2340B**

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

 <b>ALPHA</b> <small>ANALYTICAL</small>	<b>NEW YORK CHAIN OF CUSTODY</b>	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page <b>1 of 2</b>	Date Rec'd in Lab <b>11/21/19</b>	ALPHA Job # <b>4955797</b>		
		Westborough, MA 01581 B Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288				
<b>Project Information</b> Project Name: <b>275 Franklin St. site</b> Project Location: <b>275 Franklin Street Buffalo NY</b> Project # <b>B0156-019-002-001</b> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQuIS (1 File) <input type="checkbox"/> EQuIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #			
<b>Client Information</b> Client: <b>Benchmark Env. Engineering</b> Address: <b>255B Hamburg Turnpike</b> <b>Suite 300, Buffalo NY 14218</b> Phone: <b>(716) 856-0599</b> Fax: <b>(716) 856-0583</b> Email: <b>L.riker@bm-ek.com</b>		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:			
These samples have been previously analyzed by Alpha <input type="checkbox"/>		<b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>ANALYSIS</b>			
Other project specific requirements/comments: <p style="text-align: center; font-size: 1.2em;">Cat B</p>		ANALYSIS TCL VOCs - NY TEL 824		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <input type="checkbox"/> Lab to do (Please Specify below)			
Please specify Metals or TAL.				Total Bottles			
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date    Time	Sample Matrix	Sampler's Initials	ANALYSIS	Sample Specific Comments	
4955797-01	PZ-6	11/20/19 855	Water	CMC	X		
-02	PZ-5	916			X		
-03	PZ-4R	1140			X		
-04	MW-5R	1055			X		
-05	PZ-13	1038			X		
-06	PZ-14	1058			X		
-07	PZ-11	1005			X		
-08	PZ-12	1128			X		
-09	MW-24D	1255			X		
-10	MW-24S (MS/MSD)	1315			X		
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type: <b>V</b> Preservative: <b>A</b>	
Relinquished By: <i>Charlotte Clark</i>		Date/Time: 11/20/19 1445 11/20/19 1630		Received By: <i>[Signature]</i>		Date/Time: 11/20/19 1535 11/19/19	
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.)							





Project Name: 275 Franklin Street Site

Date: **11/20/2019**

Location: Buffalo, New York

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> PZ-6		Diameter (inches): 1"		Sample Date / Time: 11/20/2019 855					
Product Depth (fbTOR):		Water Column (ft): 4.07		DTW when sampled:					
DTW (static) (fbTOR): 10.96		One Well Volume (gal): 0.16		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 15.03		Total Volume Purged (gal): 1.80		Purge Method: Parastatic					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
840	0 Initial	0	7.04	13.9	3148	low	4.84	198	Clear No odor
845	1	0.3	7.26	15.2	3120	low	4.25	178	"
847	2	0.6	7.31	15.0	3113	low	3.85	173	"
849	3	0.9	7.34	14.5	3181	low	3.86	173	"
851	4	1.20	7.40	15.1	3178	low	3.83	172	"
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
855	S1	1.50	7.50	15.3	3184	low	3.95	169	"
857	S2 10.95	1.80	7.45	14.7	3293	low	3.68	168	"

<b>Well No.</b> PZ-5		Diameter (inches): 1"		Sample Date / Time: 11/20/2019 914					
Product Depth (fbTOR):		Water Column (ft): 4.84		DTW when sampled:					
DTW (static) (fbTOR): 10.96		One Well Volume (gal): 0.19		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 15.18		Total Volume Purged (gal): 1.30		Purge Method:					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
907	0 Initial	0	7.40	14.0	4688	low	4.58	156	Clear no odor
911	1	0.25	7.40	15.0	4713	low	4.76	154	"
913	2	0.50	7.39	15.0	4657	low	4.47	154	"
915	3	0.75	7.37	14.9	4667	low	4.97	153	"
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
916	S1	1.0	7.38	15.1	4666	low	4.53	153	"
919	S2 10.98	1.30	7.35	15.1	4591	low	4.61	152	"

**REMARKS:** Turbidity not recorded, both turbidity meters unable to be calibrated within range.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All water level measurements are in feet, distance from top of riser.

Project Name: 275 Franklin Street Site

 Date: **11/20/2019**

Location: Buffalo, New York

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> PZ-4R		Diameter (inches): 7		Sample Date / Time: 11/20/2019 11:40					
Product Depth (fbTOR):		Water Column (ft): 2.84		DTW when sampled:					
DTW (static) (fbTOR): 11.31		One Well Volume (gal): 0.15		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 14.2		Total Volume Purged (gal):		Purge Method: Boiler					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
11:18	0 Initial	0	7.30	15.5	6604	-	5.99	31	cloudy, no odor
11:27	1	0.15	7.41	15.6	7324	-	6.75	71	cloudy, "
11:33	2	0.30	7.47	15.2	7141	-	6.77	84	clear, "
	3		<del>7.47</del>						
	4								
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
11:40	S1	0.45	7.47	15.4	7111	-	6.60	82	clear, "
11:46	S2 11.40	0.50	7.49	15.5	7031	-	6.60	93	clear, "

<b>Well No.</b> MW-5R		Diameter (inches): 2"		Sample Date / Time: 11/20/2019 10:55					
Product Depth (fbTOR):		Water Column (ft): 7.19		DTW when sampled:					
DTW (static) (fbTOR): 11.68		One Well Volume (gal): 1.15		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 18.87		Total Volume Purged (gal):		Purge Method: Submersible pump					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:38	0 Initial	0	5.97	14.1	4314	-	1.65	149	slightly cloudy, no odor
10:42	1 11.68	1.0	6.75	15.2	4084	-	1.42	54	slightly cloudy, no odor
10:45	2 11.68	2.0	6.87	15.4	4078	-	1.61	25	clear, no odor
10:50	3 11.66	3.0	7.01	15.4	4149	-	1.80	22	clear, no odor
10:53	4 11.67	3.5	7.04	15.6	4112	-	1.65	11	
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
10:55	S1 11.68	3.75	7.04	15.6	4140	-	1.42	7	
10:58	S2 11.68	4.00	7.06	15.6	4120	-	2.44	5	

**REMARKS:**

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Note: All water level measurements are in feet, distance from top of riser.

**Volume Calculation**

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

**Stabilization Criteria**

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Project Name: 275 Franklin Street Site

Date: **11/20/2019**

Location: Buffalo, New York

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> PZ-13		<b>Diameter (inches):</b> 1"		<b>Sample Date / Time:</b> 11/20/2019 1038					
<b>Product Depth (fbTOR):</b>		<b>Water Column (ft):</b> 2.59		<b>DTW when sampled:</b>					
<b>DTW (static) (fbTOR):</b> 10.65		<b>One Well Volume (gal):</b> 0.16		<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
<b>Total Depth (fbTOR):</b> 13.24		<b>Total Volume Purged (gal):</b> 1.40		<b>Purge Method:</b>					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1029	0 Initial	0	7.54	15.3	2677	sturbed	1.34	-23	slightly turbid, no odor
1033	1 -	0.36	7.52	15.7	2849	lower	1.61	-64	less turbid, no odor
1035	2 -	0.60	7.57	15.9	2449	low	1.36	-78	clear no odor
1036	3 -	0.80	7.58	16.0	2452	low	1.40	-86	"
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
1038	S1 -	1.0	7.56	16.0	2443	low	1.34	-90	"
1040	S2 10.61	1.40	7.57	15.7	2474	low	1.62	-95	"

<b>Well No.</b> PZ-14		<b>Diameter (inches):</b> 1"		<b>Sample Date / Time:</b> 11/20/2019 1058					
<b>Product Depth (fbTOR):</b>		<b>Water Column (ft):</b> 4.75		<b>DTW when sampled:</b>					
<b>DTW (static) (fbTOR):</b> 10.32		<b>One Well Volume (gal):</b> 0.19		<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
<b>Total Depth (fbTOR):</b> 15.07		<b>Total Volume Purged (gal):</b> 1.0		<b>Purge Method:</b>					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1051	0 Initial	0	7.48	15.0	2339	low	1.77	-102	clear no odor
1053	1 -	0.20	7.42	15.3	2284	low	1.75	-113	" slight odor
1055	2 -	0.60	7.47	15.3	2307	low	1.38	-117	" no odor
3									
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
1058	S1 -	0.20	7.48	15.3	2319	low	1.72	-121	"
11.00	S2 10.27	1.0	7.49	15.3	2371	low	1.52	-128	"

**REMARKS:**

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Note: All water level measurements are in feet, distance from top of riser.

**Volume Calculation**

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

**Stabilization Criteria**

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

**PREPARED BY:**

Project Name: 275 Franklin Street Site

Date: **11/20/2019**

Location: Buffalo, New York

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> PZ-11		<b>Diameter (inches):</b> 1"				<b>Sample Date / Time:</b> 11/20/2019 1005				
<b>Product Depth (fbTOR):</b>		<b>Water Column (ft):</b> 4.57				<b>DTW when sampled:</b>				
<b>DTW (static) (fbTOR):</b> 10.45		<b>One Well Volume (gal):</b> 0.19				<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample				
<b>Total Depth (fbTOR):</b> 15.02		<b>Total Volume Purged (gal):</b> 1.70				<b>Purge Method:</b>				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
9.37	0 Initial	0	7.86	14.7	4616	low	2.8	133	Clear/ no odor	
9.46	1	0.3	7.85	14.7	4474	low	2.86	28	" "	
9.48	2	0.6	7.35	15.6	4450	low	3.10	33	" "	
9.50	3	0.9	7.37	15.2	4525	low		46	" "	
9.56	4	1.0	7.37	15.3	4452	low	4.15	11	" "	
9.58	5	1.25	7.45	14.7	4421	low		32	" "	
	6									
	7									
	8									
	9									
	10									
<b>Sample Information:</b>										
1005	S1	1.5	7.35	14.5	4360	low	4.06	51	" "	
1001	S2	10.44	1.70	7.39	14.2	4457	low	4.29	55	" "

<b>Well No.</b> PZ-12		<b>Diameter (inches):</b> 1"				<b>Sample Date / Time:</b> 11/20/2019 1128				
<b>Product Depth (fbTOR):</b>		<b>Water Column (ft):</b> 4.68				<b>DTW when sampled:</b>				
<b>DTW (static) (fbTOR):</b> 10.53		<b>One Well Volume (gal):</b> 0.19				<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample				
<b>Total Depth (fbTOR):</b> 15.21		<b>Total Volume Purged (gal):</b> 1.25				<b>Purge Method:</b>				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor	
1120	0 Initial	0	7.29	14.6	4627	low	2.92	-43	Clear/ no odor	
1122	1	0.15	7.32	15.5	4666	low	3.09	-19	" "	
1124	2	0.45	7.31	15.8	4592	low	2.95	-7	" "	
1126	3	0.65	7.33	15.9	4572	low	2.94	2	" "	
	4									
	5									
	6									
	7									
	8									
	9									
	10									
<b>Sample Information:</b>										
1128	S1	0.85	7.36	15.8	4339	low	2.83	12	" "	
1131	S2	10.50	1.25	7.35	15.7	4516	low	2.93	16	" "

**REMARKS:**

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**Volume Calculation**

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

**Stabilization Criteria**

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All water level measurements are in feet, distance from top of riser.

**PREPARED BY:**

11-25  
10.52 18.34

Project Name: 275 Franklin Street Site

Date: **11/20/2019**

Location: Buffalo, New York

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> MW-24D		<b>Diameter (inches):</b> 2"		<b>Sample Date / Time:</b> 11/20/2019 1255					
<b>Product Depth (fbTOR):</b>		<b>Water Column (ft):</b> 35.92		<b>DTW when sampled:</b>					
<b>DTW (static) (fbTOR):</b> 11.25		<b>One Well Volume (gal):</b> 5.85		<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
<b>Total Depth (fbTOR):</b> 47.17		<b>Total Volume Purged (gal):</b>		<b>Purge Method:</b>					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:35	0 Initial	0	8.16	11.0	2482	-	4.73	50	clear, no odor
12:42	1 12.18	4.5	7.40	12.5	2619	-	1.61	-45	clear, no odor
12:47	2 12.16	10.0	7.37	13.0	2614	-	1.17	-62	clear, no odor
12:50	3 11.95	15.0	7.33	12.3	2608	-	0.96	-70	clear, no odor
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
12:55	S1 11.95	17.0	7.29	13.1	2603	-	1.00	-68	clear, no odor
12:57	S2 11.95	17.5	7.27	12.9	2602	-	1.50	-71	

<b>Well No.</b> MW-24S		<b>Diameter (inches):</b> 2"		<b>Sample Date / Time:</b> 11/20/2019 13:15					
<b>Product Depth (fbTOR):</b>		<b>Water Column (ft):</b> 8.09		<b>DTW when sampled:</b>					
<b>DTW (static) (fbTOR):</b> 10.52		<b>One Well Volume (gal):</b> 1.32		<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
<b>Total Depth (fbTOR):</b> 18.61		<b>Total Volume Purged (gal):</b>		<b>Purge Method:</b>					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
13:05	0 Initial	0	7.39	13.3	2879	-	3.12	-46	cloudy, no odor
13:08	1 10.58	1.3	7.45	13.5	2858	-	3.77	-7	clear, no odor
13:10	2 10.59	2.5	7.46	13.7	2825	-	3.83	4	clear, no odor
13:13	3 10.59	4.0	7.48	13.8	2813	-	3.70	11	clear, no odor
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
13:15	S1 10.59	4.5	7.50	13.7	2804	-	3.55	17	clear, no odor
13:20	S2 10.59	5.0	7.50	13.6	2795	-	3.67	22	

**REMARKS:** MS/MSD collected w/ MW-24S  
~~Bitard Dip collected w/ MW-235~~ →

Note: All water level measurements are in feet, distance from top of riser.

**Volume Calculation**

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

**Stabilization Criteria**

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Project Name: 275 Franklin Street Site

Date: **11/20/2019**

Location: Buffalo, New York

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> MW-235		Diameter (inches): 2"			Sample Date / Time: 11/20/2019 1355				
Product Depth (fbTOR):		Water Column (ft): 7.18			DTW when sampled:				
DTW (static) (fbTOR): 11.37		One Well Volume (gal): 1.17			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample				
Total Depth (fbTOR): 18.55		Total Volume Purged (gal):			Purge Method:				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
1344	0 Initial	0	7.48	15.4	3566	Slightly turb	3.56	82	Slightly turb, w odor
1346	1 11.58	0.5	7.42	16.7	3403	"	2.07	71	"
1348	2 11.58	1.0	7.36	17.2	3516	"	1.28	65	"
1350	3 11.60	2.0	7.35	17.0	3696	Clear	1.12	69	Clear/no odor
1352	4 11.61	3.0	7.37	16.9	3814	Clear	1.11	66	"
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
1355	S1 11.61	3.25	7.34	17.2	3852	"	1.04	62	"
1358	S2 11.61	4.0	7.32	17.2	3924	"	1.98	59	"

<b>Well No.</b>		Diameter (inches):			Sample Date / Time: 11/20/2019				
Product Depth (fbTOR):		Water Column (ft):			DTW when sampled:				
DTW (static) (fbTOR):		One Well Volume (gal):			Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample				
Total Depth (fbTOR):		Total Volume Purged (gal):			Purge Method:				
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
S1									
S2									

**REMARKS:**

MW-23D 11.75  
BD w/ MW-235 800

Note: All water level measurements are in feet, distance from top of riser.

**Volume Calculation**

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

**Stabilization Criteria**

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

**PREPARED BY:**



## ANALYTICAL REPORT

Lab Number:	L2014123
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Lori Riker
Phone:	(716) 856-0599
Project Name:	275 FRANKLIN ST. SITE
Project Number:	B0156-018-001
Report Date:	04/06/20

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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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**Project Name:** 275 FRANKLIN ST. SITE**Project Number:** B0156-018-001**Lab Number:** L2014123**Report Date:** 04/06/20

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2014123-01	PZ-6	WATER	275 FRANKLIN ST	04/01/20 08:05	04/01/20
L2014123-02	PZ-5	WATER	275 FRANKLIN ST	04/01/20 08:40	04/01/20
L2014123-03	PZ-4R	WATER	275 FRANKLIN ST	04/01/20 10:20	04/01/20
L2014123-04	PZ-13	WATER	275 FRANKLIN ST	04/01/20 09:15	04/01/20
L2014123-05	PZ-14	WATER	275 FRANKLIN ST	04/01/20 09:55	04/01/20
L2014123-06	PZ-11	WATER	275 FRANKLIN ST	04/01/20 11:20	04/01/20
L2014123-07	PZ-12	WATER	275 FRANKLIN ST	04/01/20 10:50	04/01/20
L2014123-08	MW-5R	WATER	275 FRANKLIN ST	04/01/20 09:30	04/01/20
L2014123-09	MW-24S	WATER	275 FRANKLIN ST	04/01/20 10:24	04/01/20
L2014123-10	MW-24D	WATER	275 FRANKLIN ST	04/01/20 11:25	04/01/20
L2014123-11	MW-23S	WATER	275 FRANKLIN ST	04/01/20 12:32	04/01/20
L2014123-12	BLIND DUP	WATER	275 FRANKLIN ST	04/01/20 08:00	04/01/20
L2014123-13	TRIP BLANK	WATER	275 FRANKLIN ST	04/01/20 00:00	04/01/20

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

### 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:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

### 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

L2014123-13: A sample identified as "TRIP BLANK" was received, but not listed on the Chain of Custody. This sample was not analyzed.

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

Authorized Signature:



Michelle M. Morris

Title: Technical Director/Representative

Date: 04/06/20

# ORGANICS

# VOLATILES

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-01  
 Client ID: PZ-6  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 08:05  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/05/20 23:31  
 Analyst: NLK

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	1.2	J	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	220	E	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	2.2		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

**Lab ID:** L2014123-01  
**Client ID:** PZ-6  
**Sample Location:** 275 FRANKLIN ST

**Date Collected:** 04/01/20 08:05  
**Date Received:** 04/01/20  
**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	1.3	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-01 D  
 Client ID: PZ-6  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 08:05  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/03/20 16:57  
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	190		ug/l	1.2	0.45	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	93		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-02  
 Client ID: PZ-5  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 08:40  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/03/20 16:10  
 Analyst: MKS

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	0.89	J	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	260	E	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	1.1		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

**Lab ID:** L2014123-02  
**Client ID:** PZ-5  
**Sample Location:** 275 FRANKLIN ST

**Date Collected:** 04/01/20 08:40  
**Date Received:** 04/01/20  
**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	1.1	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	0.90	J	ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	94		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	97		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-02 D  
 Client ID: PZ-5  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 08:40  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/06/20 01:08  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab						
Tetrachloroethene	280		ug/l	1.2	0.45	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	100		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-03 D  
 Client ID: PZ-4R  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 10:20  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/03/20 17:20  
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	1100		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	23		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-03 D  
 Client ID: PZ-4R  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 10:20  
 Date Received: 04/01/20  
 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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	29		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	9.7	J	ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	96		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-04  
 Client ID: PZ-13  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 09:15  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/03/20 16:34  
 Analyst: MKS

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	21		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	8.9		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	1.5	J	ug/l	2.5	0.70	1
Trichloroethene	9.6		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

**Lab ID:** L2014123-04  
**Client ID:** PZ-13  
**Sample Location:** 275 FRANKLIN ST

**Date Collected:** 04/01/20 09:15  
**Date Received:** 04/01/20  
**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	44		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	0.97	J	ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	98		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-05 D  
 Client ID: PZ-14  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 09:55  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/04/20 14:47  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethane	ND		ug/l	6.2	1.8	2.5
Chloroform	ND		ug/l	6.2	1.8	2.5
Carbon tetrachloride	ND		ug/l	1.2	0.34	2.5
1,2-Dichloropropane	ND		ug/l	2.5	0.34	2.5
Dibromochloromethane	ND		ug/l	1.2	0.37	2.5
1,1,2-Trichloroethane	ND		ug/l	3.8	1.2	2.5
Tetrachloroethene	98		ug/l	1.2	0.45	2.5
Chlorobenzene	ND		ug/l	6.2	1.8	2.5
Trichlorofluoromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dichloroethane	ND		ug/l	1.2	0.33	2.5
1,1,1-Trichloroethane	ND		ug/l	6.2	1.8	2.5
Bromodichloromethane	ND		ug/l	1.2	0.48	2.5
trans-1,3-Dichloropropene	ND		ug/l	1.2	0.41	2.5
cis-1,3-Dichloropropene	ND		ug/l	1.2	0.36	2.5
Bromoform	ND		ug/l	5.0	1.6	2.5
1,1,2,2-Tetrachloroethane	ND		ug/l	1.2	0.42	2.5
Benzene	ND		ug/l	1.2	0.40	2.5
Toluene	ND		ug/l	6.2	1.8	2.5
Ethylbenzene	ND		ug/l	6.2	1.8	2.5
Chloromethane	ND		ug/l	6.2	1.8	2.5
Bromomethane	ND		ug/l	6.2	1.8	2.5
Vinyl chloride	24		ug/l	2.5	0.18	2.5
Chloroethane	ND		ug/l	6.2	1.8	2.5
1,1-Dichloroethene	0.74	J	ug/l	1.2	0.42	2.5
trans-1,2-Dichloroethene	5.4	J	ug/l	6.2	1.8	2.5
Trichloroethene	28		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-05 D  
 Client ID: PZ-14  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 09:55  
 Date Received: 04/01/20  
 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	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl tert butyl ether	ND		ug/l	6.2	1.8	2.5
p/m-Xylene	ND		ug/l	6.2	1.8	2.5
o-Xylene	ND		ug/l	6.2	1.8	2.5
cis-1,2-Dichloroethene	340		ug/l	6.2	1.8	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	ND		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	ND		ug/l	12	4.8	2.5
4-Methyl-2-pentanone	ND		ug/l	12	2.5	2.5
2-Hexanone	ND		ug/l	12	2.5	2.5
Bromochloromethane	ND		ug/l	6.2	1.8	2.5
1,2-Dibromoethane	ND		ug/l	5.0	1.6	2.5
1,2-Dibromo-3-chloropropane	ND		ug/l	6.2	1.8	2.5
Isopropylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,3-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trichlorobenzene	ND		ug/l	6.2	1.8	2.5
Methyl Acetate	ND		ug/l	5.0	0.58	2.5
Cyclohexane	ND		ug/l	25	0.68	2.5
1,4-Dioxane	ND		ug/l	620	150	2.5
Freon-113	ND		ug/l	6.2	1.8	2.5
Methyl cyclohexane	ND		ug/l	25	0.99	2.5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-06 D  
 Client ID: PZ-11  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 11:20  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/04/20 15:10  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	1000		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	2.5	J	ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-06 D  
 Client ID: PZ-11  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 11:20  
 Date Received: 04/01/20  
 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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	101		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-07 D  
 Client ID: PZ-12  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 10:50  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/04/20 15:33  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	1000		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	3.3	J	ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-07 D  
 Client ID: PZ-12  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 10:50  
 Date Received: 04/01/20  
 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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	119		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-08 D  
 Client ID: MW-5R  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 09:30  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/04/20 15:56  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	980		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	180		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-08 D  
 Client ID: MW-5R  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 09:30  
 Date Received: 04/01/20  
 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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	170		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	98		70-130
Dibromofluoromethane	103		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-09 D  
 Client ID: MW-24S  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 10:24  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/04/20 16:20  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	10	J	ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	990		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	3.8	J	ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-09 D  
 Client ID: MW-24S  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 10:24  
 Date Received: 04/01/20  
 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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	15	J	ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	101		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-10 D  
 Client ID: MW-24D  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 11:25  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/06/20 01:59  
 Analyst: NLK

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	270		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	0.73	J	ug/l	1.0	0.34	2
trans-1,2-Dichloroethene	1.4	J	ug/l	5.0	1.4	2
Trichloroethene	95		ug/l	1.0	0.35	2
1,2-Dichlorobenzene	ND		ug/l	5.0	1.4	2

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-10 D  
 Client ID: MW-24D  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 11:25  
 Date Received: 04/01/20  
 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	ND		ug/l	5.0	1.4	2
o-Xylene	ND		ug/l	5.0	1.4	2
cis-1,2-Dichloroethene	220		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	ND		ug/l	10	2.9	2
Carbon disulfide	ND		ug/l	10	2.0	2
2-Butanone	ND		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
Bromochloromethane	ND		ug/l	5.0	1.4	2
1,2-Dibromoethane	ND		ug/l	4.0	1.3	2
1,2-Dibromo-3-chloropropane	ND		ug/l	5.0	1.4	2
Isopropylbenzene	ND		ug/l	5.0	1.4	2
1,2,3-Trichlorobenzene	ND		ug/l	5.0	1.4	2
1,2,4-Trichlorobenzene	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
1,4-Dioxane	ND		ug/l	500	120	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	97		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	99		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-11 D  
 Client ID: MW-23S  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 12:32  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/06/20 01:33  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	12	3.5	5
1,1-Dichloroethane	ND		ug/l	12	3.5	5
Chloroform	ND		ug/l	12	3.5	5
Carbon tetrachloride	ND		ug/l	2.5	0.67	5
1,2-Dichloropropane	ND		ug/l	5.0	0.68	5
Dibromochloromethane	ND		ug/l	2.5	0.74	5
1,1,2-Trichloroethane	ND		ug/l	7.5	2.5	5
Tetrachloroethene	820		ug/l	2.5	0.90	5
Chlorobenzene	ND		ug/l	12	3.5	5
Trichlorofluoromethane	ND		ug/l	12	3.5	5
1,2-Dichloroethane	ND		ug/l	2.5	0.66	5
1,1,1-Trichloroethane	ND		ug/l	12	3.5	5
Bromodichloromethane	ND		ug/l	2.5	0.96	5
trans-1,3-Dichloropropene	ND		ug/l	2.5	0.82	5
cis-1,3-Dichloropropene	ND		ug/l	2.5	0.72	5
Bromoform	ND		ug/l	10	3.2	5
1,1,2,2-Tetrachloroethane	ND		ug/l	2.5	0.84	5
Benzene	ND		ug/l	2.5	0.80	5
Toluene	ND		ug/l	12	3.5	5
Ethylbenzene	ND		ug/l	12	3.5	5
Chloromethane	ND		ug/l	12	3.5	5
Bromomethane	ND		ug/l	12	3.5	5
Vinyl chloride	ND		ug/l	5.0	0.36	5
Chloroethane	ND		ug/l	12	3.5	5
1,1-Dichloroethene	ND		ug/l	2.5	0.84	5
trans-1,2-Dichloroethene	ND		ug/l	12	3.5	5
Trichloroethene	3.5		ug/l	2.5	0.88	5
1,2-Dichlorobenzene	ND		ug/l	12	3.5	5

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-11 D  
 Client ID: MW-23S  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 12:32  
 Date Received: 04/01/20  
 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	12	3.5	5
1,4-Dichlorobenzene	ND		ug/l	12	3.5	5
Methyl tert butyl ether	ND		ug/l	12	3.5	5
p/m-Xylene	ND		ug/l	12	3.5	5
o-Xylene	ND		ug/l	12	3.5	5
cis-1,2-Dichloroethene	ND		ug/l	12	3.5	5
Styrene	ND		ug/l	12	3.5	5
Dichlorodifluoromethane	ND		ug/l	25	5.0	5
Acetone	ND		ug/l	25	7.3	5
Carbon disulfide	ND		ug/l	25	5.0	5
2-Butanone	ND		ug/l	25	9.7	5
4-Methyl-2-pentanone	ND		ug/l	25	5.0	5
2-Hexanone	ND		ug/l	25	5.0	5
Bromochloromethane	ND		ug/l	12	3.5	5
1,2-Dibromoethane	ND		ug/l	10	3.2	5
1,2-Dibromo-3-chloropropane	ND		ug/l	12	3.5	5
Isopropylbenzene	ND		ug/l	12	3.5	5
1,2,3-Trichlorobenzene	ND		ug/l	12	3.5	5
1,2,4-Trichlorobenzene	ND		ug/l	12	3.5	5
Methyl Acetate	ND		ug/l	10	1.2	5
Cyclohexane	ND		ug/l	50	1.4	5
1,4-Dioxane	ND		ug/l	1200	300	5
Freon-113	ND		ug/l	12	3.5	5
Methyl cyclohexane	ND		ug/l	50	2.0	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	102		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-12 D  
 Client ID: BLIND DUP  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 08:00  
 Date Received: 04/01/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8260C  
 Analytical Date: 04/05/20 23:53  
 Analyst: NLK

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
<b>Volatile Organics by GC/MS - Westborough Lab</b>						
Methylene chloride	ND		ug/l	25	7.0	10
1,1-Dichloroethane	ND		ug/l	25	7.0	10
Chloroform	ND		ug/l	25	7.0	10
Carbon tetrachloride	ND		ug/l	5.0	1.3	10
1,2-Dichloropropane	ND		ug/l	10	1.4	10
Dibromochloromethane	ND		ug/l	5.0	1.5	10
1,1,2-Trichloroethane	ND		ug/l	15	5.0	10
Tetrachloroethene	930		ug/l	5.0	1.8	10
Chlorobenzene	ND		ug/l	25	7.0	10
Trichlorofluoromethane	ND		ug/l	25	7.0	10
1,2-Dichloroethane	ND		ug/l	5.0	1.3	10
1,1,1-Trichloroethane	ND		ug/l	25	7.0	10
Bromodichloromethane	ND		ug/l	5.0	1.9	10
trans-1,3-Dichloropropene	ND		ug/l	5.0	1.6	10
cis-1,3-Dichloropropene	ND		ug/l	5.0	1.4	10
Bromoform	ND		ug/l	20	6.5	10
1,1,2,2-Tetrachloroethane	ND		ug/l	5.0	1.7	10
Benzene	ND		ug/l	5.0	1.6	10
Toluene	ND		ug/l	25	7.0	10
Ethylbenzene	ND		ug/l	25	7.0	10
Chloromethane	ND		ug/l	25	7.0	10
Bromomethane	ND		ug/l	25	7.0	10
Vinyl chloride	ND		ug/l	10	0.71	10
Chloroethane	ND		ug/l	25	7.0	10
1,1-Dichloroethene	ND		ug/l	5.0	1.7	10
trans-1,2-Dichloroethene	ND		ug/l	25	7.0	10
Trichloroethene	210		ug/l	5.0	1.8	10
1,2-Dichlorobenzene	ND		ug/l	25	7.0	10

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

Lab ID: L2014123-12 D  
 Client ID: BLIND DUP  
 Sample Location: 275 FRANKLIN ST

Date Collected: 04/01/20 08:00  
 Date Received: 04/01/20  
 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	25	7.0	10
1,4-Dichlorobenzene	ND		ug/l	25	7.0	10
Methyl tert butyl ether	ND		ug/l	25	7.0	10
p/m-Xylene	ND		ug/l	25	7.0	10
o-Xylene	ND		ug/l	25	7.0	10
cis-1,2-Dichloroethene	180		ug/l	25	7.0	10
Styrene	ND		ug/l	25	7.0	10
Dichlorodifluoromethane	ND		ug/l	50	10.	10
Acetone	ND		ug/l	50	15.	10
Carbon disulfide	ND		ug/l	50	10.	10
2-Butanone	ND		ug/l	50	19.	10
4-Methyl-2-pentanone	ND		ug/l	50	10.	10
2-Hexanone	ND		ug/l	50	10.	10
Bromochloromethane	ND		ug/l	25	7.0	10
1,2-Dibromoethane	ND		ug/l	20	6.5	10
1,2-Dibromo-3-chloropropane	ND		ug/l	25	7.0	10
Isopropylbenzene	ND		ug/l	25	7.0	10
1,2,3-Trichlorobenzene	ND		ug/l	25	7.0	10
1,2,4-Trichlorobenzene	ND		ug/l	25	7.0	10
Methyl Acetate	ND		ug/l	20	2.3	10
Cyclohexane	ND		ug/l	100	2.7	10
1,4-Dioxane	ND		ug/l	2500	610	10
Freon-113	ND		ug/l	25	7.0	10
Methyl cyclohexane	ND		ug/l	100	4.0	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	108		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	100		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/03/20 09:30  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1358167-5					
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:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/03/20 09:30  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1358167-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	0.69	J	ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/03/20 09:30  
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-04 Batch: WG1358167-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	95		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	96		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**Method Blank Analysis  
 Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 04/04/20 09:22  
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-09 Batch: WG1358454-5					
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:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/04/20 09:22  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-09 Batch: WG1358454-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L2014123**Project Number:** B0156-018-001**Report Date:** 04/06/20**Method Blank Analysis  
Batch Quality Control**Analytical Method: 1,8260C  
Analytical Date: 04/04/20 09:22  
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 05-09 Batch: WG1358454-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	102		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/05/20 17:53  
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,10-11 Batch: WG1358539-5					
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:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/05/20 17:53  
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,10-11 Batch: WG1358539-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L2014123**Project Number:** B0156-018-001**Report Date:** 04/06/20**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 04/05/20 17:53  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02,10-11 Batch: WG1358539-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	102		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	99		70-130

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/05/20 16:34  
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,12 Batch: WG1358575-5					
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:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

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

Analytical Method: 1,8260C  
Analytical Date: 04/05/20 16:34  
Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,12 Batch: WG1358575-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L2014123**Project Number:** B0156-018-001**Report Date:** 04/06/20**Method Blank Analysis  
Batch Quality Control**

Analytical Method: 1,8260C  
 Analytical Date: 04/05/20 16:34  
 Analyst: AJK

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,12 Batch: WG1358575-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	101		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1358167-3 WG1358167-4								
Methylene chloride	90		95		70-130	5		20
1,1-Dichloroethane	90		98		70-130	9		20
Chloroform	89		98		70-130	10		20
Carbon tetrachloride	93		100		63-132	7		20
1,2-Dichloropropane	92		99		70-130	7		20
Dibromochloromethane	83		89		63-130	7		20
1,1,2-Trichloroethane	88		94		70-130	7		20
Tetrachloroethene	92		97		70-130	5		20
Chlorobenzene	90		94		75-130	4		20
Trichlorofluoromethane	98		100		62-150	2		20
1,2-Dichloroethane	86		93		70-130	8		20
1,1,1-Trichloroethane	93		100		67-130	7		20
Bromodichloromethane	90		96		67-130	6		20
trans-1,3-Dichloropropene	85		90		70-130	6		20
cis-1,3-Dichloropropene	90		97		70-130	7		20
Bromoform	85		92		54-136	8		20
1,1,2,2-Tetrachloroethane	88		95		67-130	8		20
Benzene	95		100		70-130	5		20
Toluene	90		96		70-130	6		20
Ethylbenzene	90		94		70-130	4		20
Chloromethane	75		81		64-130	8		20
Bromomethane	45		54		39-139	18		20
Vinyl chloride	91		99		55-140	8		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS		LCSD		%Recovery Limits	RPD	Qual	RPD Limits
	%Recovery	Qual	%Recovery	Qual				
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1358167-3 WG1358167-4								
Chloroethane	94		100		55-138	6		20
1,1-Dichloroethene	97		100		61-145	3		20
trans-1,2-Dichloroethene	94		100		70-130	6		20
Trichloroethene	98		100		70-130	2		20
1,2-Dichlorobenzene	86		90		70-130	5		20
1,3-Dichlorobenzene	88		93		70-130	6		20
1,4-Dichlorobenzene	88		93		70-130	6		20
Methyl tert butyl ether	89		96		63-130	8		20
p/m-Xylene	90		95		70-130	5		20
o-Xylene	90		95		70-130	5		20
cis-1,2-Dichloroethene	95		100		70-130	5		20
Styrene	90		90		70-130	0		20
Dichlorodifluoromethane	89		93		36-147	4		20
Acetone	100		110		58-148	10		20
Carbon disulfide	93		100		51-130	7		20
2-Butanone	98		100		63-138	2		20
4-Methyl-2-pentanone	84		93		59-130	10		20
2-Hexanone	78		86		57-130	10		20
Bromochloromethane	100		110		70-130	10		20
1,2-Dibromoethane	88		94		70-130	7		20
1,2-Dibromo-3-chloropropane	70		81		41-144	15		20
Isopropylbenzene	94		98		70-130	4		20
1,2,3-Trichlorobenzene	64	Q	74		70-130	14		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-04 Batch: WG1358167-3 WG1358167-4								
1,2,4-Trichlorobenzene	73		81		70-130	10		20
Methyl Acetate	85		99		70-130	15		20
Cyclohexane	95		100		70-130	5		20
1,4-Dioxane	114		126		56-162	10		20
Freon-113	98		110		70-130	12		20
Methyl cyclohexane	96		100		70-130	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	92		94		70-130
Toluene-d8	98		96		70-130
4-Bromofluorobenzene	103		104		70-130
Dibromofluoromethane	99		101		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-09 Batch: WG1358454-3 WG1358454-4								
Methylene chloride	98		98		70-130	0		20
1,1-Dichloroethane	110		110		70-130	0		20
Chloroform	110		110		70-130	0		20
Carbon tetrachloride	100		97		63-132	3		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	91		88		63-130	3		20
1,1,2-Trichloroethane	110		110		70-130	0		20
Tetrachloroethene	100		99		70-130	1		20
Chlorobenzene	100		100		75-130	0		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	110		120		70-130	9		20
1,1,1-Trichloroethane	110		110		67-130	0		20
Bromodichloromethane	98		98		67-130	0		20
trans-1,3-Dichloropropene	100		98		70-130	2		20
cis-1,3-Dichloropropene	91		92		70-130	1		20
Bromoform	87		88		54-136	1		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	97		96		70-130	1		20
Toluene	100		99		70-130	1		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	83		81		64-130	2		20
Bromomethane	60		58		39-139	3		20
Vinyl chloride	90		87		55-140	3		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-09 Batch: WG1358454-3 WG1358454-4								
Chloroethane	100		100		55-138	0		20
1,1-Dichloroethene	100		97		61-145	3		20
trans-1,2-Dichloroethene	93		91		70-130	2		20
Trichloroethene	100		97		70-130	3		20
1,2-Dichlorobenzene	94		94		70-130	0		20
1,3-Dichlorobenzene	93		94		70-130	1		20
1,4-Dichlorobenzene	96		95		70-130	1		20
Methyl tert butyl ether	88		91		63-130	3		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	95		95		70-130	0		20
cis-1,2-Dichloroethene	100		100		70-130	0		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	68		67		36-147	1		20
Acetone	110		110		58-148	0		20
Carbon disulfide	85		81		51-130	5		20
2-Butanone	120		120		63-138	0		20
4-Methyl-2-pentanone	91		92		59-130	1		20
2-Hexanone	95		95		57-130	0		20
Bromochloromethane	99		98		70-130	1		20
1,2-Dibromoethane	100		100		70-130	0		20
1,2-Dibromo-3-chloropropane	73		77		41-144	5		20
Isopropylbenzene	97		97		70-130	0		20
1,2,3-Trichlorobenzene	84		88		70-130	5		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 275 FRANKLIN ST. SITE

**Project Number:** B0156-018-001

**Lab Number:** L2014123

**Report Date:** 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-09 Batch: WG1358454-3 WG1358454-4								
1,2,4-Trichlorobenzene	84		86		70-130	2		20
Methyl Acetate	100		100		70-130	0		20
Cyclohexane	110		100		70-130	10		20
1,4-Dioxane	106		110		56-162	4		20
Freon-113	110		110		70-130	0		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	121		122		70-130
Toluene-d8	102		101		70-130
4-Bromofluorobenzene	96		97		70-130
Dibromofluoromethane	107		107		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,10-11 Batch: WG1358539-3 WG1358539-4								
Methylene chloride	98		92		70-130	6		20
1,1-Dichloroethane	99		97		70-130	2		20
Chloroform	100		93		70-130	7		20
Carbon tetrachloride	110		100		63-132	10		20
1,2-Dichloropropane	100		96		70-130	4		20
Dibromochloromethane	98		90		63-130	9		20
1,1,2-Trichloroethane	96		93		70-130	3		20
Tetrachloroethene	100		93		70-130	7		20
Chlorobenzene	96		93		75-130	3		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	100		99		70-130	1		20
1,1,1-Trichloroethane	100		99		67-130	1		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	100		97		70-130	3		20
cis-1,3-Dichloropropene	110		100		70-130	10		20
Bromoform	110		95		54-136	15		20
1,1,2,2-Tetrachloroethane	100		92		67-130	8		20
Benzene	110		100		70-130	10		20
Toluene	96		91		70-130	5		20
Ethylbenzene	98		93		70-130	5		20
Chloromethane	120		120		64-130	0		20
Bromomethane	<b>220</b>	Q	<b>210</b>	Q	39-139	5		20
Vinyl chloride	110		110		55-140	0		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,10-11 Batch: WG1358539-3 WG1358539-4								
Chloroethane	110		99		55-138	11		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		96		70-130	4		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	98		90		70-130	9		20
1,3-Dichlorobenzene	97		91		70-130	6		20
1,4-Dichlorobenzene	96		90		70-130	6		20
Methyl tert butyl ether	100		99		63-130	1		20
p/m-Xylene	100		95		70-130	5		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	100		99		70-130	1		20
Styrene	95		90		70-130	5		20
Dichlorodifluoromethane	130		120		36-147	8		20
Acetone	110		98		58-148	12		20
Carbon disulfide	100		96		51-130	4		20
2-Butanone	110		94		63-138	16		20
4-Methyl-2-pentanone	100		94		59-130	6		20
2-Hexanone	100		97		57-130	3		20
Bromochloromethane	110		100		70-130	10		20
1,2-Dibromoethane	99		91		70-130	8		20
1,2-Dibromo-3-chloropropane	100		96		41-144	4		20
Isopropylbenzene	100		93		70-130	7		20
1,2,3-Trichlorobenzene	97		89		70-130	9		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 275 FRANKLIN ST. SITE

**Lab Number:** L2014123

**Project Number:** B0156-018-001

**Report Date:** 04/06/20

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02,10-11 Batch: WG1358539-3 WG1358539-4								
1,2,4-Trichlorobenzene	99		91		70-130	8		20
Methyl Acetate	110		100		70-130	10		20
Cyclohexane	100		100		70-130	0		20
1,4-Dioxane	136		122		56-162	11		20
Freon-113	100		96		70-130	4		20
Methyl cyclohexane	100		99		70-130	1		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	103		102		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	102		100		70-130
Dibromofluoromethane	104		101		70-130

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,12 Batch: WG1358575-3 WG1358575-4								
Methylene chloride	97		98		70-130	1		20
1,1-Dichloroethane	100		98		70-130	2		20
Chloroform	92		96		70-130	4		20
Carbon tetrachloride	90		88		63-132	2		20
1,2-Dichloropropane	98		100		70-130	2		20
Dibromochloromethane	89		94		63-130	5		20
1,1,2-Trichloroethane	95		100		70-130	5		20
Tetrachloroethene	91		92		70-130	1		20
Chlorobenzene	96		96		75-130	0		20
Trichlorofluoromethane	100		100		62-150	0		20
1,2-Dichloroethane	97		100		70-130	3		20
1,1,1-Trichloroethane	92		89		67-130	3		20
Bromodichloromethane	95		95		67-130	0		20
trans-1,3-Dichloropropene	85		90		70-130	6		20
cis-1,3-Dichloropropene	90		92		70-130	2		20
Bromoform	80		91		54-136	13		20
1,1,2,2-Tetrachloroethane	92		100		67-130	8		20
Benzene	98		96		70-130	2		20
Toluene	97		97		70-130	0		20
Ethylbenzene	98		98		70-130	0		20
Chloromethane	87		84		64-130	4		20
Bromomethane	91		94		39-139	3		20
Vinyl chloride	110		100		55-140	10		20

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: 275 FRANKLIN ST. SITE

Lab Number: L2014123

Project Number: B0156-018-001

Report Date: 04/06/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,12 Batch: WG1358575-3 WG1358575-4								
Chloroethane	110		110		55-138	0		20
1,1-Dichloroethene	100		96		61-145	4		20
trans-1,2-Dichloroethene	98		92		70-130	6		20
Trichloroethene	96		98		70-130	2		20
1,2-Dichlorobenzene	95		97		70-130	2		20
1,3-Dichlorobenzene	97		100		70-130	3		20
1,4-Dichlorobenzene	95		98		70-130	3		20
Methyl tert butyl ether	87		91		63-130	4		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	94		93		70-130	1		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	95		93		36-147	2		20
Acetone	92		100		58-148	8		20
Carbon disulfide	100		99		51-130	1		20
2-Butanone	90		99		63-138	10		20
4-Methyl-2-pentanone	92		100		59-130	8		20
2-Hexanone	87		100		57-130	14		20
Bromochloromethane	95		94		70-130	1		20
1,2-Dibromoethane	91		96		70-130	5		20
1,2-Dibromo-3-chloropropane	72		86		41-144	18		20
Isopropylbenzene	97		99		70-130	2		20
1,2,3-Trichlorobenzene	81		87		70-130	7		20

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 275 FRANKLIN ST. SITE

**Lab Number:** L2014123

**Project Number:** B0156-018-001

**Report Date:** 04/06/20

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,12 Batch: WG1358575-3 WG1358575-4								
1,2,4-Trichlorobenzene	84		88		70-130	5		20
Methyl Acetate	94		100		70-130	6		20
Cyclohexane	100		100		70-130	0		20
1,4-Dioxane	102		108		56-162	6		20
Freon-113	100		100		70-130	0		20
Methyl cyclohexane	100		97		70-130	3		20

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
1,2-Dichloroethane-d4	102		102		70-130
Toluene-d8	101		101		70-130
4-Bromofluorobenzene	99		100		70-130
Dibromofluoromethane	99		100		70-130

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 275 FRANKLIN ST. SITE

**Lab Number:** L2014123

**Project Number:** B0156-018-001

**Report Date:** 04/06/20

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-09 QC Batch ID: WG1358454-6 WG1358454-7 QC Sample: L2014123-09 Client ID: MW-24S												
Methylene chloride	ND	100	100	100		100	100		70-130	0		20
1,1-Dichloroethane	ND	100	110	110		110	110		70-130	0		20
Chloroform	10J	100	120	120		130	130		70-130	8		20
Carbon tetrachloride	ND	100	100	100		100	100		63-132	0		20
1,2-Dichloropropane	ND	100	99	99		100	100		70-130	1		20
Dibromochloromethane	ND	100	85	85		91	91		63-130	7		20
1,1,2-Trichloroethane	ND	100	100	100		110	110		70-130	10		20
Tetrachloroethene	990	100	1100	110		1100	110		70-130	0		20
Chlorobenzene	ND	100	96	96		110	110		75-130	14		20
Trichlorofluoromethane	ND	100	110	110		120	120		62-150	9		20
1,2-Dichloroethane	ND	100	110	110		120	120		70-130	9		20
1,1,1-Trichloroethane	ND	100	110	110		110	110		67-130	0		20
Bromodichloromethane	ND	100	93	93		100	100		67-130	7		20
trans-1,3-Dichloropropene	ND	100	85	85		93	93		70-130	9		20
cis-1,3-Dichloropropene	ND	100	78	78		85	85		70-130	9		20
Bromoform	ND	100	77	77		82	82		54-136	6		20
1,1,2,2-Tetrachloroethane	ND	100	95	95		98	98		67-130	3		20
Benzene	ND	100	95	95		100	100		70-130	5		20
Toluene	ND	100	96	96		110	110		70-130	14		20
Ethylbenzene	ND	100	100	100		110	110		70-130	10		20
Chloromethane	ND	100	78	78		86	86		64-130	10		20
Bromomethane	ND	100	34	<b>34</b>	Q	38	<b>38</b>	Q	39-139	11		20
Vinyl chloride	ND	100	86	86		93	93		55-140	8		20

## Matrix Spike Analysis

*Batch Quality Control*

**Project Name:** 275 FRANKLIN ST. SITE

**Lab Number:** L2014123

**Project Number:** B0156-018-001

**Report Date:** 04/06/20

<i>Parameter</i>	<i>Native Sample</i>	<i>MS Added</i>	<i>MS Found</i>	<i>MS %Recovery</i>	<i>Qual</i>	<i>MSD Found</i>	<i>MSD %Recovery</i>	<i>Qual</i>	<i>Recovery Limits</i>	<i>RPD</i>	<i>Qual</i>	<i>RPD Limits</i>
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-09 QC Batch ID: WG1358454-6 WG1358454-7 QC Sample: L2014123-09 Client ID: MW-24S												
Chloroethane	ND	100	100	100		110	110		55-138	10		20
1,1-Dichloroethene	ND	100	100	100		100	100		61-145	0		20
trans-1,2-Dichloroethene	ND	100	94	94		97	97		70-130	3		20
Trichloroethene	3.8J	100	100	100		110	110		70-130	10		20
1,2-Dichlorobenzene	ND	100	88	88		96	96		70-130	9		20
1,3-Dichlorobenzene	ND	100	88	88		96	96		70-130	9		20
1,4-Dichlorobenzene	ND	100	91	91		98	98		70-130	7		20
Methyl tert butyl ether	ND	100	85	85		86	86		63-130	1		20
p/m-Xylene	ND	200	190	95		210	105		70-130	10		20
o-Xylene	ND	200	180	90		200	100		70-130	11		20
cis-1,2-Dichloroethene	15J	100	120	120		120	120		70-130	0		20
Styrene	ND	200	190	95		220	110		70-130	15		20
Dichlorodifluoromethane	ND	100	64	64		74	74		36-147	14		20
Acetone	ND	100	120	120		120	120		58-148	0		20
Carbon disulfide	ND	100	83	83		89	89		51-130	7		20
2-Butanone	ND	100	110	110		110	110		63-138	0		20
4-Methyl-2-pentanone	ND	100	59	59		48J	48	Q	59-130	21	Q	20
2-Hexanone	ND	100	81	81		84	84		57-130	4		20
Bromochloromethane	ND	100	100	100		100	100		70-130	0		20
1,2-Dibromoethane	ND	100	94	94		100	100		70-130	6		20
1,2-Dibromo-3-chloropropane	ND	100	65	65		65	65		41-144	0		20
Isopropylbenzene	ND	100	92	92		100	100		70-130	8		20
1,2,3-Trichlorobenzene	ND	100	71	71		78	78		70-130	9		20

### Matrix Spike Analysis Batch Quality Control

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 05-09 QC Batch ID: WG1358454-6 WG1358454-7 QC Sample: L2014123-09 Client ID: MW-24S												
1,2,4-Trichlorobenzene	ND	100	72	72		79	79		70-130	9		20
Methyl Acetate	ND	100	100	100		100	100		70-130	0		20
Cyclohexane	ND	100	110	110		110	110		70-130	0		20
1,4-Dioxane	ND	5000	4600	92		5000	100		56-162	8		20
Freon-113	ND	100	110	110		120	120		70-130	9		20
Methyl cyclohexane	ND	100	98J	98		110	110		70-130	12		20

Surrogate	MS		MSD		Acceptance Criteria
	% Recovery	Qualifier	% Recovery	Qualifier	
1,2-Dichloroethane-d4	124		120		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	108		108		70-130
Toluene-d8	100		102		70-130

**Project Name:** 275 FRANKLIN ST. SITE**Lab Number:** L2014123**Project Number:** B0156-018-001**Report Date:** 04/06/20**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>
L2014123-01A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-01B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-01C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-02A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-02B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-02C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-03A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-03B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-03C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-04A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-04B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-04C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-05A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-05B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-05C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-06A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-06B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-06C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-07A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-07B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-07C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-08A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-08B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

Serial\_No:04062016:25  
**Lab Number:** L2014123  
**Report Date:** 04/06/20

**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>
L2014123-08C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09A1	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09A2	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09B1	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09B2	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09C1	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-09C2	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-10A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-10B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-10C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-11A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-11B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-11C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-12A	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-12B	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-12C	Vial HCl preserved	A	NA		4.6	Y	Absent		NYTCL-8260-R2(14)
L2014123-13A	Vial HCl preserved	A	NA		4.6	Y	Absent		ARCHIVE()
L2014123-13B	Vial HCl preserved	A	NA		4.6	Y	Absent		ARCHIVE()

\*Values in parentheses indicate holding time in days



**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

## GLOSSARY

### Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)  Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

### Footnotes

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

**Analytical Method:** Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

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

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

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

**Initial pH:** As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

**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. If a 'Total' result is requested, the results of its individual components will also be reported.

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.)

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

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

**Data Qualifiers**

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.

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certification Information

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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

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

**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.

**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, 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.

**EPA TO-12** Non-methane organics

**EPA 3C** Fixed gases

**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.**

### Mansfield Facility:

#### Drinking Water

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

**EPA 522.**

#### Non-Potable Water

**EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.

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

**EPA 245.1** Hg.

**SM2340B**

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



 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193	Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288	<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105	Page <b>2 of 2</b>	Date Rec'd in Lab <b>4/2/20</b>	ALPHA Job # <b>12014123</b>				
		<b>Project Information</b> Project Name: <b>275 Franklin St. Site</b> Project Location: <b>275 Franklin St</b> Project # <b>B0156-018-001</b> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input type="checkbox"/> Same as Client Info PO #			
<b>Client Information</b> Client: <b>Benchmark Env. Eng-</b> Address: <b>2558 Hamburg Turnpike</b> <b>Suite 300, Buffalo NY 14218</b> Phone: <b>(716) 856-0599</b> Fax: Email: <b>Lriker@bm-tk.com</b>		<b>Project Manager:</b> <b>Candace Fox</b> ALPHAQuote #: <b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> Due Date: Rush (only if pre approved) <input type="checkbox"/> # of Days:		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input type="checkbox"/> NY <input type="checkbox"/> Other:			
These samples have been previously analyzed by Alpha <input type="checkbox"/> Other project specific requirements/comments: <div style="text-align: center; font-size: 1.2em; margin: 10px 0;">Category B</div> Please specify Metals or TAL.				<b>ANALYSIS</b>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do <b>Preservation</b> <input type="checkbox"/> Lab to do (Please Specify below)	Total Bottles		
ALPHA Lab ID (Lab Use Only)	Sample ID	Collection	Sample Matrix	Sampler's Initials	TCL VOCs -	NYTEL -		BZLO	Sample Specific Comments
<b>14123</b>	<b>11</b>	<b>MW-23 S</b>	<b>4/1/2020</b>	<b>12:32</b>	<b>water</b>	<b>CMC</b>	<b>X</b>		<b>3</b>
	<b>12</b>	<b>Blind Dup</b>	<b>4/1/2020</b>	<b>8:00</b>	<b>water</b>	<b>CMC</b>	<b>X</b>		<b>3</b>
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code: P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type <b>V</b> Preservative <b>A</b>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)	
Relinquished By: <b>Chambeth Clark</b> <b>4/1/2020 13:00</b>		Date/Time <b>4/1/2020 13:00</b>		Received By: <b>[Signature]</b> <b>4/1/2020 13:45</b>		Date/Time <b>4/1/2020 00:50</b>			

# GROUNDWATER FIELD FORM

Project Name: 275 Franklin Street Site

Date: **4/1/2020**

Location: Buffalo, NY

Project No.: B0156-019-002

Field Team: CMC/CCB

Well No.		PZ-4R		Diameter (inches):		1"		Sample Date / Time:		4/1/2020 10:20	
Product Depth (fbTOR):		NA		Water Column (ft):		2.77		DTW when sampled:		1140	
DTW (static) (fbTOR):		11.39		One Well Volume (gal):		0.11		Purpose:		<input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample	
Total Depth (fbTOR):		14.16		Total Volume Purged (gal):				Purge Method:		peristaltic	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor		
1005	0 Initial	0	7.72	9.8	5669	67.0	8.62	-77	clear, no odor		
1010	1 -	0.25	7.69	10.0	5782	226	8.97	-29	"		
1013	2 -	0.5	7.73	10.0	5783	666	8.92	-6	"		
1015	3 -	0.75	7.69	10.0	5646	457	8.98	10	"		
1017	4 -	1.0	7.71	10.0	5580	839	9.12	26	"		
	5										
	6										
	7										
	8										
	9										
	10										
<b>Sample Information:</b>											
1020	S1 -	1.25	7.72	10.0	5525	900	9.20	37	"		
1025	S2 11:40	1.50	7.74	10.0	5404	513	9.27	44	"		

Well No.		MW-5R		Diameter (inches):		2"		Sample Date / Time:		4/1/2020 9:30	
Product Depth (fbTOR):		NA		Water Column (ft):		7.26		DTW when sampled:		11.78	
DTW (static) (fbTOR):		11.62		One Well Volume (gal):		1.18		Purpose:		<input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample	
Total Depth (fbTOR):		18.88		Total Volume Purged (gal):				Purge Method:		submersible pump	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor		
9:10	0 Initial	0	6.42	10.4	6061	26.0	2.3	247			
9:13	1 11.84	1.0	6.72	11.0	5876	12.8	2.01	207			
9:16	2 11.86	2.0	6.92	10.0	5865	9.69	1.66	174			
9:19	3 11.76	3.0	6.98	11.0	5819	33.4	1.46	141			
9:22	4 11.76	3.5	7.04	11.2	5796	25.5	1.40	110			
9:25	5 11.78	4.5	7.06	11.0	5818	16.1	1.26	101			
	6										
	7										
	8										
	9										
	10										
<b>Sample Information:</b>											
9:30	S1 11:78	5.0	7.12	11.1	5826	31.2	1.23	92			
9:35	S2 11:74	5.5	7.14	11.6	5789	20.7	0.98	82			

REMARKS: BD collected at MW-5R

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All water level measurements are in feet, distance from top of riser.

Project Name: 275 Franklin Street Site

Date: 4/1/2020

Location: Buffalo, NY

Project No.: B0156-019-002

Field Team: CMC/CCB

Well No.		PZ-13		Diameter (inches):		1"		Sample Date / Time:		4/1/2020 915	
Product Depth (fbTOR):		NA		Water Column (ft):		2.01		DTW when sampled:		10.67	
DTW (static) (fbTOR):		10.84		One Well Volume (gal):		0.082		Purpose:		<input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample	
Total Depth (fbTOR):		12.85		Total Volume Purged (gal):		1.50		Purge Method:		peristaltic	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor		
900	0 Initial	0	7.65	10.4	2613	71000	4.05	138	Slight turbidity		
905	1 -	0.25	7.60	10.8	2537	342	3.08	120	Very clear, no odor		
908	2 -	0.50	7.64	11.1	2509	142	2.96	92	""		
912	3 -	0.75	7.68	11.1	2495	77.9	2.60	67	""		
914	4 -	1.0	7.66	11.3	2499	79	2.47	53	""		
	5										
	6										
	7										
	8										
	9										
	10										
<b>Sample Information:</b>											
915	S1 -	1.25	7.62	11.2	2522	303	2.17	39	""		
920	S2 10.67	1.50	7.65	11.0	2550	30.9	2.45	19	""		

Well No.		PZ-14		Diameter (inches):		1"		Sample Date / Time:		4/1/2020 955	
Product Depth (fbTOR):		NA		Water Column (ft):		4.69		DTW when sampled:		10.31	
DTW (static) (fbTOR):		10.36		One Well Volume (gal):		0.19		Purpose:		<input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample	
Total Depth (fbTOR):		15.05		Total Volume Purged (gal):		1.50		Purge Method:		peristaltic	
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor		
935	0 Initial	0	7.48	10.1	3951	128	2.00	-82	Clear, no odor		
940	1 -	0.5	7.40	10.4	4137	17.5	2.03	-91	""		
945	2 -	0.75	7.48	10.6	4163	11.8	1.88	-111	""		
950	3 -	1.0	7.47	10.6	4077	10.8	2.21	-115	""		
	4										
	5										
	6										
	7										
	8										
	9										
	10										
<b>Sample Information:</b>											
955	S1 -	1.25	7.48	10.7	4111	11.1	1.78	-118	""		
1000	S2 10.31	1.50	7.51	10.6	4050	8.41	2.10	-123	""		

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

CCB

Project Name: 275 Franklin Street Site

Date: 4/1/2020

Location: Buffalo, NY

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> PZ-11		<b>Diameter (inches):</b> 1"		<b>Sample Date / Time:</b> 4/1/2020 <i>10:52</i>					
<b>Product Depth (fbTOR):</b> NA		<b>Water Column (ft):</b> 4.54		<b>DTW when sampled:</b> 10.49					
<b>DTW (static) (fbTOR):</b> 10.49		<b>One Well Volume (gal):</b> 0.18		<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
<b>Total Depth (fbTOR):</b> 15.03		<b>Total Volume Purged (gal):</b>		<b>Purge Method:</b> peristaltic					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
<i>10:50</i>	Initial	0	7.32	10.9	7042	2100	5.34	86	Clear, no odor
<i>11:05</i>	1 -	0.25	7.30	10.9	6200	<100	4.43	91	" "
<i>11:10</i>	2 -	0.50	7.32	10.8	6015	<100	4.71	94	" "
<i>11:15</i>	3 -	0.75	7.32	10.8	5796	<100	4.60	96	" "
	4								
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
<i>11:20</i>	S1 -	1.0	7.31	10.8	5718	<100	4.41	98	" "
<i>11:25</i>	S2 10.49	1.25	7.33	10.8	5660	<100	4.20	95	" "

<b>Well No.</b> PZ-12		<b>Diameter (inches):</b> 1"		<b>Sample Date / Time:</b> 4/1/2020 <i>10:50</i>					
<b>Product Depth (fbTOR):</b> NA		<b>Water Column (ft):</b> 4.64		<b>DTW when sampled:</b> 10.56					
<b>DTW (static) (fbTOR):</b> 10.57		<b>One Well Volume (gal):</b> 0.19		<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
<b>Total Depth (fbTOR):</b> 15.21		<b>Total Volume Purged (gal):</b>		<b>Purge Method:</b> peristaltic					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
<i>10:30</i>	Initial	0	7.35	10.8	4302	<100	4.13	64	Clear, no odor
<i>10:35</i>	1 -	0.5	7.48	10.8	4276	<100	4.03	63	" "
<i>10:40</i>	2 -	0.75	7.43	10.8	4273	<100	3.64	67	" "
<i>10:45</i>	3 -	1.0	7.42	10.8	4251	<100	4.00	71	" "
<i>10:48</i>	4 -	1.15	7.42	10.8	4246	<100	4.21	72	" "
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
<i>10:50</i>	S1 -	1.25	7.42	10.6	4236	<100	3.72	71	" "
<i>11:00</i>	S2 10.56	1.50	7.47	10.6	4215	<100	3.83	72	" "

**REMARKS:** turbid meter will not turn on.  
all samples were clear w/ low turbidity.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

Note: All water level measurements are in feet, distance from top of riser.

PREPARED BY: CCB

Project Name: 275 Franklin Street Site

Date: 4/1/2020

Location: Buffalo, NY

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> PZ-6		Diameter (inches): 1"		Sample Date / Time: 4/1/2020 805					
Product Depth (fbTOR): NA		Water Column (ft): 3.8		DTW when sampled: 11.00					
DTW (static) (fbTOR): 11.03		One Well Volume (gal): 0.15		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 14.83		Total Volume Purged (gal): 1.25		Purge Method: peristaltic					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
757	0 Initial	0	7.14	10.4	3881	34.5	5.91	124	Clear, no odor
801	1 -	0.5	7.52	11.1	3870	9.08	6.05	120	"
803	2 -	0.75	7.53	11.5	3837	5.42	6.13	125	"
805	3 -	1.0							
	4								
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
805	S1 -	1.0	7.57	11.4	3864	8.23	5.96	130	"
810	S2 11.00	1.25	7.58	11.3	3875	5.38	5.96	135	"

<b>Well No.</b> PZ-5		Diameter (inches): 1"		Sample Date / Time: 4/1/2020 840					
Product Depth (fbTOR): NA		Water Column (ft): 4.5		DTW when sampled: 11.00					
DTW (static) (fbTOR): 11.01		One Well Volume (gal): 0.17		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 15.16		Total Volume Purged (gal):		Purge Method: peristaltic					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
827	0 Initial	0	7.54	10.3	3727	101	5.42	135	Clear, no odor
834	1 -	0.25	7.61	10.9	3714	8.09	5.25	136	"
837	2 -	0.50	7.50	11.2	3723	3.41	5.54	140	"
839	3 -	0.75	7.47	11.1	3725	3.01	5.31	140	"
	4								
	5								
	6								
	7								
	8								
	9								
	10								
<b>Sample Information:</b>									
840	S1 -	1.0	7.46	11.2	3722	1.99	5.62	143	"
845	S2 11.00	1.25	7.50	11.1	3736	1.65	5.61	143	"

REMARKS:

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY: OCB

Project Name: 275 Franklin Street Site

Date: 4/1/2020

Location: Buffalo, NY

Project No.: B0156-019-002

Field Team: CMC/CCB

<b>Well No.</b> MW-23S		<b>Diameter (inches):</b> 2"				<b>Sample Date / Time:</b> 4/1/2020 12:32			
<b>Product Depth (fbTOR):</b> NA		<b>Water Column (ft):</b> 7.13				<b>DTW when sampled:</b>			
<b>DTW (static) (fbTOR):</b> 11.42		<b>One Well Volume (gal):</b> 1.16				<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample			
<b>Total Depth (fbTOR):</b> 18.55		<b>Total Volume Purged (gal):</b>				<b>Purge Method:</b> submersible pump			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
12:15	0 Initial	0	7.56	11.8	3008	553	1.54	33	cloudy, no odor
12:20	1 11.64	1.0	7.41	11.9	2989	47.1	1.05	36	
12:25	2 11.65	2.5	7.38	11.8	3087	47.1	1.38	40	
12:28	3 11.65	3.5	7.36	11.4	3152	11.4	1.12	46	clear, no odor
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
12:32	S1 11.7	4.5	7.36	11.6	3161	10.2	1.29	48	
12:36	S2 11.71	5.0	7.40	12.0	3154	9.71	1.36	53	

<b>Well No.</b>		<b>Diameter (inches):</b>				<b>Sample Date / Time:</b>			
<b>Product Depth (fbTOR):</b>		<b>Water Column (ft):</b>				<b>DTW when sampled:</b>			
<b>DTW (static) (fbTOR):</b>		<b>One Well Volume (gal):</b>				<b>Purpose:</b> <input type="checkbox"/> Development <input type="checkbox"/> Sample <input type="checkbox"/> Purge & Sample			
<b>Total Depth (fbTOR):</b>		<b>Total Volume Purged (gal):</b>				<b>Purge Method:</b>			
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
0	Initial								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
<b>Sample Information:</b>									
S1									
S2									

**REMARKS:** MW-23D  
DTW 11.82  
Total Depth 18.30

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

Project Name: 275 Franklin Street Site

Date: 4/1/2020

Location: Buffalo, NY

Project No.: B0156-019-002

Field Team: CMC/CCB

Well No. MW-24S		Diameter (inches): 2"		Sample Date / Time: 4/1/2020					
Product Depth (fbTOR): NA		Water Column (ft): 8.04		DTW when sampled:					
DTW (static) (fbTOR): 10.57		One Well Volume (gal): 1.31		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 18.61		Total Volume Purged (gal):		Purge Method: submersible pump					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:10	0 Initial	0	7.49	10.9	3762	>1000	4.36	137	minimal sheen, no odor
10:13	1 10.61	1.0	7.47	11.3	3457	37.0	4.41	130	no sheen, no odor
10:16	2 10.62	2.0	7.49	11.5	3465	12.5	4.83	132	
10:19	3 10.62	3.5	7.49	11.3	3499	6.36	4.21	132	
10:24	4 10.62	4.5							
	5								
	6								
	7								
	8								
	9								
	10								
Sample Information:									
10:24	S1 10.62	4.5	7.51	11.0	3490	3.97	4.48	130	
10:36	S2 10.62	5.0	7.51	10.3	3517	2.19	4.20	131	

Well No. MW-24D		Diameter (inches): 2"		Sample Date / Time: 4/1/2020					
Product Depth (fbTOR): NA		Water Column (ft): 35.8		DTW when sampled:					
DTW (static) (fbTOR): 11.29		One Well Volume (gal): 5.8		Purpose: <input type="checkbox"/> Development <input type="checkbox"/> Sample <input checked="" type="checkbox"/> Purge & Sample					
Total Depth (fbTOR): 47.09		Total Volume Purged (gal):		Purge Method: submersible pump					
Time	Water Level (fbTOR)	Acc. Volume (gallons)	pH (units)	Temp. (deg. C)	SC (uS)	Turbidity (NTU)	DO (mg/L)	ORP (mV)	Appearance & Odor
10:52	0 Initial	0	7.52	10.7	2528	21.9	6.61	44	no sheen, no odor
10:56	1 11.46	1.0	7.38	11.2	2577	38.7	1.59	-3	
11:00	2 11.47	2.5	7.37	11.5	2570	10.5	1.67	-23	
11:05	3 11.47	3.5	7.36	11.8	2568	2.88	1.42	-22	
11:10	4 11.47	4.5	7.33	12.1	2550	2.12	1.25	-20	
11:15	5 11.47	6.5	7.34	11.8	2571	2.24	1.70	-21	
11:18	6 11.47	8.0	7.35	12.1	2577	2.11	1.15	-31	
	7								
	8								
	9								
	10								
Sample Information:									
11:25	S1 11.47	8.5	7.28	12.1	2555	2.00	1.57	-30	
11:30	S2 11.47	9.0	7.34	11.7	2572	1.74	1.63	-36	

REMARKS:

MS/MSD collected w/ MW-24S

Note: All water level measurements are in feet, distance from top of riser.

Volume Calculation

Diam.	Vol. (g/ft)
1"	0.041
2"	0.163
4"	0.653
6"	1.469

Stabilization Criteria

Parameter	Criteria
pH	± 0.1 unit
SC	± 3%
Turbidity	± 10%
DO	± 0.3 mg/L
ORP	± 10 mV

PREPARED BY:

# WATER LEVEL MONITORING RECORD

Project Name: 275 Franklin Street Site

Client: Buffalo Development Corp.

Project No.: B0156-019-002

Location: Buffalo, NY

Field Personnel: CMC/CCB

Date: 4/1/2020

Weather:

Well No.	Time	Top of Riser Elevation (fmsl)	Static Depth to Water (fbTOR)	Groundwater Elevation (fmsl)	Total Depth (fbTOR)	Last Total Depth Measurement (fbTOR)
PZ-1	*Paved over					
PZ-2	* Can't get PVC cap off					
PZ-3	8:00		11.34		15.21	
PZ-4R						
PZ-5			11.01			
PZ-6			11.03			
PZ-7	7:50		12.59		15.49	
PZ-8	7:32		12.22		14.24	
PZ-9	7:38		11.24		15.27	
PZ-10	7:30	10.82	10.82		12.43	
PZ-11			10.49			
PZ-12			10.57			
PZ-13			10.84			
PZ-14			10.36			
MW-5R			11.62			
MW-24S			10.57			
MW-23S						
MW-2	J-plug wedged in well sideways w/ handle broken off unable to access well.					
<b>Comments/Remarks:</b>						
PZ-8 No PVC well cap, dirt/debris noted in + around top of well						
PZ-9 No PVC well cap (broken), dirt/debris noted in + around top of well						

PREAPRED BY: \_\_\_\_\_

DATE: \_\_\_\_\_

# APPENDIX E

## DATA USABILITY SUMMARY REPORTS

# Data Validation Services

120 Cobble Creek Road P. O. Box 208

North Creek, NY 12853

Phone (518) 251-4429

[harry@frontiernet.net](mailto:harry@frontiernet.net)

March 17, 2020

Charlotte Clark  
Turnkey Environmental Restoration  
2558 Hamburg Turnpike Suite 300  
Buffalo, NY 14218

RE: Validation of the 275 Franklin Street Site Analytical Laboratory Data  
Alpha Analytical SDG Nos. L1955797  
Data Usability Summary Report (DUSR)

Dear Ms. Clark:

Review has been completed for the data package generated by Alpha Analytical that pertains to samples collected between 11/20/19 the 275 Franklin Street site. Eleven aqueous samples and a field duplicate were processed for TCL volatiles. Analytical methodologies utilized are USEPA SW846.

The data package submitted by the laboratory contains full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

- \* Data Completeness
- \* Case Narrative
- \* Custody Documentation
- \* Holding Times
- \* Surrogate and Internal Standard Recoveries
- \* Method Blanks
- \* Matrix Spike Recoveries/Duplicate Correlations
- \* Blind Field Duplicate Correlations
- \* Laboratory Control Sample (LCS)
- \* Instrumental Tunes
- \* Initial and Continuing Calibration Standards
- \* Method Compliance
- \* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data package.

**In summary**, results for the samples are usable either as reported or with minor qualification as estimated, with the exception of those for 1,4-dioxane. The results for 1,4-dioxane are rejected due to poor responses inherent in the methodology.

Data completeness, representativeness, reproducibility, sensitivity, comparability, and accuracy and precision are acceptable.

Validation qualifier definitions and the client sample identification summary are attached to this text. Also submitted is the Alpha EQUIS EDD with recommended qualifiers/edits applied in red.

### **Blind Field Duplicate Correlations**

The field duplicate evaluation was performed on MW-23S, and shows correlations within validation guidelines.

### **TCL Volatile Analyses by EPA 8260C**

Results for 1,4-dioxane in the samples are rejected due to low responses in the calibration standards. Other calibration standard responses meet validation guidelines, with the exception of the following, results for which have been qualified as estimated in the indicated associated samples: bromomethane, dichlorodifluoromethane, and bromoform (25%D to 54%D) in all samples except MW-23S and Blind Dup.

Holding times were met. Surrogate and internal standard responses are acceptable. Blanks show no contamination.

Matrix spikes of MW-24S are within validation guidelines.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

Attachments:           Validation Qualifier Definitions  
                              Sample Identifications  
                              Qualified Laboratory EQUIS EDDs

## VALIDATION DATA QUALIFIER DEFINITIONS

- U** The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
- J** The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
- J-** The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
- J+** The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
- UJ** The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
- NJ** The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
- R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
- EMPC** The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

## Sample Summaries

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-019-002-001

**Lab Number:** L1955797  
**Report Date:** 11/27/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1955797-01	PZ-6	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 08:55	11/20/19
L1955797-02	PZ-5	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 09:16	11/20/19
L1955797-03	PZ-4R	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 11:40	11/20/19
L1955797-04	MW-5R	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:55	11/20/19
L1955797-05	PZ-13	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:38	11/20/19
L1955797-06	PZ-14	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:58	11/20/19
L1955797-07	PZ-11	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 10:05	11/20/19
L1955797-08	PZ-12	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 11:28	11/20/19
L1955797-09	MW-24D	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 12:55	11/20/19
L1955797-10	MW-24S	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 13:15	11/20/19
L1955797-11	MW-23S	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 13:55	11/20/19
L1955797-12	BLIND DUP	WATER	275 FRANKLIN STREET, BUFFALO, NY	11/20/19 08:00	11/20/19
<del>L1955797-13</del>	<del>TRIP-BLANK</del>	<del>WATER</del>	<del>275 FRANKLIN STREET, BUFFALO, NY</del>	<del>11/20/19 08:00</del>	<del>11/20/19</del>

# Data Validation Services

120 Cobble Creek Road P. O. Box 208

North Creek, NY 12853

Phone (518) 251-4429

harry@frontiernet.net

April 20, 2020

Charlotte Clark  
Turnkey Environmental Restoration  
2558 Hamburg Turnpike Suite 300  
Buffalo, NY 14218

RE: Validation of the 275 Franklin Street Site Analytical Laboratory Data  
Alpha Analytical SDG Nos. L2014123  
Data Usability Summary Report (DUSR)

Dear Ms. Clark:

Review has been completed for the data package generated by Alpha Analytical that pertains to samples collected between 04/01/20 the 275 Franklin Street site. Eleven aqueous samples and a field duplicate were processed for TCL volatiles by USEPA SW846 method 8260C.

The data package submitted by the laboratory contains full deliverables for validation, and this usability report is generated from review of the QC summary form information, with full review of sample raw data and limited review of associated QC raw data. The reported QC summary forms and sample raw data have been reviewed for application of validation qualifiers, with guidance from the USEPA national and regional validation documents, and in consideration for the specific requirements of the analytical methodology. The following items were reviewed:

- \* Data Completeness
- \* Case Narrative
- \* Custody Documentation
- \* Holding Times
- \* Surrogate and Internal Standard Recoveries
- \* Method Blanks
- \* Matrix Spike Recoveries/Duplicate Correlations
- \* Blind Field Duplicate Correlations
- \* Laboratory Control Sample (LCS)
- \* Instrumental Tunes
- \* Initial and Continuing Calibration Standards
- \* Method Compliance
- \* Sample Result Verification

Those items listed above which show deficiencies are discussed within the text of this narrative. All of the other items were determined to be acceptable for the DUSR level review, as discussed in NYS DER-10 Appendix B Section 2.0 (c). Documentation of the outlying parameters cited in this report can be found in the laboratory data package.

**In summary**, results for the samples are usable either as reported or with minor qualification as estimated, with the exception of those for 1,4-dioxane. The results for 1,4-dioxane are rejected due to poor responses inherent in the methodology.

Data completeness, representativeness, reproducibility, sensitivity, comparability, and accuracy and precision are acceptable.

Validation qualifier definitions and the client sample identification summary are attached to this text. Also submitted is the Alpha EQUIS EDD with recommended qualifiers/edits applied in red.

### **Blind Field Duplicate Correlations**

The field duplicate evaluation was performed on MW-5R, and shows correlations within validation guidelines.

### **TCL Volatile Analyses by EPA 8260C**

Results for 1,4-dioxane in the samples are rejected due to low responses in the calibration standards. Other calibration standard responses meet validation guidelines, with the exception of the following, results for which have been qualified as estimated in the indicated associated samples:

- Bromomethane, 1,2,3-trichlorobenzene, and 1,2,4-trichlorobenzene (26%D to 55%D) in PZ-4R, PZ-5, PZ-6, and PZ-13
- Bromomethane (40%D) in MW-5R, MW-24S, PZ-11, PZ-12, and PZ-14

Due to presence in the associated method blank, the detected results for methyl acetate in the project samples are considered external contamination and have been edited to reflect non-detection at the reporting limits.

Holding times were met. Surrogate and internal standard responses are acceptable.

Matrix spikes of MW-24S are within validation guidelines, with the exception of the recoveries for bromomethane (34% and 38%). The result for that compound in that parent sample has been qualified as estimated in value.

Please do not hesitate to contact me if questions or comments arise during your review of this report.

Very truly yours,



Judy Harry

Attachments:           Validation Qualifier Definitions  
                              Sample Identifications  
                              Qualified Laboratory EQUIS EDDs

## VALIDATION DATA QUALIFIER DEFINITIONS

- U** The analyte was analyzed for, but was not detected above the level of the associated reported quantitation limit.
- J** The analyte was positively identified; the associated numerical value is an approximate concentration of the analyte in the sample.
- J-** The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
- J+** The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
- UJ** The analyte was analyzed for, but was not detected. The associated reported quantitation limit is approximate and may be inaccurate or imprecise.
- NJ** The detection is tentative in identification and estimated in value. Although there is presumptive evidence of the analyte, the result should be used with caution as a potential false positive and/or elevated quantitative value.
- R** The data are unusable. The sample results are rejected due to serious deficiencies in meeting Quality Control limits. The analyte may or may not be present.
- EMPC** The results do not meet all criteria for a confirmed identification. The quantitative value represents the Estimated Maximum Possible Concentration of the analyte in the sample.

## Sample Summaries

**Project Name:** 275 FRANKLIN ST. SITE  
**Project Number:** B0156-018-001

**Lab Number:** L2014123  
**Report Date:** 04/06/20

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2014123-01	PZ-6	WATER	275 FRANKLIN ST	04/01/20 08:05	04/01/20
L2014123-02	PZ-5	WATER	275 FRANKLIN ST	04/01/20 08:40	04/01/20
L2014123-03	PZ-4R	WATER	275 FRANKLIN ST	04/01/20 10:20	04/01/20
L2014123-04	PZ-13	WATER	275 FRANKLIN ST	04/01/20 09:15	04/01/20
L2014123-05	PZ-14	WATER	275 FRANKLIN ST	04/01/20 09:55	04/01/20
L2014123-06	PZ-11	WATER	275 FRANKLIN ST	04/01/20 11:20	04/01/20
L2014123-07	PZ-12	WATER	275 FRANKLIN ST	04/01/20 10:50	04/01/20
L2014123-08	MW-5R	WATER	275 FRANKLIN ST	04/01/20 09:30	04/01/20
L2014123-09	MW-24S	WATER	275 FRANKLIN ST	04/01/20 10:24	04/01/20
L2014123-10	MW-24D	WATER	275 FRANKLIN ST	04/01/20 11:25	04/01/20
L2014123-11	MW-23S	WATER	275 FRANKLIN ST	04/01/20 12:32	04/01/20
L2014123-12	BLIND DUP	WATER	275 FRANKLIN ST	04/01/20 08:00	04/01/20
<del>L2014123-13</del>	<del>TRIP BLANK</del>	<del>WATER</del>	<del>275 FRANKLIN ST</del>	<del>04/01/20 00:00</del>	<del>04/01/20</del>