Remedial Investigation/ Interim Remedial Measures/Alternatives Analysis Report

July 2018 0239-016-001

Prepared For:

1665 Main Street Group, LLC

Prepared By:

Benchmark Environmental Engineering & Science, PLLC

In Association With:

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REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES / ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE
BUFFALO, NEW YORK
BCP SITE No. C915306

July 2018 0239-016-001

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REMEDIAL INVESTIGATION/INTERIM REMEDIAL MEASURES /ALTERNATIVES ANALYSIS REPORT MAIN & EAST BALCOM SITE

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Certification

I, Thomas H. Forbes, certify that I am currently a NYS registered professional engineer as defined in 6NYCRR Part 375 and that this July 2018 Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Report (RI/IRM/AAR) for the Main & East Balcom Street Site (C915306) was prepared in general accordance with applicable statutes and regulations and in general conformance with the DER Technical Guidance for Site Investigation and Remediation (DER-10) and that activities were performed in general accordance with the DER-approved work plan and any DER-approved modifications.

6-18-19

Date

1.0 INTRODUCTION

This Remedial Investigation/Interim Remedial Measures/Alternatives Analysis Report (RI/IRM/AAR) has been prepared by Benchmark Environmental Engineering and Science, PLLC (Benchmark), in association with TurnKey Environmental Restoration, LLC (TurnKey), referred to herein as Benchmark-Turnkey, on behalf of 1665 Main Street Group, LLC, for the Main & East Balcom Site, located in the City of Buffalo, Erie County, New York (Site; see Figures 1 and 2).

1665 Main Street Group, LLC elected to pursue cleanup and redevelopment of the Site under the New York State Brownfield Cleanup Program (BCP) and executed a Brownfield Cleanup Agreement (BCA) with the New York State Department of Environmental Conservation (NYSDEC) in August 2014 and amended in November 2014 (Site No. C915306). The RI/IRM Work Plan was approved by the NYSDEC, with concurrence of the New York State Department of Health (NYSDOH), in May 2017. Benchmark-TurnKey performed RI-IRM activities at the Site between July 2017 and February 2018.

1.1 Site Description

The approximately 1-acre Site is located along Main Street and East Balcom Street, in a highly developed mixed use commercial and residential area of the City of Buffalo, Erie County, New York (Site; see Figures 1 and 2). The Site is currently improved with a six (6) story former storage building with asphalt and soil covered areas along Main Street and East Balcom Street.

The Site is bound by Main Street to the west, vacant and residential properties to the east, East Balcom Street with commercial building beyond to the north, and a commercial facility (bus garage) to the south. Land use surrounding the Site includes commercial and residential properties.

1.2 Site Environmental Background

Portions of the Site have a long history of being utilized for warehouse-storage and trucking, filling station(s) and retail (donut manufacturer), and residential.

Previous environmental investigations completed at the Site have revealed evidence of environmental contamination related to the former uses of the Site. Elevated photoionization detector (PID) readings and elevated levels of semi-volatile organic compounds (SVOCs) and metals have been detected on Site at concentrations exceeding regulatory guidelines. Details of the previous investigations are presented in Section 1.2 below.

According to municipal records, multiple underground storage tanks (USTs) and fuel dispensers have been installed on several of the former parcels (1653-1655 Main Street and 1661 Main Street). The current building (1661 Main Street) was identified on the RCRA list of generators of hazardous waste. Additional hazardous/regulated materials and/or wastes associated with automobile service activities were likely used, stored and/or generated on-Site. Multiple NYSDEC Spills records are associated with the Site, including a currently open spill file No. 1500185.

1.3 Previous Investigations

1.3.1 January 2015 – Phase I Environmental Site Assessment

TurnKey completed a Phase I Environmental Site Assessment (ESA) for the Site, dated January 2015. TurnKey's review of historical sources revealed that the Site had a history of residential and commercial uses/development. The following RECs and other concerns were identified:

- A 1,000-gallon fuel oil aboveground storage tank (AST) is located in the basement boiler room of the existing building. Petroleum odors and staining were noted on the exterior of the tank as well as beneath it (petro-stained wood chips present surrounding the tank within concrete enclosure). Filling and vent lines are present in the basement.
- Three (3) vent and filling pipes are located next to man-door along E. Balcom Street. It should be noted that only two (2) lines were identified in the basement related to boiler AST, likely indicating additional tank(s) present on-Site.

- City of Buffalo Building Department and Fire Prevention office records indicate the presence of at least one (1) and potentially up to three (3) USTs, and at least one (1) fuel dispenser on-Site.
- Gasoline station and automotive repair operations were identified in connection with adjacent properties.
- Hazardous/regulated materials are stored and utilized on-site.
- The Site (American Household Storage Company) was identified as a RCRA generator of hazardous waste.
- Multiple NYSDEC Spill files are associated with the Site, including:
  - Spill No. 9702110, involving a diesel fuel release, is classified as "closed" by the NYSDEC.
  - Spill No. 9975698, involving a battery acid release, is classified as "closed" by the NYSDEC.
- Numerous closed/inactive spills were identified in connection with adjacent/nearby properties in the regulatory database.

1.3.2 April 2015 - Limited Phase II Environmental Investigation Report

TurnKey completed a Limited Phase II Environmental Investigation on the 1661 Main Street Site. Findings of the Limited Phase II investigation are detailed below:

- A total of seven (7) soil borings were completed across the Site, including two (2), identified as SB-1 and SB-2, completed in the basement boiler room, and five (5), identified as SB-2 through SB-7 in the exterior parking lot along E. Balcom.
- Multiple SBs, designated collectively as SB-8, were advanced along the southeast portion of the E. Balcom parking lot, adjacent to the vent/fill lines. Boring refusal was encountered at approximately 2-3 fbgs at each location, likely indicating the presence of an additional UST. Investigation activities were limited to the west by the presence of a utility (natural gas) and north, south and west by the building and property boundaries.
- Field observations of apparent petroleum contamination, including elevated PID readings (390 ppm) and petroleum odors were noted in the basement SBs.

- Petroleum-related compound, naphthalene, was detected exceeding its NYSDEC CP-51 Soil Cleanup Level (SCL).
- Based on the presence of the fuel oil tank in the basement, including staining and odors associated with the tank, and the presence of petroleum impacts beneath the basement slab, the NYSDEC Spill hotline was notified and Spill No. 1500185 was issued for the Site. The spill is currently classified as "active" pending remedial measures.

1.3.3 January 2016 - Supplemental Phase II Environmental Investigation Report

TurnKey completed a Supplemental Phase II Environmental Investigation on the Main & East Balcom Street Site. Findings of the Supplemental Phase II investigation are detailed below:

- A 5,000 gallon UST was discovered in the 1661 Main Street parcel, East Balcom parking lot. Additional assessment of the tank was limited by the presence of subgrade utilities along the sides of the tank, the building, and the property boundary. Investigation of the former fuel pump was limited due to vehicle restricting access.
- Field observations of apparent petroleum contamination, including elevated PID readings and petroleum odors were noted in the TP locations.
- Elevated metals, including arsenic, cadmium, chromium, lead and mercury, some exceeding CSCOs, were detected across the Site. Elevated metals are likely associated with fill that was identified Site-wide from surface to 10 fbgs.
- Based on the findings of the completed investigations, Site remediation appears warranted. The two (2) known tanks, one (1) AST in the basement and one (1) UST in the 1661 Main Street parking lot, and appurtenant piping, should be removed in accordance with NYSDEC protocols and impacted soil encountered in the area of these structures should be properly handled.
- Based on the elevated concentration of metals and PAHs in the upper 8-10 ft. across the Site, any soil-fill excavated during redevelopment for utilities or building foundations will need to be handled as a solid waste, and disposed off-

site, in accordance with NYSDEC and City of Buffalo guidelines. Any excavated material needs to be handled in accordance with all local, state and federal regulations.

- Additional investigation and/or remediation will be required to address NYSDEC Spill No. 1500185.

A summary of previous investigation analytical results, described above, is provided on Table 2. Historic sample locations are illustrated on Figure 3.

1.4 Purpose and Scope

This RI/IRM/AAR has been prepared on behalf of 1665 Main Street Group, LLC. to describe and present the findings of the RI activities, detail the completed IRMs, and evaluate remedial alternatives for the Site.

This report contains the following sections:

- Section 2.0 presents the approach for the RI
- Section 3.0 describes the physical characteristics of the Site as they pertain to the investigation findings
- Section 4.0 presents the investigation results by media
- Section 5.0 describes the Interim Remedial Measures (IRMs)
- Section 6.0 describes the fate and transport of the constituents of primary concern (COPCs)
- Section 7.0 presents the qualitative risk assessment
- Section 8.0 evaluates remedial alternatives for the Site
- Section 9.0 presents the RI/IRM/AAR summary and conclusions
- Section 10.0 provides a list of references for this report

2.0 INVESTIGATION APPROACH

The purpose of the RI field activities was to define the nature and extent of contamination on the BCP Site, and to collect data of sufficient quantity and quality to perform the remedial alternatives evaluation. The field investigation was completed across the BCP Site to supplement previous environmental data and to delineate areas requiring remediation. Field activities included: advancement of soil borings; subsurface soil sampling; monitoring well installation; groundwater sampling; and, collection of hydrogeologic data.

Field team personnel collected environmental samples in accordance with the rationale and protocols described in the Quality Assurance Project Plan (QAPP). USEPA and NYSDEC-approved sample collection and handling techniques were utilized during field activities.

Samples for chemical analysis were analyzed in accordance with USEPA SW-846 methodology with an equivalent Category B deliverable package to meet the definitive-level data requirements. Analytical results were evaluated by a third-party data validation expert in accordance with provisions described in the QAPP.

The investigation activities are described below. Figure 3 presents the RI sample locations including historic sample locations. Appendix A contains photographs of field activities. Field borehole logs and well completion details are included in Appendix B.

2.1 RI Soil/Fill Investigation

A soil/fill investigation was completed across the Site to supplement previous environmental data and to further delineate known contamination on-Site. The soil/fill investigation included the excavation of test pits and advancement of soil borings across the Site.

2.1.1 Surface/Near Surface Soil/Fill Investigation

Four (4) surface soil samples, identified as NS-1 through NS-4, were collected from the upper 0-24 inches in areas of the Site not covered by hardscape (see Figure 3). Surface soil/fill samples were collected and analyzed in accordance with the approved Work Plan and Sampling and Analysis Plan as detailed on Table 1.

2.1.2 Subsurface Soil/Fill Investigation

The subsurface soil/fill investigation included the excavation of nine (9) test pits, identified as TP-11 through TP-19 and advancement of five (5) soil borings identified as MW-1 through MW-5.

Test pits were excavated to target depth of 12-15 feet below ground surface (fbgs), and soil borings were advanced using direct-push drilling techniques and continuous split spoon sampling to a target depth of 20 fbgs. Test pits were completed in July 2017, and soil borings were advanced between September-October 2017 (MW-1 – MW-4) and February 2018 (MW-5).

Retrieved soil/fill samples allowed for visual, olfactory, and photoionization detector (PID) assessment of subsurface conditions. Subsurface soil/fill samples were collected for laboratory analysis per the approved Work Plan (see Table 1). Test pit and soil boring logs are provided in Appendix B.

2.1.3 Soil/Fill Sample Collection and Analyses

Soil/fill samples were collected using dedicated stainless steel sampling tools. Representative soil samples were placed in pre-cleaned laboratory provided sample bottles, cooled to 4ºC in the field, and transported under chain-of-custody command to a NYSDOH Environmental Laboratory Accreditation Program (ELAP)-certified analytical laboratory.

Representative soil/fill samples were analyzed in accordance with the approved work plan, including Target Compound List (TCL) plus Commissioner Policy (CP-51) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), Target Analyte List (TAL) metals, polychlorinated biphenyls (PCBs), pesticides and herbicides, as detailed on Table 1.

All samples were collected and analyzed in accordance with USEPA SW-846 methodology with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment.

2.2 Groundwater Investigation

Benchmark-TurnKey personnel provided oversight for the installation of five (5) groundwater monitoring wells, identified as MW-1 through MW-5, to investigate on-Site

groundwater flow direction and quality. MW-1, MW-2 and MW-3 were installed in September 2017. MW-4 was installed in November 2017 after completion of UST IRM excavation activities; MW-5 was installed in February 2018. Details of the well installation, well development, and groundwater sampling are provided below. Figure 4 presents the location of the monitoring well network.

2.2.1 RI Monitoring Well Installation

RI groundwater monitoring wells were installed after completion of RI soil boring advancement, with a drill rig capable of advancing hollow-stem augers to install the groundwater monitoring wells. Due to the potential for well destruction related to the planned UST IRM excavation, installation of MW-4 was delayed until after IRM excavation activities were complete in October 2017. After the initial RI groundwater data was reviewed, an additional well (MW-5) was installed in consultation with the Department in February 2018.

Monitoring well construction details are presented in Appendix B. Location of the monitoring wells is presented on Figure 4.

2.2.2 Monitoring Well Development

After installation, the monitoring wells were developed in accordance with the approved work plan as well as Benchmark-TurnKey and NYSDEC protocols. Development of the monitoring wells was completed with dedicated disposable polyethylene bailers via surge and purge methodology. Field parameters including pH, temperature, turbidity, dissolved oxygen and specific conductance were measured during development until they became relatively stable. Stability was defined as variation between measurements of approximately 10 percent or less with no overall upward or downward trend in the measurements; or a minimum of three well volumes.

2.2.3 Groundwater Sample Collection and Analyses

Prior to sampling, Benchmark-TurnKey personnel purged a minimum of three (3) well volumes, or purged dry, due to low groundwater well recovery rates and sampled monitoring wells using dedicated bailers. Field measurements for pH, specific conductance,

temperature, turbidity, dissolved oxygen (DO), redox potential (ORP), and water levels, as well as visual and olfactory field observations, were periodically recorded and monitored for stabilization. All collected groundwater samples were placed in pre-cleaned, pre-preserved laboratory provided sample bottles, cooled to 4°C in the field, and transported under chain-of-custody command to a NYSDOH ELAP-certified analytical laboratory

Groundwater samples were collected and analyzed for TCL plus CP-51 list VOCs, TCL SVOCs, TAL metals, PCBs, pesticides, and herbicides in accordance with the approved Work Plan and detailed on Table 1. All sampling was performed in accordance with USEPA SW-846 methodology with equivalent NYSDEC Category B deliverables to allow for independent third-party data usability assessment.

The NYSDEC requested emerging contaminants sampling and analysis was not a requirement at the time the RI-IRM Work Plan was approved. Supplemental emerging contaminant sampling will be completed in accordance with the Department's approved emerging contaminant work plan (May 2018) and sample results will be provided to the Department under separate cover.

2.3 Soil Vapor Intrusion Investigation

A preliminary soil vapor intrusion (SVI) investigation was completed to assess the potential for soil vapor conditions within the existing building's basement. The goal of the preliminary SVI investigation was to qualitatively assess conditions beneath the existing building after completion of the approved IRMs during ongoing building redevelopment.

To perform the evaluation, two (2) locations within the building basement were selected as sub-slab vapor (SV) sample locations, in consultation with the Department after completion of the planned IRMs (SSV-1 and SSV-2). Ambient basement air samples were also collected at both subslab sample locations (Ambient 1 and Ambient 2), and indoor ambient air sample was collected from the first floor (Ambient 3). An outdoor ambient air sample (Outdoor-1) was collected to establish background conditions (see Figure 3). A pre-sampling walk-through was completed with NYSDEC after completion of the interior IRM to review SVI sampling locations and pre-sampling conditions.

Prior to initiation of SV sampling, a pre-sampling inspection was performed to identify and minimize conditions that may interfere with or bias testing (e.g., open containers of solvents, paints, etc.). The pre-inspection inventory is provided in Appendix C.

2.3.1 Sub-Slab Vapor & Ambient Air Sample Collection

Sub-slab vapor and ambient air sampling was completed in general conformance with the NYSDOH Soil Vapor Intrusion Guidance and Benchmark-TurnKey's Ambient Air/Sub-slab Vapor Sampling Field Operating Procedure, which was included with the approved RI Work Plan.

At each SSV sampling location, Benchmark/TurnKey personnel drilled a hole through a competent portion of the concrete slab, away from cracks and floor drains using a hand-held hammer drill. Sub-slab vapor samples were collected in the following manner:

- After tracer gas (helium) verification that the air sample tubing is sealed to the subsurface, one to three volumes (i.e., the volume of the sample probe and tube) were purged prior to collecting the samples to ensure they were representative;
- The SSV probes were sealed at the surface with non-VOC containing clay;
- Flow rates for both purging and sample collection were regulated to less than 0.2 liters per minute; and
- SSV sample canisters were equipped with a 24-hour regulator to allow the sample to be collected over an approximate 24-hour period.

Concurrent with the SSV samples, indoor ambient air samples were collected from the basement adjacent to the SSV locations, the first floor, and outdoor air sample were collected (see Figure 3). It should be noted that the basement is a primarily large open space with minimal interior walls or dividers. However, the sampling area, was isolated by hanging plastic to localize the interior basement ambient air samples. Air sampling was completed during the weekend (Saturday-Sunday) when no other activities were being completed within the building. Laboratory provided air sample canisters were equipped with a 24-hour regulator.

Each canister had an initial vacuum of approximately 30 inches of mercury (in Hg) was fitted with an appropriate regulator for the 24-hour sampling period. The summa

canister valves were kept closed until the SSV samples holes were complete and the ambient indoor air canisters were in their respective positions. Information regarding the sample duration and starting and ending vacuums were recorded on the sampling forms included in Appendix C.

After the sampling was completed, the regulator valves were closed, and the air samples were transported to the laboratory for TCL VOCs analysis via USEPA Method TO-15 (see Table 1).

2.4 Field Specific Quality Assurance/Quality Control Sampling

Field-specific quality assurance/quality control (QA/QC) samples were collected and analyzed to ensure the reliability of the generated data as described in the QAPP and to support the required third-party data usability assessment effort. Site-specific QA/QC samples included matrix spikes, matrix spike duplicates, blind duplicates, and trip blanks.

2.5 Site Mapping

A Site map was developed during the RI field investigation. All sample points and relevant Site features were located on the map. Benchmark-TurnKey personnel employed a handheld GPS unit to identify the locations of all exterior sample locations relative to New York state planar grid coordinates. For interior sample locations a hand held GPS unit was used to locate the corners of the existing building relative state planar grid coordinates, and interior building measurements were then recorded and sample locations were adjusted to the state planar grid. Monitoring well elevations were measured by Benchmark-TurnKey's surveyor. An isopotential map showing the groundwater elevations was prepared based on water level measurements relative to the Site vertical datum (see Figure 4).

2.6 Decontamination & Investigation-Derived Waste Management

Every attempt was made to utilize dedicated sampling equipment during the RI, however, non-dedicated equipment was required and/or used (e.g., spilt spoons) and was decontaminated with a non-phosphate detergent (i.e., Alconox®) and potable water mixture, rinsed with distilled water, and air-dried before each use in accordance with the field operating procedure (FOP).

3.0 SITE PHYSICAL CHARACTERISTICS

The physical characteristics of the Site observed during the RI are described in the following sections.

3.1 General Site Features and Site Topography

The Site consists of one (1) parcel addressed at 1661 Main Street (SBL: 100.24-4-14.1) in the City of Buffalo. The Site is bound by Main Street the west, vacant residential to the east, East Balcom Street followed by commercial buildings to the north, and a commercial facility (bus garage) to the south. Land use surrounding the Site includes commercial and residential properties. The Site is general flat along Main Street, but rises gently to the south along East Balcom, with little distinguishable site features beyond the building.

3.2 Geology and Hydrogeology

3.2.1 Overburden

The U.S. Department of Agriculture Soil Conservation Service soil survey map of Erie County characterized the general soil type at the Site as Urban Land (Ud) with level to gently sloping land with at least 60 percent of the soil surface covered by the existing building, asphalt, concrete, and other impervious structures typical of an urban environment. The presence of overburden fill material is widespread and common throughout the City of Buffalo.

The geology at the Site was investigated during the RI. The shallow overburden is generally described as fill with varying amount of brick, block, concrete, wood, cinders and ash, with sandy lean clay and fine sands. Fill ranged in depth from 4-11 fbgs. Several former stone building foundations were encountered during test pitting on the eastern portion of the Site (East Balcom). Borehole logs are provided in Appendix B.

3.2.2 Bedrock

Based on the bedrock geologic map of Erie County, the Site is situated over the Onondaga Formation of the Middle Devonian Series. The Onondaga Formation is

comprised of a varying texture from coarse to very finely crystalline with a dark gray to tan color and chert and fossils within. The unit has an approximate thickness of 110 to 160 feet. Structurally, the bedrock formations strike in an east-west direction and exhibit a regional dip that approximates 40 feet per mile (0.4 degrees) toward the south and southwest.

Bedrock was not encountered during RI drilling activities.

3.2.3 Hydrogeology

Based on the findings of the RI, perched and overburden water was encountered at depths ranging from 12 to 15 fbgs. The Site hydrogeology is complicated by the presence of municipal subgrade utilities along Main Street and East Balcom Street, the presence of the subgrade transit tunnel under Main Street, subgrade building footers and foundations, and presence of historic fill.

In general, localized groundwater flow direction was estimated to flow north towards Scajaquada Creek. Figure 4 depicts the estimated overburden groundwater isopotential map based on the water level measurements collected in February 2018.

3.2.4 Hydraulic Gradients

Hydraulic gradient of the saturated overburden was determined from groundwater elevation data collected in February 2018.

The estimated horizontal hydraulic gradient for overburden groundwater was calculated to range from 0.007 ft/ft (MW-1 to MW-2) to 0.003 ft/ft (MW-5 to MW-4), with an estimated hydraulic gradient calculated average of 0.0047 ft/ft.

4.0 INVESTIGATION RESULTS BY MEDIA

The nature and extent of contamination at the Site was further characterized using soil and groundwater samples collected and analyzed as part of the RI. As described above, samples collected during previous investigations were used to supplement this RI.

The soil and groundwater samples collected during the RI sampling events were submitted for analyses under chain-of-custody to a NYSDOH ELAP-certified laboratory. Analytical services were performed in accordance with SW-846 analytical methods and protocols. Appendix D contains laboratory analytical data packages for samples analyzed from the RI. Tabulated analytical data discussed in this section includes results from prior investigations as well as the RI data collected by Benchmark-TurnKey personnel. Tabulated analytical results are shown only for those parameters for which a value greater than the laboratory method detection limit was detected at a minimum of one (1) sample location.

Figure 3 shows the RI and previous investigation sampling locations. Table 1 summarizes the sampling and analytical program employed under RI.

4.1 Standards, Criteria, and Guidance

According to DER-10 Section 1.3(b)71, SCGs mean "*standards and criteria that are generally applicable, consistently applied, and officially promulgated, that are either directly applicable or not directly applicable but are relevant and appropriate, unless good cause exists why conformity should be dispensed with, and with consideration being given to guidance determined, after the exercise of scientific and engineering judgment, to be applicable. This term incorporates both the CERCLA concept of 'applicable or relevant and appropriate requirements' (ARARs) and the USEPA's 'to be considered' (TBCs) category of non-enforceable criteria or guidance. For purposes of this Guidance, 'soil SCGs' means the soil cleanup objectives and supplemental soil cleanup objectives identified in 6NYCRR 375-6.8 and the Commissioner Policy on Soil Cleanup Guidance (CP-Soil).*"

For discussion purposes, analytical results for the investigation were compared with the following SCG values.

Soil/Fill:

Soil Cleanup Objectives (SCOs) per 6 New York Code Rules and Regulation (6 NYCRR) Part 375 Environmental Remediation Programs, Subparts 375-12 to 375-4 & 375-6, effective December 14, 2006.

NYSDEC, Commissioner Policy, CP-51 Soil Cleanup Guidance, October 21, 2010.

Groundwater

Class GA Groundwater Quality Standards and Guidance Values (GWQS/GVs) per NYSDEC's Division of Water, Technical and Operational Guidance Series (TOGS 1.1.1), June 1998, amended April 2000.

Soil Vapor

NYSDOH *Final Guidance for Evaluating Soil Vapor Intrusion in the State New York – Matrix A, Matrix B, and Matrix C*. May 2017(NYSDOH Guidance).

Sample results compared to the above criteria are described below according to media and contaminant class.

4.2 Historic Soil/Fill Investigation Results

A total of 10 historic soil/fill samples, identified as SB-1, SB-2, SB-3, TP-1 through TP-4, and TP-8 through TP-10 were collected and selectively analyzed for VOCs, SVOCs, and metals during previous investigations. Table 2 summarizes the historic soil/fill analytical results with comparison to applicable Part 375 SCOs. Historic sample locations are identified on Figure 3.

Elevated SVOCs, primarily polycyclic aromatic hydrocarbons (PAHs) were detected exceeding their Unrestricted Use Soil Cleanup Objectives (USCOs), Restricted Residential Use SCOs (RRSCOs) and Commercial Use SCOs (CSCOs). Elevated metals, including arsenic, barium, and lead, were detected exceeding their respective USCOs, RRSCOs, and CSCOs at several locations across the Site within the fill layer (see Table 2 and Figure 3). Elevated detections exceeding RRSCOs appear to be related to the presence of shallow fill material across the Site.

4.3 RI Soil/Fill Investigation Results

Benchmark-TurnKey completed surface and subsurface sampling across the Site to further assess on-Site conditions. Table 3 summarizes the surface soil and subsurface soil/fill

samples, respectively, with comparison to applicable Part 375 SCOs. Sample locations are shown on Figure 3. Boring and test pit logs are provided in Appendix B.

4.3.1 Qualitative Soil/Fill Screening Results

During the RI field activities, fill material was identified across the Site to varying depths, ranging from surface to 11 fbgs. The shallow overburden fill is generally described as brick, block, concrete, wood, cinders and ash, with sandy lean clay and fine sands. Shallow fill was prominent in the East Balcom parking lot area, with a former building concrete floor being identified in TP-18 at approximately 5 fbgs. Former building foundation walls were also identified in several test pits in the eastern portion of the Site.

Reworked soil/fill, including brick, block, concrete, was evident at surface in the southern portion of the Site Along Main Street. This portion of the Site was formerly a donut manufacturing facility that was demolished in 2008, with likely recycled C&D concrete and brick used to backfill the former building after demolition.

Elevated PID readings ranging from 56-105 ppm were detected in TP-14, with slight odors being noted. Soil samples were collected from the elevated PID horizon. No other elevated PID readings were detected outside of the UST IRM area.

4.3.2 RI Near Surface Soil Results

Near-surface soil/fill samples were collected from surface to two (2) fbgs, from areas of the Site with visual evidence of fill materials present at surface, likely related to the demolition of the former building. The goal of the near-surface sampling was to characterize the shallow soil/fill in these areas of the Site and determine if these soils would be potentially acceptable for use as on-Site backfill beneath the cover system.

Four (4) near surface soil samples, identified as NS-1 through NS-4, were collected from the accessible areas across the Site. Table 3 summarizes the analytical results of the surface soil sample results with comparison to applicable SCGs.

4.3.2.1 Semi-Volatile Organic Compounds

Elevated PAHs were detected above RRSCOs at one (1) location (NS-4). Specifically, benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and

dibenzo(a,h)anthracene, chrysene, and indeno(1,2,3-cd)pyrene were detected at concentrations exceeding RRSCOs. Total PAHs at NS-4 are less than 100 ppm (see Table 3 and Figure 3).

4.3.2.2 Metals

No metals were detected exceeding RRSCOs. Several metals, including chromium, lead, mercury and zinc were detected above their respective USCOs.

4.3.2.3 Polychlorinated Biphenyls

Total PCBs were not detected above RRSCOs. Total PCBs were detected above USCOs at one location (NS-4), with the majority of results being reported as non-detect or estimated values by the laboratory.

4.3.2.4 Pesticides and Herbicides

No pesticides or herbicides were detected above USCOs, with all results being reported as non-detect (below the MDL) or estimated by the laboratory.

4.3.2.5 Near Surface Soil/Fill Summary

Select individual PAHs were detected above RRSCOs at one location (NS-4), with total PAHs of less than 100 ppm. Certain metals and PCBs were detected above USCOs, however, none of the concentrations exceeded RRSCOs.

No pesticides or herbicides were detected above USOCs in the near-surface soil-fill samples.

4.3.3 RI Subsurface Soil/Fill Investigation

Eleven (11) subsurface samples were collected across the site, including seven (7) test pits (TPs) and 5 soil boring (SBs). Shallow soil-fill samples were collected from test pit locations, with sample depths ranging from surface to 11 fbgs. Deeper native soil samples were collected and sampled from the soil borings with sample depths ranging from 8 to 20

fbgs. Table 3 presents a summary of the RI subsurface soil/fill sample results with comparison to applicable SCOs. Sample locations are shown on Figure 3.

4.3.3.1 Volatile Organic Compounds

No VOCs were detected above USCOs, with the vast majority of results being reported as non-detect or estimated values by the laboratory.

4.3.3.2 Semi-Volatile Organic Compounds

No SVOCs were detected above USCOs, with the vast majority of results being reported as non-detect or estimated values by the laboratory.

It should be noted that RI soil samples aimed to characterize a different fill horizon than the previous investigations, which identified elevated PAHs associated with on-Site fill material.

4.3.3.3 Inorganic Compounds

No metals were detected above RRSCOs. Certain metals were detected above USCOs (see Table 3).

It should be noted that RI soil samples aimed to characterize a different fill horizon than the previous investigations, which identified elevated metals associated with on-Site fill material.

4.3.3.4 Polychlorinated Biphenyls

No PCBs were detected above USCOs, with the vast majority of results being reported as non-detect by the laboratory (see Table 3).

4.3.3.5 Pesticides and Herbicides

Pesticides and herbicides were reported as non-detect by the laboratory.

4.3.3.6 Subsurface Soil/Fill Summary

As described above, no VOCs, SVOCs, PCBs, metals, pesticides or herbicides were detected above RRSCOs. Certain metals were detected above their respective USCOs. No analytical results above USCOs were detected from the deeper native soil samples.

It should be noted that RI soil samples aimed to characterize different fill horizon than the previous investigations, which identified elevated PAHs and metals associated with on-Site fill material.

4.4 Groundwater Investigation

Benchmark-TurnKey personnel provided oversight for the installation of five (5) RI groundwater monitoring wells, MW-1 through MW-5, to investigate on-Site groundwater quality and flow. Table 4 presents a comparison of the detected groundwater parameters to the applicable SCGs. Groundwater samples were collected in accordance with the work plan and analyzed in accordance with Table 1.

Based on the initial groundwater analytical results from MW-1 through MW-4, it was determined in consultation with the Department that an additional well was warranted to further assess suspect low-level chlorinated VOC results in MW-3 and MW-4 (see below) in the absence of any chlorinated VOCs being detected in on-Site soil (no on-Site source). After installation of MW-5, wells MW-3, MW-4 and MW-5 were sampled in February 2018 for VOCs only. Groundwater results are discussed below.

The NYSDEC requested emerging contaminants sampling and analysis was not a requirement at the time the RI-IRM Work Plan was approved (March 2017). Supplemental emerging contaminant sampling will be completed in accordance with the Department's approved emerging contaminant work plan (May 2018) and sample results will be provided to the Department under separate cover.

4.4.1 Volatile Organic Compounds

The majority of analytes were reported as non-detectable or trace (estimated) concentrations below the laboratory quantitation limit.

Elevated VOCs were detected above GWQS in MW-4 and MW-5. Specifically, benzene was detected slightly above its GWQS in MW-4, and acetone, a common laboratory contaminate, was detected in MW-4.

Certain chlorinated VOCs (cVOCs) were detected above their GWQS in MW-4 and MW-5. It should be noted that the November 2017 groundwater results for MW-3 indicated the presence of trichloroethene (TCE) exceeding GWQS, however, the February 2018 resample data had no detection (ND) of TCE. All analytical results were reviewed and validated by third-party data validator.

4.4.2 Semi-volatile Organic Compounds

No SVOCs were detected above GWQS, with the vast majority of results being reported as non-detect or estimated values by the laboratory (see Table 4).

4.4.3 Inorganic Compounds

Metals detected at concentrations above GWQS were limited to naturally occurring minerals, including iron, magnesium and sodium. No other metals were detected above GWQS.

4.4.4 Polychlorinated Biphenyls

No PCBs were detected above GWQS, with all results reported as non-detect by the laboratory.

4.4.5 Pesticides and Herbicides

Heptachlor was detected slightly above its GWQS in MW-1, and Endrin was detected above its GWQS in MW-3, with the vast majority of results being reported as non-detect by the laboratory.

4.4.6 Groundwater Summary

As described above no SVOCs, PCBs, or herbicides were detected above their respective GWQS. Certain naturally-occurring metals and two (2) pesticides were detected

slight above GWQS. Benzene and certain cVOCs were detected above their respective GWQS at MW-4, and one (1) cVOC slightly exceeded its GWQS at MW-5 (see Table 4).

It should be noted that no cVOCs were detected above USCOs in on-Site soils (RI and IRM) or above laboratory detection limits for SVI air sample results.

4.5 Soil Vapor Investigation Results

Prior to completing soil vapor intrusion (SVI) sampling, a walk-over of the basement was completed with NYSDEC to inspect site conditions after the completion of the IRM activities. AST IRM post-removal subslab soil boring core holes were patched and plumbing related floor penetration were backfilled and concrete patched prior to SVI sampling. Additionally, plastic sheeting was erected to seal off the elevator shaft and isolate the sampling areas from the larger open basement space.

4.5.1 SVI Pre-sample Inventory

No sources for potential indoor air contamination were noted within the basement.

Several sources for potential indoor air contamination were observed on the first floor of the building including:

- twenty (20) new sealed five gallon buckets of latex paint, five (5) five gallon buckets of latex primer, two (2) five gallon diesel gasoline cans, one (1) one gallon gasoline can, three (3) pallets of Portland cement, and 30 cans of PVC cement. Several hundred feet of PVC pipe of various dimensions were stored on the first floor, and a diesel powered forklift was also parked within the building loading dock at the time of the sampling.

4.5.2 RI SVI Results

Six (6) SVI air samples were collected and analyzed during the RI. The samples were analyzed for VOCs via Method TO-15 (see Figure 3). Table 5 summarizes the RI air sampling analytical results and Table 6 provides a comparison of the constituents identified in the NYSDOH SVI Guidance matrices.

The vast majority of detected air constituents were reported by the laboratory as non-detect or estimated values below the laboratory quantitation limit.

The eight (8) VOC compounds subject to the NYSDOH SVI Guidance were tabulated in Table 6 and compared to their respective decision matrices provided in the Guidance (Matrix A, Matrix B, and Matrix C, respectively). Based on the comparison of subslab concentrations (SSV-1 and SSV-2) to the indoor ambient concentrations (Ambient-1 and Ambient-2, all results indicate "No Further Action (NFA)".

4.5.3 SVI Results Summary

Based on the NYSDOH SVI Guidance Matrices A-C comparisons, air results indicate "No Further Action (NFA)" (see Tables 5 and 6).

Preliminary SVI air sampling was completed prior to optimal building conditions, per the Department's air sampling guidelines. Therefore, supplemental confirmatory SVI air sampling is planned to be completed after building redevelopment activities are complete on the first floor and basement levels to confirm that no further actions to address the potential for exposure are warranted.

The supplemental SVI evaluation will consist of the collection of sub-slab soil vapor samples co-located with indoor air samples in the basement level, indoor air samples on the first floor level, and an outdoor (ambient) air sample. Supplemental SVI air sampling is planned for the upcoming heating season.

4.6 Data Usability Summary

In accordance with the RI Work Plan, the laboratory analytical data from this investigation was assessed and, as required, submitted for independent review. Data Validation Services located in North Creek, New York performed the data usability summary assessment, which involved a review of the summary form information and sample raw data, and a limited review of associated QC raw data. Specifically, the following items were reviewed:

- Laboratory Narrative Discussion
- Custody Documentation
- Holding Times

- Surrogate and Internal Standard Recoveries
- Matrix Spike Recoveries/Duplicate Recoveries
- Field Duplicate Correlation
- Preparation/Calibration Blanks
- Control Spike/Laboratory Control Samples
- Instrumental IDLs
- Calibration/CRI/CRA Standards
- ICP Interference Check Standards
- ICP Serial Dilution Correlations
- Sample Results Verification

The Data Usability Summary Report (DUSR) was conducted using guidance from the USEPA Region 2 validation Standard Operating Procedures, the USEPA National Functional Guidelines for Data Review, as well as professional judgment.

In summary, results are usable either as reported or with minor qualification. Additional qualifications of the data have been incorporated to the summary data tables. Appendix E includes the DUSR.

4.7 Constituents of Concern (COCs)

Based on the findings of the RI and previous investigations, and the planned redevelopment of the Site, the Constituents of Potential Concern (COCs) to be are presented below:

Soil/Fill: VOCs (related to UST and AST), SVOCs, and Metals.

Groundwater: VOCs.

5.0 INTERIM REMEDIAL MEASURES

Interim Remedial Measures (IRMs) were completed on-Site in accordance with the Department's approved RI-IRM Work Plan (March 2017). Details of the completed IRMs are presented below. Figures 5 and 6 presents the approximate extents of the IRM excavation areas and locations of post-excavation confirmatory sample locations, and post-excavation confirmatory samples are summarized on Tables 7 and 8.

5.1 Exterior UST and Pump Island IRM Activities

5.1.1 UST Cleaning and Removal

Between July 17th and 18th, 2017, one (1) 5,000 gallon UST was uncovered, and licensed vacuum truck operator, North American Industrial Services (NAIS) was mobilized to the Site to vacuum out and clean the interior of the UST and lines. Cleaning residuals were transported off-site by NAIS (9A-324) and transported to American Recyclers located in Tonawanda New York for disposal. Disposal documents will be provided in the FER.

After cleaning of the UST and lines, RE Lorenz (9A-799) removed the UST and lines from the subsurface, cleaned the exterior of residual soils, and transported off-site for recycling as scrap at Niagara Metals, located in Lancaster New York.

After removal of the UST, supplemental test pitting was completed to delineate the associated petroleum impacts, collect a bottom sample (15-16 fbgs) and waste characterization samples for landfill review and approval.

A NYSDEC Petroleum Bulk Storage (PBS) Closure form was prepared to register the former tanks as closed-removed. A copy of the PBS closure form is included in Appendix F.

5.1.2 UST Petroleum- Impacted Soil/Fill Activities

Between October 24th and October 25th, 2017, approximately 264 tons of petroleum impacted soil was excavated and transported off-site by RE Lorenz (9A-799) for disposal at Waste Management's Chaffee Landfill, located in Chaffee New York. Disposal documents will be provided in the FER.

The excavation was completed to the East Balcom Street property boundary to the north, the building to the south, a retaining wall to the east, and active natural gas line to the west, with final excavation depth of 15-16 fbgs. PID readings of 0.0 ppm were recorded along excavation boundaries, with the exception of SW-6 (240 ppm) located against the building. Post excavation confirmatory samples were collected from the excavation sidewalls and floor for laboratory analysis.

Field inspection and PID readings (0.0 ppm) of the western excavation sidewall along the natural gas line indicated that petroleum impacts were removed. In consultation with the NYSDEC, it was decided to excavate a test pit (TP-17) on the west side of the natural gas line to equivalent depth (15-16 fbgs) to assess if petroleum impacts migrated beneath the gas line. No petroleum impacts were detected in TP-17, with concurrence in the field from NYSDEC.

A total of seven (7) post-excavation soil samples were collected, including six (6) side wall samples, and one (1) bottom sample from beneath the former tank. Post-excavation confirmatory soil samples results are all below Unrestricted Use SCOs (USCOs). Table 7 summarizes the UST post-excavation analytical results, and sample locations are shown on Figure 5.

5.1.3 Former Pump Island IRM Activities

In accordance with the approved RI-IRM Work Plan, and consultation with the Department during the UST IRM excavation, an additional test pit, TP-19, was excavated next to the building loading dock to assess potential petroleum impacts related to a suspect former pump island. Petroleum-impacted soil-fill was identified at approximately 7-10 fbgs, with elevated PID readings (165-200 ppm), black stained soil and odors discovered.

Approximately 90 tons of petroleum impacted soil-fill was excavated and transported off-site by RE Lorenz (9A-799) for disposal at WM's Chaffee Landfill. The excavation was completed to remove visually impacted soil fill, PID readings less than 5 ppm, with the exception of SW-4 (70 ppm) against the building, and approximately 12-15 deep. Figure 5 shows post-excavation confirmatory sample locations. Disposal documents will be provided in the FER.

Post-excavation confirmatory samples were collected, including four (4) sidewall samples and one (1) bottom sample. Post-excavation confirmatory results were all below USCOs (see Table 7).

5.1.4 Backfill

After the remedial excavations were deemed complete by the Department, backfilling of the excavations was completed to structural subgrades using NYSDEC pre-approved stone backfill from virgin-source quarry, in accordance with DER-10 requirements. Backfill documents will be provided in the FER.

5.2 Basement AST IRM Activities

Basement AST IRM activities were completed between October 17th and October 20th, 2017. The basement AST IRM activities included; structural assessment and shoring design, pre-cleaning of AST and lines, cutting and removal of concrete enclosure surrounding the AST, removal of AST, lines, and associated wastes, post-removal cleaning of AST prior to offsite disposal, disposal of tank cleaning residuals, and post-AST removal confirmatory sub-slab soil boring sample collection and analysis. Details of AST IRM are provided below.

5.2.1 First Floor Structural Assessment

As discussed with NYSDEC, due to safety concerns related to the bearing capacity of the 1st floor of the building and loading from heavy-equipment required to remove the petroleum AST from the basement, a structural engineer, Studio T3 Engineering, was contracted to provide a structural assessment of the first floor loading capacity, review of planned heavy equipment usage and removal process, and provided structural shoring layout and shoring post review and approvals.

Based on the structural engineer's review, 105 shore posts were temporarily installed between the basement floor and 1st floor slab along the pathway that heavy equipment would need to travel for removal of basement AST wastes, in accordance with the structural engineer's layout. Shoring posts remained in place during all Basement AST IRM activities.

5.2.2 Cleaning AST and Lines

Due to the presence of the concrete enclosure surrounding the basement AST, NAIS mobilized a vacuum truck to the site to blow back and clean the AST fill and distribution lines and remove interior contents to the extent practicable. NAIS transported the tank contents and cleaning residual off-site for disposal at American Recyclers, located in Tonawanda NY. Disposal documentation will be provided in the FER.

The AST was not able to be cleaned in a single step due to obstruction by the concrete enclosure. Pre-cleaning was necessary to clean the lines and remove contents to the extent practicable, allow for line removal prior to concrete closure cutting, and remove potential tank contents before concrete cutting and AST removal.

After the AST was removed from the basement, the AST was opened and cleaned by NAIS. NAIS transported the tank contents and cleaning residual off-site for disposal at American Recyclers, located in Tonawanda NY.

The cleaned AST and appurtenant lines were transported offsite by RE Lorenz for recycling as scrap at Niagara Metals, located in Lancaster New York. Disposal documentation will be provided in the FER.

5.2.3 AST Concrete Enclosure Removal

As detailed on Figure 6, the AST was surrounded by an existing concrete enclosure that required removal to gain access to the AST. Additionally, based on the orientation of the AST, a section of basement divider wall was removed to allow direct access to the tank. After pre-cleaning of the AST and lines, Concrete Cutters was mobilized to the Site and cut the concrete enclosure and basement wall into acceptable size pieces to be safely removed from the basement.

5.2.4 AST Removal

After the concrete enclosure was removed from the basement, RE Lorenz removed the AST from the basement through an existing open elevator shaft. The AST was lifted out of the basement using an excavator staged on the first floor, and skid loader. Wood construction planking was placed across the elevator shaft pit to allow for safely strapping and lifting the tank and concrete debris.

After the tank was removed from the basement, RE Lorenz moved the tank through the first floor of the building and exited the building at the East Balcom loading dock. The tank was cleaned by NAIS, as described above, and transported offsite for recycling as scrap at Niagara Metals, located in Lancaster New York.

5.2.5 Post AST-Removal Confirmatory Sub-slab Soil Sampling

After the removal of the basement AST, five (5) subslab soil borings were advanced beneath and surrounding the former AST location to assess soil/fill beneath the concrete slab. Elevated PID readings and odors were noted from beneath the building slab. Two (2) subslab boring locations were advanced to 8 ft beneath concrete slab surface (BSB-1 and BSB-2) and retrieved soils were collected and submitted for analysis, per the approved Work Plan. Three (3) of the attempted subslab soil borings encountered refusal at 1-2 feet beneath the concrete floor slab (BSB-3, BSB-4, and BSB-5). Boring retrieval from refusal locations was limited to subbase gravel, and therefore not sampled. Boring core holes were filled with concrete after completion. Locations of the post-removal samples are shown on Figure 6.

Post-removal subslab confirmatory soil sample results were all below RRSCOs (see Table 8). Laboratory analytical data packages are provided electronically in Appendix D.

Documentation of the completed IRMs described above will be provided in the Final Engineering Report.

6.0 FATE AND TRANSPORT OF COCS

The surface and subsurface soil/fill and groundwater analytical sample results were incorporated with the physical characterization of the Site to evaluate the fate and transport of COCs in Site media. The mechanisms by which the COCs can migrate to other areas or media are briefly outlined below. In all instances, the potential pathways are evaluated in the context of post-IRM conditions.

6.1 Fugitive Dust Generation

Volatile and non-volatile chemicals present in soil can be released to ambient air as a result of fugitive dust generation. Historic use of the Site has impacted surface and subsurface soil-fill, and as such fugitive dust generation during excavations related to remediation and redevelopment activities is considered a relevant potential short-term migration pathway.

Particulate monitoring in accordance with the approved Community Air Monitoring Plan (CAMP) will be completed during intrusive activities and, if required, dust mitigation measures will be employed during future remediation and redevelopment.

6.2 Volatilization

Volatile chemicals present in soil/fill and groundwater may be released to ambient or indoor air. Volatile chemicals typically have a low organic-carbon partition coefficient (K_{oc}), low molecular weight, and a high Henry's Law constant.

No VOCs were detected in on-Site soils exceeding RRSCOs, with the vast majority being below USCOs. After completion of the IRMs, volatilization is not considered a migration pathway for on-Site soils.

Elevated VOCs were detected in on-Site groundwater in the vicinity of MW-4. Though a soil vapor intrusion study completed in the existing building did not identify a vapor intrusion concern, volatilization from low-level cVOC impacted groundwater is considered a relevant migration pathway to be considered in remedy selection.

6.3 Surface Water Runoff

The potential for soil particle transport due to surface water runoff is low, though is considered a short-term migration pathway for the Site. Elevated PAHs and metals exceeding RRSCOs were detected in surface soil-fill on-Site.

Pre-remedial conditions at the site include the existing building, asphalt and soil-vegetation covered areas.

As such, surface water runoff is considered a potential migration pathway.

6.4 Leaching

Leaching refers to chemicals present in soil/fill migrating downward to groundwater as a result of infiltration of precipitation. The site is partially covered by grass and scrub vegetation allowing for potential infiltration into the subsurface.

Based on the findings of the RI, certain PAHs and metals were detected above RRSCOs in the non-saturated soil/fill interval. However, the detected PAHs and metals tend to adsorb strongly to soil, sediments and particulate matter and are not expected to leach under natural conditions (i.e., neutral pH). This is supported by the differential detections of analytes in the soil and groundwater analytical results.

Though no VOCs were detected in subsurface soil/fill samples above RRSCOs, the former UST and associated petroleum impacted soil/fill were identified, and as such, leaching is considered a potential migration pathway.

6.5 Groundwater Transport

Overburden groundwater at the Site flows in a northern direction. Residual groundwater impacts exceeding GWQS are present on-Site. RI groundwater analytical results indicated exceedance of benzene and certain cVOCs above GWQS. Based on the UST IRM source removal and post-excavation confirmatory soil sample results, benzene concentrations are expected to decline in groundwater, and therefore is not considered a migration pathway.

Groundwater transport of cVOCs is considered a potential migration pathway. Wells upgradient of the building, MW-1 and MW-2, had no exceedances of GWQS; and, no cVOCs were detected in the subslab air samples from beneath the basement slab.

Furthermore, no cVOCs above USCOs were detected in on-Site soil-fill from the RI and IRM soil samples. In total, including previous investigations, over 40 soil samples have been collected on-Site, and no cVOCs were detected above USCOs. Based on the findings of the RI, specifically MW-4, the potential for off-site migration exists, and groundwater transport is considered a potential migration pathway.

6.6 Exposure Pathways

Based on the fate and transport analysis provided above, the pathways through which Site contaminants could potentially reach receptors at significant exposure point concentrations are: fugitive dust, volatilization of cVOCs in groundwater, surface water run-off, leaching, and groundwater transport of cVOCs.

The potential significance of contaminants in terms of on-site and off-site receptors is further evaluated in Section 7.0.

7.0 QUALITATIVE EXPOSURE ASSESSMENT

7.1 Potential Human Health Exposure

The Main and East Balcom Street Site is planned for redevelopment for a mixed-use commercial and residential use project. The objective will be to meet Restricted-Residential Use SCOs. The planned reuse is consistent with the surrounding property use and zoning. Under current site conditions, including remedial and redevelopment activities that do not allow for the Site to be fenced, human contact with the Site can be reasonably expected to occur primarily by two types of receptors: construction workers involved in the remediation and/or redevelopment of the Site, and trespassers who may traverse the property during intrusive activities. Construction workers will be comprised of adults, and trespassers would likely be limited to adolescents and adults. Exposures are unlikely to occur, and future intrusive activities beneath the cover system will be completed in accordance with an approved Site Management Plan (SMP).

Elevated PAHs and metals were detected above RRSCOs and CSCOs in on-Site soil/fill; therefore, under the current use scenario exposure pathways would be limited to inhalation of dust and dermal contact with impacted soil/fill. An approved Health and Safety Plan (HASP) and Community Air Monitoring Plan (CAMP) will be followed during intrusive remedial and redevelopment activities to reduce and/or minimize the potential for exposure.

For groundwater, the requirements to use municipally supplied potable water at the Site mitigates the potential for routine direct human contact or ingestion (i.e., as might occur with use of on-Site groundwater water for potable or process purposes). Human contact with groundwater can be expected to be limited to only one receptor type: construction workers during deep intrusive activities. If groundwater is encountered during deep excavation activities, excavation waters will be managed in accordance with SCGs, approved work plan, and discharged to municipal sewer system under an approved temporary discharge permit.

Under the current use and planned redevelopment scenario, the majority of the Site will be covered by hardscape (e.g., building, asphalt, concrete) with limited passive recreation areas on-Site. The planned restricted-residential use of the site will necessitate either

achieving RRSCOs to depths of 15 feet below grade across the Site, or extending the redevelopment cover to assure that all areas of the property are covered by hard cover (asphalt, pavement, etc.) and/or 24-inches of clean soil material in accordance with DER-10. In either case exposures to routine end users would be mitigated, with the only remaining migration pathway being potential short term exposures due to dust inhalation and dermal contact by construction workers during deeper excavation (i.e., utility work) beneath the cover system.

7.2 Potential Ecological Exposure

The Site has a long history of commercial operations and is located within a highly developed area of the City of Buffalo. The Site is predominantly covered with the existing building, asphalt, concrete and soil-vegetated area, which provide little or no wildlife habitat or food value, and/or access to the subsurface contamination. Remedial activities will be conducted in accordance with an approved Remedial Action Work Plan including CAMP and completion of Part 375 compliant cover system on the Site. Dust and erosion controls will be implemented, as necessary, during intrusive activities to mitigate potential short-term risks.

As such, no unacceptable ecological risks are anticipated under the reasonably anticipated future use scenario.

7.3 Potential Off-Site Exposure

The Site is located in a highly developed areas of the City of Buffalo. Soil/fill within the vicinity of the Site is expected to be of similar intermingled fill material, present beneath existing roadways, buildings and associated parking lots, similar to what is found on-Site. The Site is bound by municipal streets on two (2) sides, and any exposure would be assumed to be limited to construction work (e.g. utility work), with a large asphalt parking lot present along the southern boundary (bus garage facility). Off-site migration from on-Site soil contaminants is not considered a potential off-site exposure pathway.

Low-level cVOCs were detected in the groundwater, however; exposure to off-site groundwater would be limited to deep excavations (greater than 15 feet) which is highly unlikely. It should be noted that degraded cVOCs were detected in the upgradient well

(MW-5) located in the eastern portion of the Site, potentially indicating an off-site source of the groundwater contamination.

No off-site ecological exposure is considered relevant based on the surrounding urban surface cover, and no access to underlying groundwater surrounding the Site.

8.0 REMEDIAL ALTERNATIVES ANALYSIS

This section provides an analysis of the selected remedial approach by media using the Remedy Selection Evaluation Criteria identified in Section 4.2 of Guidance Document DER-10: Technical Guidance for Site Investigation and Remediation. In accordance with DER-10 Section 4.4(d)2, in addition to a "no action" baseline alternative, the following three alternatives are developed and assessed for each BCP Site based on NYSDEC-defined cleanup tracks as follows:

Track 1, 6 New York Codes, Rules and Regulations (6NYCRR) Part 375-3.8(e)(1) requires site media to meet Part 375 SCOs that will allow the site to be used for any purpose without restrictions on the use of the site (i.e., unrestricted use). The soil cleanup must achieve the unrestricted use criteria at any depth above bedrock. Details and evaluation of the Track 1 alternative are described below.

Track 2, 6NYCRR Part 375-3.8(e)(2) requires site media to meet Part 375 restricted use SCOs that are consistent with the end use. For the Site, the Track 2 cleanup must achieve the Residential Use SCOs to a depth of 15 fbgs. For Track 2 remedies, restrictions can be placed on the use of the property in the form of institutional and engineering controls, and future use and development will be completed in accordance with the environmental easement and site management plan. Details and evaluation of the of the Track 2 cleanup are described below.

Track 4, 6NYCRR Part 375-3.8(e)(4) soil cleanups use site-specific information to identify site-specific SCOs that are protective of public health and the environment under a restricted use scenario. For Track 4 remedies, restrictions can be placed on the use of the property in the form of institutional and engineering controls if they can be realistically implemented and maintained in a reliable and enforceable manner. As set forth in 6 NYCRR Part 375-3.8(e)(4)(iii)(b)(1), the top two (2) feet of all exposed surface soils, not otherwise covered by the components of the development of the site (e.g., buildings, pavement), shall not exceed the restricted use (Restricted Residential Use) SCOs. Areas that exceed these SCOs must be covered by material meeting the requirements of the generic soil cleanup table contained in Part 375-6.7(d) and/or DER-10, Appendix 5 for imported material, for the applicable future site use (i.e., Restricted Residential).

Based on the findings of the RI and IRMs, low-level cVOC impacted groundwater does exist in the vicinity of MW-4, with total cVOCs concentration significantly less than 1 ppm (see Table 4). Wells located upgradient of the existing building, MW-1 and MW-2, had no exceedances of VOC GWQS. Additionally, no cVOCs were detected in subslab air samples from beneath the existing building, and no elevated cVOCs were detected in on-Site soils, including post-excavation samples from the UST IRM, adjacent to MW-4. As such, no on-Site source of the cVOC groundwater contamination has been found.

Supplemental assessment of low-level cVOC groundwater impacts in the vicinity of MW-4 will be completed as part of the remedial work, including additional groundwater sampling and well installation. If the results of the supplemental groundwater assessment indicate remediation is required, details for in-Situ groundwater treatment in the vicinity of MW-4 will be provided to the Department for review and approval. Details of the supplemental assessment will be provided in the Remedial Action Work plan.

8.1 Remedial Action Objectives

The development of an appropriate remedial approach begins with definition of site-specific Remedial Action Objectives (RAOs) to address substantial public health and significant environmental issues identified during remedial investigations. In developing the RAOs, consideration is given to the reasonably anticipated future use of the Property (i.e., commercial) and the applicable SCGs.

Per DER-10, generic RAOs appropriate for the Site include:

8.1.1 Soil/Fill RAOs

- Prevent ingestion of and/or direct contact with contaminated soil/fill.
- Prevent migration of contaminants that would result in groundwater and/or surface water contamination.

8.1.2 Groundwater RAOs

- Prevent ingestion of groundwater with contaminant levels exceeding drinking water standards.

- Prevent ingestion of and/or direct contact with groundwater containing contaminant levels exceeding SCGs.

8.1.3 Soil Vapor RAOs

- Mitigate impacts to public health resulting from existing, or the potential for, soil vapor intrusion into buildings at a site.

8.2 Evaluation of Alternatives

In addition to achieving the RAOs, NYSDEC's Brownfield Cleanup Program calls for remedy evaluation in accordance with Part 375-1.8(f) and DER-10 Technical Guidance for Site Investigation and Remediation. Specifically, the guidance states "When proposing an appropriate remedy, the person responsible for conducting the investigation and/or remediation should identify and develop a remedial action that is based on the following criteria..:"

- **Overall Protection of Public Health and the Environment** – This criterion is an evaluation of the remedy's ability to protect public health and the environment, assessing how risks posed through each existing or potential pathway of exposure are eliminated, reduced, or controlled through removal, treatment, engineering controls, or institutional controls.
- **Compliance with Standards, Criteria, and Guidance (SCGs)** – Compliance with SCGs addresses whether a remedy will meet applicable environmental laws, regulations, standards, and guidance.
- **Long-Term Effectiveness and Permanence** – This criterion evaluates the long-term effectiveness of the remedy after implementation. If wastes or treated residuals remain on-site after the selected remedy has been implemented, the following items are evaluated: (i) the magnitude of the remaining risks (i.e., will there be any significant threats, exposure pathways, or risks to the community and environment from the remaining wastes or treated residuals), (ii) the adequacy of the engineering and institutional controls intended to limit the risk, (iii) the reliability of these controls, and (iv) the ability of the remedy to continue to meet RAOs in the future.
- **Reduction of Toxicity, Mobility or Volume with Treatment** – This criterion evaluates the remedy's ability to reduce the toxicity, mobility, or volume of Site

contamination. Preference is given to remedies that permanently and significantly reduce the toxicity, mobility, or volume of the wastes at the Site.

- **Short-Term Effectiveness** – Short-term effectiveness is an evaluation of the potential short-term adverse impacts and risks of the remedy upon the community, the workers, and the environment during construction and/or implementation. This includes a discussion of how the identified adverse impacts and health risks to the community or workers at the Site will be controlled, and the effectiveness of the controls. This criterion also includes a discussion of engineering controls that will be used to mitigate short term impacts (i.e., dust control measures), and an estimate of the length of time needed to achieve the remedial objectives.
- **Implementation** – The implementation criterion evaluates the technical and administrative feasibility of implementing the remedy. Technical feasibility includes the difficulties associated with the construction and the ability to monitor the effectiveness of the remedy. For administrative feasibility, the availability of the necessary personnel and material is evaluated along with potential difficulties in obtaining specific operating approvals, access for construction, etc.
- **Cost** – Capital, operation, maintenance, and monitoring costs are estimated for the remedy and presented on a present worth basis, where applicable.
- **Community Acceptance** – This criterion evaluates the public's comments, concerns, and overall perception of the remedy.
- **Land Use –** This criterion includes the Department's determination of reasonable certainty of the use; and the evaluation of the reasonably anticipated future use of the site.

8.3 Anticipated Future Land Use Evaluation

In developing and screening remedial alternatives, NYSDEC's Part 375 regulations require that the reasonableness of the anticipated future land be factored into the evaluation. The regulations identify 16 criteria that must be considered. These criteria and the resultant outcome for the Main & East Balcom Site are presented below.

1. *Current use and historical and/or recent development patterns:* The Site was historically used for various commercial operations, including an automobile service and filling station, storage and warehousing, and trucking. The Site is located in a historically residential-commercial area of the City of Buffalo. According to the Buffalo Green Code, the Site is classified as Urban Center (N-2). Urban Center areas are described

as mixed-use neighborhood centers composed primarily of commercial block structures. The Site is identified as N-2C – Mixed-Use Center and N-2E – Mixed-Use Edge. The planned redevelopment includes the construction of a mixed-use residential/commercial space improved with residential units and commercial retail use on the ground floor. **Accordingly, planned redevelopment would be consistent with historic and recent development patterns.**

2. *Applicable zoning laws and maps:* The Site is located in an area of the City of Buffalo zoned for mixed use commercial residential area. **Residential/ commercial use is consistent with current zoning (Buffalo Green Code).**

3. *Brownfield opportunity areas as designated set forth in GML 970-r:* The Brownfield Opportunity Area (BOA) Program provides municipalities and community based organizations with assistance to complete revitalization plans and implementation strategies for areas or communities affected by the presence of brownfield sites, and site assessments for strategic sites. **The subject property does not lie within a BOA.**

4. *Applicable comprehensive community master plans, local waterfront revitalization plans as provided for in EL article 42, or any other applicable land use plan formally adopted by a municipality*: The Main & East Balcom Site falls within the N-2C Zone indicating a mixed use center neighborhood in the 2014 Buffalo Green Code **Redevelopment is consistent with the Buffalo Green Code and will not require rezoning or change in use.**

5. *Proximity to real property currently used for residential use, and to urban, commercial, industrial, agricultural and recreational areas*: Residential properties are located adjacent to site, including east along East Balcom Street, with commercial use to the north, south and west. **Nearby and adjacent properties are mixed use, including residential and commercial. The proposed redevelopment does not change the previous land use for the Site and is consistent with local zoning and development plans.**

6. *Any written and oral comments submitted by members of the public on the proposed use as part of the activities performed pursuant to the citizen participation plan*: **No comments have been received from the public to date.**

7. *Environmental justice concerns, which include the extent to which the proposed use may reasonably be expected to cause or increase a disproportionate burden on the community in which the site is located, including low-income minority communities, or to result in a disproportionate concentration of commercial or industrial uses in what has historically been a mixed use or residential community*: **Nearby and adjacent property is currently a mixed-use commercial and**

residential capacity. Redeveloping the Site in a commercial-residential capacity does not pose environmental justice issues.

8. *Federal or State land use designations:* The property is designated by Erie County as Mixed land use. **Redevelopment is consistent with the current land use designation.**

9. *Population growth patterns and projections:* The City of Buffalo, encompassing approximately 40.38 square miles, has a population of 256,902 (2016 estimate - US Census Bureau), a decrease of 1.7 percent from the 2010 census. **Redevelopment is consistent with the past use and would not have impact on residential capacity.**

10. *Accessibility to existing infrastructure:* Access to the Site is from Main Street and East Balcom Street. Utilities (sewer, water, electric) are present around the Site along Main Street and East Balcom Street. **Existing infrastructure supports planned reuse**.

11. *Proximity of the site to important cultural resources, including federal or State historic or heritage sites or Native American religious sites*. **No such resources or sites are known to be present on or adjacent to the Site.**

12. *Natural resources, including proximity of the site to important federal, State or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species:* No State or Federal wetlands exist on the Site. Scajaquada Creek is located approximately 0.4 miles north of the Site. The nearest NYS regulated wetland (BU-3) is located approximately 3.3-miles to the south. **The absence of significant ecological resources on or adjacent to the Site indicates that cleanup to restricted-residential use conditions will not pose an ecological threat.**

13. *Potential vulnerability of groundwater to contamination that might emanate from the site, including proximity to wellhead protection and groundwater recharge areas and other areas identified by the Department and the State's comprehensive groundwater remediation and protection program established set forth in ECL article 15 title 31:* There are no groundwater supply well(s) present on the Site or noted in the vicinity of the Site. Regionally, groundwater has not been extracted for industrial, commercial agriculture, or public supply purposes. Potable water service is provided by the local municipal water authority. No bulk chemical or petroleum storage is proposed under the current redevelopment plan that might threaten groundwater quality from releases. **The absence of groundwater use and wellhead protection, and the planned restricted residential reuse will not pose a threat to groundwater.**

14. *Proximity to flood plains:* The Erie County Internet Mapping System indicates that the Scajaquada Creek is located approximately 0.4-miles north of the Site, which is a designated flood zone. No flood zones are present on the property, and therefore there is a low risk of erosion due to flooding. **As such, the planned remediation and redevelopment of the Site, which includes cleanup to restricted residential use standards, does not pose a threat to surface water.**

15. *Geography and geology:* The Site is located within the Lake Erie-Niagara River major drainage basin, which is typified by little topographic relief, except in the immediate vicinity of major drainage ways. Surface soils within the vicinity of the Site are described as Urban Land (Ud) by the USDA Erie County Soil Map, and further described as Urban Land (Ud) by the Erie County GIS. The presence of overburden fill material is widespread and common throughout the City of Buffalo. Previous development patterns covered the Site in asphalt, concrete and building foundations. **The redevelopment plan is consistent with the geography and geology of the Site.**

16. *Current institutional controls applicable to the site:* **No institutional controls are currently present that would affect redevelopment options.**

Based on the above analysis, planned reuse of the Site is consistent with past, current and contemplated development and zoning on and around the Site, and does not pose additional environmental or human health risk.

8.4 Evaluation of Remedial Alternatives

In addition to the evaluation of the alternatives to remediate the Site to the likely end use, NYSDEC regulations and policy calls for evaluation of more restrictive end-use scenarios. These include an Unrestricted Use scenario (considered under 6NYCRR Part 375 to be representative of cleanup to pre-disposal conditions), and a scenario less restrictive than the reasonably anticipated future use. Per NYSDEC DER-10 Technical Guidance for Site Investigation and Remediation, evaluation of a "no action" alternative is also required to provide a baseline for comparison against other alternatives. The alternatives evaluated below in greater detail include:

- Alternative 1 - No Further Action (Completed IRMs);

- Alternative 2 – Track 1 Unrestricted Use Cleanup;
- Alternative 3 - Track 2 Residential Use Cleanup; and,
- Alternative 4 - Track 4 Restricted Residential Use Cleanup

8.4.1 Alternative 1 - No Further Action (Completed IRMs)

Under this alternative, the Site would remain in its current state, with no additional controls in-place, beyond the completed IRMs. The completed IRMs on the Main & East Balcom Street Site achieved RAOs, however, remaining on-Site soil/ fill above RRSCOs is still present on-Site.

Overall Protection of Public Health and the Environment – The Main and East Balcom Site is not protective of human health and the environment, based on the presence of the soil/fill exceeding CSCOs at surface, and the absence of institutional controls to prevent more restrictive forms of future Site use (e.g., unrestricted use). Uncontrolled access to the Site could lead to potential exposure to impacted soil/fill during intrusive work performed at the Site and workers who are unaware or untrained regarding the contamination.

Accordingly, no further action is not protective of public health and does not satisfy the RAOs.

Compliance with SCGs – The no further action alternative would not make the Site compliant with SCGs. Based on the results of the RI and IRMs, on-Site constituents detected in the soil/fill and groundwater exceeds the applicable SCOs and GWQS.

Long-Term Effectiveness and Permanence – Based on the findings of the RI and IRMs, the no further action alternative does not provide long-term effectiveness or permanence, and does not achieve the RAOs.

Reduction of Toxicity, Mobility, or Volume with Treatment – The no further action alternative does not reduce the toxicity, mobility, or volume of contamination beyond

natural degradation/attenuation, and therefore this alternative is not protective of public health and does not satisfy the RAOs.

Short-Term Effectiveness – There would be short-term adverse impacts and risks to the community, workers, or the environment attributable to implementation of the no further action alternative, if the cover system and/or restrictions were not placed on the Site.

Implementation – No technical or administrative implementation issues are associated with this alternative.

Cost – The capital cost of the IRMs completed was approximately $100,000 (see Table 9). There would be no capital or long-term operation, maintenance, or monitoring costs associated with the no further action alternative.

Community Acceptance – Community acceptance will be evaluated based on comments to be received from the public in response to Fact Sheets and other planned Citizen Participation activities. Recent development patterns in the vicinity of the Site, would likely make the No Further Action alternative not acceptable to the community.

8.4.2 Alternative 2 – Track 1 Unrestricted Use Cleanup

An Unrestricted Use alternative would necessitate remediation of all soil/fill where concentrations exceed the 6NYCRR Part 375 Unrestricted Use SCOs (see Tables 2 and 3). For Unrestricted Use scenario, excavation and off-site disposal of impacted soil/fill is generally regarded as the most applicable remedial measure, because institutional controls cannot be used to supplement the remedy. As such, the Unrestricted Use alternative assumes that those areas which exceed Unrestricted Use SCOs would be excavated and disposed at an off-Site commercial solid waste landfill.

Exceedances of the USCOs were detected to a sample depth of 9 fbgs, though exceedances are related to the presence of fill material that ranged in depth from 2 to 12 fbgs. As such, the Unrestricted Use cleanup alternative average depth of 8 ft was used in

this evaluation. Additionally, soil exceeding USCOs is located beneath the existing building that would be required to be removed under this alternative.

In total, approximately 11,650 CY of soil/fill would require excavation and off-site disposal; and equivalent backfill.

Overall Protection of Public Health and the Environment – Excavation and off-site disposal to achieve Unrestricted Use SCOs would be protective of public health under any reuse scenario. However, this alternative would permanently use and displace valuable landfill airspace, causing ancillary environmental issues due to reduced landfill capacity, and would require excavating, transporting, and placing a similar volume of clean soil from an off-site borrow source to backfill the excavation, also contributing to significant detrimental off-site environmental issues.

Compliance with SCGs – The Unrestricted Use alternative would be performed in accordance with applicable, relevant, and appropriate standards, guidance, and criteria. Excavation of soil to achieve Unrestricted Use SCOs would satisfy this criterion.

Long-Term Effectiveness and Permanence – The Unrestricted Use alternative would achieve removal of all residual impacted soil/fill; therefore, the Unrestricted Use alternative would provide long-term effectiveness and permanence. Post-remedial monitoring and certifications would not be required.

Reduction of Toxicity, Mobility, or Volume with Treatment – Through removal of all impacted soil/fill, the Unrestricted Use alternative would permanently and significantly reduce the toxicity, mobility, and volume of on-Site contamination.

Short-Term Effectiveness – The principal advantage of a large-scale excavation to achieve Unrestricted Use SCOs is reliability of effectiveness in the long-term. The short-term adverse impacts and risks to the community, workers, and environment during implementation of this alternative are significant.

There are several potential short-term impacts associated with this alternative.

- There is potential for impacts to human health (workers and construction personnel) due to direct contact with impacted soil and particulate releases. This alternative would require implementation of a health and safety plan (HASP) and community air monitoring, as outlined in the NYSDOH Generic Community Air Monitoring Plan (CAMP), in order to mitigate potential adverse conditions/short-term impacts. Additional health and safety measures would need to be employed during excavation activities within the building and under the building slab. Moreover, significant physical hazards may be encountered due to structural limitations associated with deep excavation and the proximity of adjacent buildings, utilities and roadways.
- Human health and the environment associated with chemical exposures would be protected under this alternative if the HASP and CAMP are properly implemented. This alternative is expected to meet RAOs at completion of the excavations, because the impacted soil will be removed from the Site. Confirmatory soil sampling would be performed.

This alternative would significantly increase the duration of time community, workers, and the environment is exposed to on-Site contamination and potential for off-site exposures during remediation.

Implementation **–** Significant technical and administrative implementation issues would be encountered in completion of the Unrestricted Use alternative. Technical implementation issues include, but are not limited to: shoring/stabilizing excavation sidewalls to prevent sloughing during the excavation; groundwater and/or storm water handling, treatment and/or discharge/disposal; and traffic coordination for trucks entering and exiting the Site, staging of trucks, and multiple landfill and backfill sources required for the project. As such the feasibility of achieving an Unrestricted Use cleanup is questionable.

Administrative implementation issues may include: the need to coordinate and secure disposal contracts with numerous permitted off-site landfills as a single location would not be able to be relied upon to accept the volume of soil/fill generated under this alternative; difficulty locating local borrow sources for such a large volume of backfill; and the need for rezoning of the area to allow for Unrestricted Uses (e.g., farming, livestock, single-family

residential), which are not consistent with current surrounding land-use or the reasonably anticipated future use the Site.

Cost – The capital cost of implementing an Unrestricted Use cleanup alternative is estimated at $2.6 MM (see Table 9). Annual certification costs would not be incurred.

Community Acceptance – Community acceptance will be evaluated based on comments to be received from the public in response to Fact Sheets and other planned Citizen Participation activities.

8.4.3 Alternative 3 – Track 2 Residential Use Cleanup

Under this alternative, the Site would be required to achieve 6NYCRR Part 375 Residential Use SCOs without the use of a cover system to limit potential exposure to subsurface contaminant; therefore, the Track 2 alternative in general would include: excavation and off-Site disposal of soil/fill exceeding RSCOs.

Based on the historic and RI investigation findings, soil/fill exceeding RSCOs is present on-Site, ranging in depth from 0-12 fbgs, with the average depth of 8 fbgs.

Though soils exceeding RSCOs are present beneath the building, this alternative does include removal of those soils. Fill material would be removed from accessible areas of the Site to 15 fbgs, with an average depth of 8 fbgs used in this evaluation.

Approximately 7,500 CY would be removed from the Site for this alternative. For Track 2 remedies, restrictions can be placed on the use of the property in the form of institutional and engineering controls, and future use and development will be completed in accordance with the environmental easement and site management plan.

Overall Protection of Public Health and the Environment – This alternative would satisfy the NYSDEC requirements for a Track 2 cleanup under the BCP regulations and would be protective of public health and the environment. The RAOs for the Site would be satisfied through the planned extent of remedial activities, including: removal and off-site disposal of targeted soil/fill exceeding RSOCs; and, the use of IC/ECs to limit the future use to restricted residential purposes.

Compliance with SCGs – The planned remedial activities would need to be performed in accordance with applicable, relevant, and appropriate SCGs. Imported backfill material would need to meet backfill quality criteria per DER-10. Subgrade intrusive activities would necessitate preparation of and adherence to a community air monitoring plan in accordance with Appendices 1A and 1B of DER-10. The planned remedial actions are fully protective of public health and the environment, and achieve all RAOs for the Site.

Long-Term Effectiveness and Permanence – Completion of this remedial alternative would provide for long-term effectiveness and permanence. The SMP will include: a Site-wide inspection program to assure that the IC/ECs placed on-Site have not been altered and remain effective. Furthermore, an Environmental Easement will be filed with Erie County, which will limit the future use of the Site to restricted residential or commercial activity, restrict groundwater use, and reference the Department-approved SMP. As such, this alternative will provide long-term effectiveness and permanence.

Reduction of Toxicity, Mobility, or Volume with Treatment – Through removal of soil/fill exceeding RRSCOs this criteria would be achieved. The Site Management Plan will include a Site-wide Inspection and Certification program to assure that the Institutional Controls placed on the Site have not been altered and remain effective. Accordingly, this alternative satisfies this criterion.

Short-Term Effectiveness –The principal advantage of a large-scale excavation to achieve Track 2 Residential Use SCOs is reliability of effectiveness in the long-term. However, similar to achieving an Unrestricted Use cleanup, the short-term adverse impacts and risks to the community, workers, and environment during implementation of this alternative are significant.

There are several potential short-term impacts associated with this alternative.

- There is potential for impacts to human health (workers and construction personnel) due to direct contact with impacted soil and particulate releases. This alternative would require implementation of a health and safety plan (HASP) and community air monitoring, as outlined in the NYSDOH Generic Community Air Monitoring Plan (CAMP), in order to mitigate potential adverse

conditions/short-term impacts. Significant physical hazards may be encountered due to structural limitations associated with deep excavation and the proximity of adjacent buildings, utilities and roadways.

- Human health and the environment associated with chemical exposures would be protected under this alternative if the HASP and CAMP are properly implemented. This alternative is expected to meet RAOs at completion of the excavations, because the impacted soil will be removed from the Site. Confirmatory soil sampling would be performed.

This alternative would significantly increase the duration of time community, workers, and the environment is exposed to on-Site contamination and potential for off-site exposures during remediation.

Implementation **–** Technical implementation would be a barrier to construction of this alternative. The Site is planned for mixed use residential and commercial redevelopment with buildings and surface parking areas, with limited greenspace. As a Track 2 cleanup does not allow for the use of a cover system, excavation and off-site disposal of the over 12,000 tons of contaminated soil/fill would be required.

Given the location of the Site, and the required number of dump trucks for disposal and backfill the staging and access to the Site would likely impact neighboring residential streets/communities. The additional cleanup required to achieve Track 2 is consider a significant implementation issue. Therefore, implementation of the Track 2 alternative is not considered reasonable given the current and anticipated future use of the Site.

Cost **–** The capital cost of implementing a Track 2 Residential Use alternative is estimated at $1.75 MM (see Table 10).

Community Acceptance – Community acceptance will be evaluated based on comments to be received from the public in response to Fact Sheets and other planned Citizen Participation activities.

8.4.4 Alternative 4 – Track 4 Restricted Residential Use Cleanup

Under this alternative, the Site would be cleaned up to achieve a Track 4 Restricted Residential Use Cleanup. For Track 4 remedies, restrictions can be placed on the use of the property in the form of IC/ECs if they can be realistically implemented and maintained in a reliable and enforceable manner. For restricted-residential use, the top two feet of all exposed soils that are not otherwise covered by the components of the development of the site (e.g. buildings, pavement) cannot exceed the restricted-residential SCOs. Areas that exceed the RRSCOs must be covered by material meeting the requirements of the generic soil cleanup table contained in 6NYCRR Part 375-6.7(d) for restricted-residential future Site use.

Figure 7 identifies the planned remedial measures necessary to achieve a Track 4 RRSCO cleanup. Table 11 provides a cost estimate to complete this alternative.

This alternative's remedial measures would include:

- **Confirmatory building SVI;**
- **MW-4 cVOC groundwater assessment and in-Situ remediation (if necessary).**
- **Excavation and offsite disposal of soil/fill exceeding RRSCOs** for metals in the vicinity of TP-3 to approximately 9 fbgs;
- **Remediation of nuisance petroleum** impacted soil-fill in the vicinity of TP-14;
- **Excavation and off-site disposal of fill materials** not suitable for on-Site reuse generated during DER-10 cover construction;
- **Collection of post-excavation confirmatory samples**;
- **Placement of Cover System** including demarcation layer underlying DER-10 acceptable backfill in areas without hardscape (building, asphalt and concrete) to address remaining contamination above RRSCOs.
- **Implementation of a Site Management Plan (SMP)**. The SMP will include:
    - **Institutional Controls and Engineering Controls (IC/EC)** Engineering controls include any physical barrier or method employed to actively or passively contain, stabilize, or monitor contaminants; restrict the movement of contaminants; or eliminate potential exposure pathways to contaminants. Institutional controls at the site will include groundwater use restrictions and use restrictions of the Site to restricted residential use.

- **Excavation Work Plan** to assure that future intrusive activities and soil/fill handling at the Site are completed in a safe and environmentally responsible manner;
- **Site Monitoring Plan** that includes: provisions for a Site-wide inspection program to assure that the IC/ECs have not been altered and remain effective; and,
- **Environmental Easement** filed with Erie County.

During redevelopment, additional soil management to address excess fill from excavation activities, including DER-10 soil cover system, hardscape cover elements including asphalt and concrete areas and utilities, will require soil management in accordance with an approved SFMP. Accumulated redevelopment spoils will be characterized in accordance with DER-10, and reuse and/or disposal will be discussed with the Department. Details of the planned hardscape and soil cover areas will be provided in the Remedial Action Work Plan.

Overall Protection of Public Health and the Environment – This alternative meets NYSDEC requirements for a Track 4 cleanup under the BCP regulations and is protective of public health and the environment. The RAOs for the Site would be satisfied through the planned extent of remedial activities, including: removal and off-site disposal of soil/fill exceeding CSCOs, placement of DER-10 compliant cover system, and the use of IC/ECs to prevent potential future exposure, and limit the future use to restricted residential purposes.

Compliance with SCGs – The planned remedial activities would need to be performed in accordance with applicable, relevant, and appropriate SCGs. Post-excavation samples would be collected to verify conformance with SCOs, and imported cover material would need to meet backfill criteria per DER-10.

Cover placement would be performed under the BCP and DER-10 and require an equivalent SFMP. Subgrade intrusive activities would necessitate adherence with the CAMP, in accordance with Appendices 1A and 1B of DER-10. The Site Management Plan will include: an Excavation Work Plan to address any impacted soil/fill encountered during post-development maintenance activities; and, a Site-wide Inspection program to assure that the

engineering and institutional controls placed on the Site have not been altered and remain effective.

The planned remedial activities for this alternative are fully protective of public health and the environment, and achieve RAOs for the Site.

Long-Term Effectiveness and Permanence **–** Completion of the IRMs and planned remedial excavations, and construction of a soil cover system would prevent direct contact with soil/fill exceeding RRSCOs will provide long-term effectiveness and permanence.

The SMP will include appropriate plans, controls, and measures and an environmental easement to ensure the restricted use remedy is protective of human health and the environment. The SMP will be followed by the current Site owner as well as future Site owners. As such, this alternative will provide long-term effectiveness and permanence.

Reduction of Toxicity, Mobility, or Volume with Treatment **–** Through the planned remedial measures described above, this criteria will be achieved. The Site Management Plan will include an Excavation Work Plan to address any residual material encountered during post-development maintenance activities and a Site-wide Inspection and Certification program to assure that the Engineering and Institutional Controls placed on the Site have not been altered and remain effective. Accordingly, this alternative satisfies this criterion.

Short-Term Effectiveness **–** The short-term adverse impacts and risks to the community, workers, and environment during implementation of this Restricted Residential Use alternative are not considered significant and are controllable.

During intrusive remedial activities air monitoring will be performed to assure conformance with community air monitoring action levels. Planned remedial activities will be performed in accordance with an approved work plan, including HASP, CAMP, and SFMP. This alternative achieves the RAOs for the Site.

Implementation **–** No technical or action-specific administrative implementable issues are associated with the Track 4 Restricted Residential Use Cleanup alternative.

Cost **–** The capital cost of implementing a Track 4 RRSCO cleanup alternative is estimated at $1.03 MM (see Table 11).

Community Acceptance – Community acceptance will be evaluated based on comments to be received from the public in response to Fact Sheets and other planned Citizen Participation activities.

8.5 Comparison of Remedial Alternatives

The previous section describes and evaluates the remedial alternatives for the Main & East Balcom Site against the screening criteria. Table 12 provides a comparison of the remedial alternatives to the screening criteria to identify appropriate remedial measures that will achieve the RAOs for the Site.

Overall, the Track 4 Restricted Residential Use cleanup alternative will achieve the goals of the remediation, with limited short-term impacts to the surrounding neighborhoods, be implemented in accordance with the requirements in the most cost effective manner, and is consistent with the surrounding land use of the Site.

8.6 Recommended Remedial Measure

Based on the alternatives evaluation, as described above, the proposed remedial approach for the Site is a Track 4 Restricted Residential Use Cleanup. A Track 4 Restricted Residential Use cleanup would be fully protective of public health and the environment, is significantly less disruptive to the surrounding community, is consistent with current and future land use, and represents a cost-effective approach that fully satisfies the RAOs for the Site.

The components and details of the remedial approach will be more fully described in a Remedial Action Work Plan to be submitted to the Department for approval. In summary, this alternative would involve:

- **Completed IRMs,** including: the removal of the interior basement AST, the removal of the exterior UST and the associated petroleum impacted soil-fill;
- **Confirmatory building SVI;**

- **MW-4 cVOC groundwater assessment and in-Situ remediation (if necessary).**
- **Excavation and offsite disposal of soil/fill exceeding RRSCOs** for metals in the vicinity of TP-3 to approximately 9 fbgs;
- **Remediation of nuisance petroleum** impacted soil-fill in the vicinity of TP14;
- **Excavation and off-site disposal of fill materials** not suitable for on-Site reuse generated during DER-10 cover construction
- **Collection of post-excavation confirmatory samples,** in accordance with DER-10.
- **Placement of Cover System** including demarcation layer underlying DER-10 acceptable cover soil in areas without hardscape (building, asphalt and concrete) to address remaining contamination above RRSCOs.
- **Implementation of a Site Management Plan (SMP)**. The SMP will include:
    - **Institutional Controls and Engineering Controls (IC/EC)** Engineering controls include any physical barrier or method employed to actively or passively contain, stabilize, or monitor contaminants; restrict the movement of contaminants; or eliminate potential exposure pathways to contaminants. Institutional controls at the site will include groundwater use restrictions and use restrictions of the Site to restricted residential use.
    - **Excavation Work Plan** to assure that future intrusive activities and soil/fill handling at the Site are completed in a safe and environmentally responsible manner;
    - **Site Monitoring Plan** that includes: provisions for a Site-wide inspection program to assure that the IC/ECs have not been altered and remain effective; and,
    - **Environmental Easement** filed with Erie County.

9.0 RI/IRM/AAR SUMMARY AND CONCLUSIONS

Based on the data and analyses presented in the preceding sections, we offer the following summary and conclusions:

- Based on the RI soil data, certain PAHs and metals were detected above their respective Restricted Residential and/or Commercial Use SCOs. All VOCs, PCBs, pesticides, and herbicides were detected below their respective USCOs.

- Based on the groundwater data, the vast majority of analytes were detected below GWQS. VOCs were detected above GWQS in two sample locations, certain pesticides and three naturally occurring metals were detected above GWQS. No PCBs or herbicides were detected above GWQS.

- Post-excavation confirmatory samples and screening of the completed IRMs on the Site have achieved a Part 375 RRSCOs cleanup. The completed IRMs included removal and disposal of the interior AST, removal and disposal of the exterior UST, excavation and off-site disposal of non-hazardous petroleum impacted soil/fill.

- Given the nature and extent of contamination present in soil/fill and groundwater, and the intended reuse of the Site, the evaluation of remedial alternatives selected a Restricted Residential Use (Track 4) Cleanup that is fully protective of public health and the environment.

10.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation.* May 2010.

2. United States Department of Agriculture (USDA), Soil Conservation Service. *Soil Survey of Erie County, New York.* December 1986.

3. Benchmark Environmental Engineering and Science, PLLC,. Main and East Balcom Street Site, *Remedial Investigation – Interim Remedial Measures Work Plan, Buffalo, New York.* revised March 2017.

4. TurnKey Environmental Restoration, LLC. *Supplemental Phase II Environmental Investigation Report, 1653-1661 Main Street and 17-21 East Balcom Street, Buffalo, New York.* January 2016.

5. TurnKey Environmental Restoration, LLC. *Limited Phase II Environmental Investigation Report, 1661 Main Street, Buffalo, New York.* April 2015.

6. TurnKey Environmental Restoration, LLC. *Phase I Environmental Site Assessment, 1653-1661 Main Street and 17-21 East Balcom Street, Buffalo, New York.* January 2015.

7. United States Department of Agriculture (USDA), Soil Conservation Service. *Soil Survey of Niagara County, New York.* December 1986.

8. Chow, V., Maidment, D., and Mays, L. 1988. Applied Hydrology. McGraw-Hill.

TABLES

TABLE 1

SUMMARY OR SAMPLING ANALYSIS PROGRAM

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT
MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Date	Remedial Investigation Location	Sample Interval (ft)	Project Phase	Full List VOCs [1]	TCL SVOCs	TAL Metals	PCBs	Pesticides	Herbicides	Notes
Soil/Fill Samples										
12/10/2016	TP-1	(1-4)	Supp. Phase II	1	1	1				
12/10/2016	TP-2	(1-3)	Supp. Phase II		1	1				
12/10/2016	TP-3	(1-6)	Supp. Phase II		1	1				
12/10/2016	TP-4	(1-4)	Supp. Phase II		1	1				
12/10/2016	TP-8	(1-3)	Supp. Phase II		1	1				
12/10/2016	TP-9	(3-6)	Supp. Phase II		1	1				
12/10/2016	TP-10	(10-11)	Supp. Phase II	1	1	1				
7/18/2017	NS-1	(0-2)	RI		1	1				
7/18/2017	NS-2	(0-2)	RI		1	1				
7/18/2017	NS-3	(0-2)	RI	1	1	1	1	1	1	
7/18/2017	NS-4	(0-2)	RI		1	1	1			
7/18/2017	TP-11	(4-5)	RI		1	1				
7/18/2017	TP-12	(4.5-6.5)	RI		1	1	1			
7/18/2017	TP-13	(4-9)	RI	1	1	1				
7/18/2017	TP-14	(9-11)	RI	1	1	1	1	1	1	MS/MSD
7/18/2017	TP-15	(1.5-3.5)	RI	1	1	1				
7/18/2017	TP-16	(0-2)	RI		1	1	1			
7/18/2017	TP-18	(6-9)	RI	1	1	1	1	1	1	Blind Dup
9/18/2017	MW-1	(16-18)	RI	1	1	1	1			
9/18/2017	MW-2	(18-20)	RI		1	1	1			
9/19/2017	MW-3	(18-20)	RI	1	1	1	1	1	1	Blind Dup
11/13/2017	MW-4	(8-10)	RI	1	1	1				
2/8/2018	MW-5	(20-24)	RI	1	1	1				
10/24/2017	BOTTOM-1	(15)	IRM (UST Area)	1	1					
10/24/2017	SW-1	(13-15)	IRM (UST Area)	1	1					
10/24/2017	SW-2	(7-9)	IRM (UST Area)	1	1					
10/24/2017	SW-3	(7-9)	IRM (UST Area)	1	1					
10/24/2017	SW-4	(7-9)	IRM (UST Area)	1	1					
10/24/2017	SW-5	(9-11)	IRM (UST Area)	1	1					
10/24/2017	SW-6	(7-9)	IRM (UST Area)	1	1					
10/25/2017	B-2	(13)	IRM (Pump Island Area)	1	1					
10/25/2017	SW-1	(8-10)	IRM (Pump Island Area)	1	1					
10/25/2017	SW-2	(8-10)	IRM (Pump Island Area)	1	1					

TABLE 1

SUMMARY OR SAMPLING ANALYSIS PROGRAM

REMEDIAL INVESTIGATION / INTERIM REMEDIAL MEASURES / ALTERNATIVE ANALYSIS REPORT
MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Date	Remedial Investigation Location	Sample Interval (ft)	Project Phase	Full List VOCs [1]	TCL SVOCs	TAL Metals	PCBs	Pesticides	Herbicides	Notes
10/25/2017	SW-3	(8-10)	IRM (Pump Island Area)	1	1					
10/25/2017	SW-4	(8-10)	IRM (Pump Island Area)	1	1					
11/13/2017	BSB-1	(1-2)	IRM (Basment AST Area)	1	1					
11/13/2017	BSB-2	(4-5)	IRM (Basment AST Area)	1	1					
Groundwater Samples										
10/23/2017	MW-1	NA	RI	1	1	1	1	1	1	
10/23/2017	MW-2	NA	RI	1	1	1	1	1	1	
11/16/2017	MW-3	NA	RI	1	1	1	1	1	1	
2/11/2018	MW-3	NA	RI	1						
11/16/2017	MW-4	NA	RI	1	1	1	1	1	1	MS/MSD Blind Dup
2/11/2018	MW-4	NA	RI	1						
2/11/2018	MW-5	NA	RI	1						
Air Samples										
2/12/2018	SSV-1	NA	RI	1						Blind Dup
2/12/2018	SSV-2	NA	RI	1						
2/12/2018	AMBIENT-1	NA	RI	1						
2/12/2018	AMBIENT-2	NA	RI	1						
2/12/2018	AMBIENT-3	NA	RI	1						
2/12/2018	OUTDOOR-1	NA	RI	1						

1. Full List VOCs includes TCL VOCs plus CP-51 List VOCs via Method 8260.

Acronyms:

VOCs = volatile organic compounds
SVOCs = semi-volatile organic compounds
TCL = Target Compound List
TAL = Target Analyte List
PCBs = Polychlorinated Biphenyls
NA = Not Applicable

TABLE 2

SUMMARY OF HISTORIC SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

PARAMETER[1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs [2]	Sample Location (depth)									
				SB-1 (2-4')	SB-2 (0-2')	SB-3 (2-4')	TP-1 (1-4')	TP-2 (1-3')	TP-3 (1-6')	TP-4 (1-4')	TP-8 (1-3')	TP-9 (3-6')	TP-10 (10-11')
				3/23/2015			12/10/2015						
Volatile Organic Compounds (VOCs) - mg/Kg [3]													
1,2,4-Trimethylbenzene	**3.6**	**47**	**190**	--	0.4 D	--	ND	--	--	--	--	--	ND
1,3,5-Trimethylbenzene	**8.4**	**52**	**190**	--	0.096 D	--	ND	--	--	--	--	--	ND
4-Isopropyltoluene	**--**	**--**	**--**	--	ND	--	ND	--	--	--	--	--	ND
Acetone	**0.05**	**100**	**500**	--	ND	--	ND	--	--	--	--	--	ND
Benzene	**0.06**	**4.8**	**44**	--	0.00058 J	--	ND	--	--	--	--	--	ND
Chloroform	**0.37**	**49**	**350**	--	ND	--	0.00034 J	--	--	--	--	--	ND
Ethylbenzene	**1**	**41**	**390**	--	0.093	--	ND	--	--	--	--	--	ND
Isopropylbenzene (Cumene)	**--**	**--**	**--**	--	0.066	--	ND	--	--	--	--	--	ND
Methylene chloride	**0.05**	**100**	**500**	--	ND	--	ND	--	--	--	--	--	ND
n-Butylbenzene	**12**	**100**	**500**	--	0.14	--	ND	--	--	--	--	--	ND
n-Propylbenzene	**3.9**	**100**	**500**	--	0.15	--	ND	--	--	--	--	--	ND
p-Cymene (p-isopropyltoluene)	**--**	**--**	**--**	--	0.12	--	ND	--	--	--	--	--	ND
sec-Butylbenzene	**11**	**100**	**500**	--	0.078	--	ND	--	--	--	--	--	ND
Toluene	**0.7**	**100**	**500**	--	0.0023 J	--	ND	--	--	--	--	--	ND
Total Xylenes	**0.26**	**100**	**500**	--	0.079 DJ	--	ND	--	--	--	--	--	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]													
Acenaphthene	**20**	**100**	**500**	3	ND	ND	ND	ND	ND	ND	0.18 J	0.16 J	1.1
Acenaphthylene	**100**	**100**	**500**	ND	ND	ND	ND	ND	ND	ND	0.12 J	ND	ND
Anthracene	**100**	**100**	**500**	1.4	ND	ND	ND	ND	ND	ND	0.83 J	0.67 J	2.7
Benzo(a)anthracene	**1**	**1**	**5.6**	ND	ND	ND	ND	ND	ND	**4.3 J**	**2.6**	**3.1**	**6.3**
Benzo(a)pyrene	**1**	**1**	**1**	ND	ND	ND	ND	ND	ND	**4.6 J**	**2.1**	**2**	**5.1**
Benzo(b)fluoranthene	**1**	**1**	**5.6**	ND	ND	ND	ND	ND	ND	**8.2 J**	**2.7**	**2.6 J**	**8.5**
Benzo(ghi)perylene	**100**	**100**	**500**	ND	ND	ND	ND	ND	ND	3.8 J	1.5	1.5	4.2
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	ND	ND	ND	ND	ND	ND	ND	**1.1**	**1.7 J**	ND
Bis(2-ethylhexyl) phthalate	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Carbazole	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	0.38 J	0.27 J	1.3
Chrysene	**1**	**3.9**	**56**	ND	ND	ND	ND	ND	ND	**4.8 J**	**2.4**	**3**	**5.7**
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	0.21 J	ND	0.82
Fluoranthene	**100**	**100**	**500**	ND	ND	ND	ND	ND	1.7 J	12	4.8	6.1	15
Fluorene	**30**	**100**	**500**	8.5	0.79 J	ND	ND	ND	ND	ND	0.24 J	ND	1.4 J
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	ND	ND	ND	ND	ND	ND	**3.3 J**	**1.3**	**1.2**	**3.7**
Naphthalene	**12**	**100**	**500**	**22**	1	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**100**	**100**	**500**	15	1.6	ND	ND	ND	ND	7.5 J	3.7	2.6	10
Pyrene	**100**	**100**	**500**	0.61	ND	ND	ND	ND	ND	9.9	4	5.3	13
Metals - mg/Kg													
Arsenic	**13**	**16**	**16**	--	--	--	5.1	2.3	**15.1**	3.3	8.1	**17**	7
Barium	**350**	**400**	**400**	--	--	--	24.3	109	**2460**	204	83.4	77.1	103
Cadmium	**2.5**	**4.3**	**9.3**	--	--	--	0.36	ND	2.1	0.38	0.37	0.73	0.75
Chromium	**30**	**180**	**1500**	--	--	--	8.4	9	**35.2**	9.8	10.2	**65**	18.4
Lead	**63**	**400**	**1000**	--	--	--	31.6	9.4	**2820**	107	174	190	72
Mercury	**0.18**	**0.81**	**2.8**	--	--	--	ND	ND	**0.27**	0.11	**0.37**	**0.21**	**0.24**

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as ND.
2. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs)
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analyzed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
D = Indicates laboratory dilution.
F1 = MS and/or MSD Recovery is outside acceptance limits

Bold	= Result exceeds Unrestricted Use SCOs
Bold	= Result exceeds Rest. Residential Use SCOs
Bold	= Result exceeds Commercial Use SCOs

TABLE 3

SUMMARY OF RI SUBSURFACE SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	Commercial Use SCOs [2]	SAMPLE LOCATION (DEPTH)															
				NS-1 (0'-2')	NS-2 (0'-2')	NS-3 (0'-2')	NS-4 (0'-2')	TP-11 (4'-5')	TP-12 (4.5'-6.5')	TP-13 (4'-9')	TP-14 (9'-11')	TP-15 (1.5'-3.5')	TP-16 (0-2)	TP-18 (6'-9')	MW-1 (16'-18')	MW-2 (18'-20')	MW-3 (18'-20')	MW-4 (8-10')	MW-5 (20-24')
				07/18/2017											09/18/2017		09/19/2017	11/13/2017	02/08/2018
Volatile Organic Compounds (VOCs) - mg/Kg [3]																			
1,2,4-Trimethylbenzene	**3,6**	**47**	**190**	--	--	ND	--	--	--	ND	ND	ND	--	ND	0.00088 J	--	ND	ND	0.00022 J
1,3,5-Trimethylbenzene	**8.4**	**52**	**190**	--	--	ND	--	--	--	ND	ND	ND	--	ND	0.00088 J	--	ND	ND	ND
Acetone	**0.05**	**100**	**500**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Benzene	**0.06**	**4.8**	**44**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	ND	0.00035 J	ND
Carbon disulfide	**--**	**--**	**--**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	ND	ND	ND
Isopropylbenzene (Cumene)	**--**	**--**	**--**	--	--	ND	--	--	--	ND	ND	ND	--	ND	0.0011	--	ND	ND	ND
Methylcyclohexane	**--**	**--**	**--**	--	--	ND	--	--	--	ND	ND	ND	--	ND	0.0014 NJ	--	ND	ND	ND
Methylene chloride	**0.05**	**100**	**500**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	0.0022 J	ND	ND
sec-Butylbenzene	**11**	**100**	**500**	--	--	ND	--	--	--	ND	ND	ND	--	ND	0.00028 J	--	ND	ND	ND
Toluene	**0.7**	**100**	**500**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	ND	ND	0.0011 J
trans-1,2-Dichloroethene	**0.19**	**100**	**500**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	ND	0.00032 J	ND
Trichloroethene	**0.47**	**21**	**200**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	0.0017	ND	ND
Total Xylenes	**0.26**	**100**	**500**	--	--	ND	--	--	--	ND	ND	ND	--	ND	ND	--	ND	ND	0.00059 J
Total VOCs	**--**	**--**	**--**	--	--	ND	--	--	--	ND	ND	ND	--	ND	0.00366	--	0.0039	0.00067	0.00191
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																			
2-Methylnaphthalene	**--**	**--**	**--**	0.037 J	ND	ND	0.35 J	ND	ND	0.023 J	ND	ND	0.091 J	ND	ND	ND	ND	ND	ND
Acenaphthene	**20**	**100**	**500**	0.045 J	0.027 J	0.11 J	0.94	ND	0.03 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Acenaphthylene	**100**	**100**	**500**	ND	ND	ND	0.47 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Anthracene	**100**	**100**	**500**	0.12	0.1 J	0.24	2.4	ND	0.091 J	0.046 J	ND	ND	ND	ND	ND	ND	ND	ND	ND
Benzo(a)anthracene	**1**	**1**	**5.6**	0.43	0.49	0.61	**6.6**	0.033 J	0.28	0.24	ND	0.084 J	0.18	ND	ND	ND	ND	ND	ND
Benzo(a)pyrene	**1**	**1**	**1**	0.41	0.39	0.57	**4.9**	ND	0.3	0.22	ND	0.082 J	0.19	ND	ND	ND	ND	ND	ND
Benzo(b)fluoranthene	**1**	**1**	**5.6**	0.56	0.59	0.73	**6.8**	0.034 J	0.44	0.32	ND	0.11 J	0.25	ND	ND	ND	ND	ND	ND
Benzo(ghi)perylene	**100**	**100**	**500**	0.28	0.22	0.36	2.7	ND	0.23	0.14 J	ND	0.055 J	0.16	ND	ND	ND	ND	ND	ND
Benzo(k)fluoranthene	**0.8**	**3.9**	**56**	0.16	0.18	0.24	**2.4**	ND	0.14	0.1 J	ND	0.031 J	0.077 J	ND	ND	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	**--**	**--**	**--**	ND	ND	ND	0.6 J	ND	ND	ND	ND	ND	0.082 J	ND	ND	ND	ND	ND	ND
Carbazole	**--**	**--**	**--**	0.078 J	0.054 J	0.14 J	1.3	ND	0.057 J	0.043 J	ND	ND	0.025 J	ND	ND	ND	ND	ND	ND
Chrysene	**1**	**3.9**	**56**	0.39	0.44	0.54	**6.3**	0.027 J	0.3	0.24	ND	0.079 J	0.19	ND	ND	ND	ND	ND	ND
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	0.065 J	0.074 J	0.092 J	**0.71**	ND	0.056 J	0.039 J	ND	ND	0.042 J	ND	ND	ND	ND	ND	ND
Dibenzofuran	**7**	**59**	**350**	0.024 J	ND	0.053 J	0.75	ND	0.025 J	ND	ND	ND	0.029 J	ND	ND	ND	ND	ND	ND
Fluoranthene	**100**	**100**	**500**	0.88	0.87	1.3	15	0.05 J	0.62	0.41	ND	0.15	0.35	ND	ND	ND	ND	ND	ND
Fluorene	**30**	**100**	**500**	0.042 J	0.027 J	0.1 J	1	ND	0.041 J	ND	ND	ND	0.019 J	ND	ND	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	0.3	0.26	0.41	**2.9**	ND	0.24	0.16	ND	0.064 J	0.14 J	ND	ND	ND	ND	ND	ND
Naphthalene	**12**	**100**	**500**	0.023 J	ND	0.042 J	0.86	ND	0.039 J	ND	ND	ND	0.051 J	ND	ND	ND	ND	ND	ND
Phenanthrene	**100**	**100**	**500**	0.51	0.37	0.98	9.9	0.026 J	0.38	0.19	ND	0.064 J	0.23	ND	ND	ND	ND	ND	ND
Pyrene	**100**	**100**	**500**	0.75	0.7	1	12	0.037 J	0.48	0.34	ND	0.12	0.29	ND	ND	ND	ND	ND	ND
Total PAHs	**--**	**100**	**500**	4.965 J	4.738 J	7.324 J	75.88 J	0.207 J	3.667 J	2.445 J	ND	0.839 J	2.169 J	ND	ND	ND	ND	ND	ND
Metals - mg/Kg																			
Aluminum	**--**	**--**	**--**	7850	12300	10100	8010	17800	7540	5900	4860 J-	14400	14600	10700	3520	1540	1700	2740	2740
Antimony	**--**	**--**	**--**	0.368 J	ND	0.34 J	0.832 J	0.446 J	1.32 J	ND	ND	ND	ND	0.398 J	ND	ND	ND	0.448 J	0.448 J
Arsenic	**13**	**16**	**16**	5.49	5.47	2.72	9.92	4.92	8.15	3.25	1.02	3.93	2.21	4.94	1.43	1.36	0.622 J	1.4	1.4
Barium	**350**	**400**	**400**	119	96.8	86	92.3	132	64.7	39.8	54.7 J-	108	103	95.1	37	21.4	14.9	30.1	30.1
Beryllium	**7.2**	**72**	**590**	0.304 J	1.19	0.367 J	0.394 J	0.902	0.563	0.26 J	0.145 J	0.799	2.02	0.416 J	0.066 J	ND	0.036 J	0.112 J	0.112 J
Cadmium	**2.5**	**4.3**	**9.3**	1.08	0.848 J	0.779 J	1.12	1.28	1.78	0.655 J	0.545 J	0.628 J	0.538 J	0.934	0.596 J	0.409 J	0.4 J	0.293 J	0.293 J
Calcium	**--**	**--**	**--**	71400	60000	53200	65400	4500	90300	29000	54000 J-	52900	62400	53000	54700	47300	47500	49500	49500
Chromium	**30**	**180**	**1500**	18.1	19.8	13.3	**39.3**	22.2	**31.5**	8.74	8.71	12.3	6.97	15	6.13	3.21	4.01	7.51	7.51
Cobalt	**--**	**--**	**--**	5.76	4.73	5.66	5.34	18.8	4.57	4.54	4.27	4.49	2.2	8.14	3.3	1.8 J	1.86 J	2.7 J	2.7 J
Copper	**50**	**270**	**270**	17.4	20.2	15.1	33.9	14.8	44.7	15	10	26.7	11.7	20.1	9.68	5.24	5.29	7.77	7.77
Iron	**--**	**--**	**--**	14900	14900	15400	18700	29200	25900	12400	10200 J-	11700	10000	17800	8480	5180	5440	7220	7220
Lead	**63**	**400**	**1000**	**87**	**64.6**	20.7	**148**	12.8	54.2	16.1	9.85	**111**	**68.6**	16.5 J	9.63	7.62	6.94	7.67	7.67
Magnesium	**--**	**--**	**--**	9810	13700	12200	8770	5410	34000	8950	20900 J-	14600	12600	19100	24200	21800	21800	20700	20700
Manganese	**1600**	**2000**	**10000**	1180	1060	303	1320	946	1020	536	315 J-	717	876	388	282	185	222	260	260
Mercury	**0.18**	**0.81**	**2.8**	0.15	**0.25**	0.09	**0.48**	0.04 J	**0.25**	0.08	ND	0.08	0.12	0.05 J	0.02 J	ND	ND	ND	ND
Nickel	**30**	**310**	**310**	9.78	11.5	14.3	14.9	23.9	24.4	12	8.85	10.1	5.8	19.2	6.67	3.23	3.5	5.8	5.8
Potassium	**--**	**--**	**--**	834	921	1160	994	1690	745	758	1010	2200	1100	1600	662	314	305	672	672
Selenium	**3.9**	**180**	**1500**	0.267 J	0.604 J	ND	0.626 J	ND	ND	ND	ND	ND	2.06	ND	ND	ND	0.373 J	ND	ND
Silver	**2**	**180**	**1500**	ND	ND	ND	0.447 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sodium	**--**	**--**	**--**	296	798	360	372	378	520	201	375	1190	615	165 J	231	168 J	108 J	184 J	184 J
Thallium	**--**	**--**	**--**	0.883 J	1.01 J	ND	1.4 J	1.04 J	1.02 J	0.529 J	ND	0.675 J	0.815 J	ND	ND	ND	ND	ND	ND
Vanadium	**--**	**--**	**--**	22.3	20.9	18.6	31.7	30.3	20	12.7	12.8	21.9	8.12	21.4	10.5	7.59	7.39	9.7	9.7
Zinc	**109**	**10000**	**10000**	97.3	90.8	61.3	**151**	58.3	**148**	52.5	47.6	76.8	60.3	79.9 J	75.7	62.7	56.4	61.6	61.6
Polychlorinated biphenyls- mg/Kg [3]																			
Aroclor 1242	**--**	**--**	**--**	--	--	ND	0.142 J+	--	ND	--	ND	--	ND	ND	ND	ND	ND	--	--
Aroclor 1254	**--**	**--**	**--**	--	--	ND	0.215 J+	--	0.0143 J+	--	ND	--	0.00809 J+	ND	ND	ND	ND	--	--
Aroclor 1260	**--**	**--**	**--**	--	--	ND	0.0755 J+	--	0.0124 J+	--	ND	--	0.0106 J+	ND	ND	ND	ND	--	--
Aroclor 1268	**--**	**--**	**--**	--	--	ND	0.024 J+	--	ND	--	ND	--	ND	ND	ND	ND	ND	--	--
Total PCBs	**0.1**	**1**	**1**	--	--	ND	**0.4565 J+**	--	0.0267 J+	--	ND	--	0.01869 J+	ND	ND	ND	ND	--	--
Pesticides and Herbicides - mg/Kg [3]																			
Total Pesticides	**--**	**--**	**--**	--	--	ND	--	--	--	--	ND	--	--	ND	--	--	ND	--	--
Total Herbicides	**--**	**--**	**--**	--	--	ND	--	--	--	--	ND	--	--	ND	--	--	ND	--	--

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs

Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
J+ = The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.
J- = The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.
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.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.

TABLE 4

SUMMARY OF RI GROUNDWATER ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Parameters [1]	Class GA GWQS[2]	Sample Location						
		MW-1	MW-2	MW-3	MW-3	MW-4	MW-4	MW-5
		10/23/17		11/16/17	2/11/18	11/16/17	2/11/18	2/11/18
Volatile Organic Compounds (VOCs) - ug/L								
1,1-Dichloroethene	**5**	ND	ND	ND	ND	0.27 J	ND	ND
2-Butanone	**50**	ND	ND	**360 NJ**	ND	ND	13	ND
1,2-Dichloroethane	**0.6**	ND	0.14 J	ND	ND	0.18 J	0.16 J	ND
Acetone	**50**	5.2	2 J	**51**	4.5 J	3.1 J	**93 J**	9
Benzene	**1**	ND	0.53	ND	ND	**3.4**	**1.9**	ND
Cyclohexane	**--**	ND	ND	ND	ND	0.64 J	0.29 J	ND
Methylcyclohexane	**--**	ND	ND	ND	ND	ND	ND	ND
Cis-1,2-Dichloroethene	**5**	ND	ND	2.5 J	ND	**39**	**21**	**5.2**
Xylene (total)	**5**	ND	0.88 J	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	**5**	ND	ND	ND	ND	**100**	**58**	ND
Trichloroethene	**5**	ND	ND	**30**	ND	**17**	**8**	ND
Vinyl Chloride	**2**	ND	ND	ND	ND	**6.9**	**2.5**	0.5 J
Semivolatile Organic Compounds (SVOCs) - ug/L								
2-Methylnaphthalene	**--**	ND	ND	ND	--	ND	--	--
3-Methylphenol/4-methylphenol*	**5**	2.9 J	ND	ND	--	ND	--	--
Acenaphthene	**20**	ND	ND	ND	--	ND	--	--
Benzo(a)anthracene	**0.002**	ND	ND	ND	--	ND	--	--
Fluoranthene	**50**	0.07 J	0.06 J	0.05 J	--	0.05 J	--	--
Fluorene	**50**	0.05 J	ND	0.06 J	--	ND	--	--
Naphthalene	**10**	ND	ND	ND	--	ND	--	--
Phenanthrene	**50**	0.12	0.37	0.42	--	0.22	--	--
Pyrene	**50**	ND	ND	ND	--	ND	--	--
Polychlorinated Biphenyls - ug/L								
Total PCBs	**0.09**	ND	ND	ND	--	ND	--	--
Metals - ug/L [3]								
Aluminum	--	2260	2360	2,400	--	971 J	--	--
Antimony	**3**	ND	ND	ND	--	ND	--	--
Arsenic	**25**	6.49	9.34	10.29	--	2.11	--	--
Barium	**1000**	59.18	62.7	100.9	--	65.02	--	--
Beryllium	**--**	0.00012 J	0.13	0.16 J	--	ND	--	--
Cadmium	**5**	0.11 J	0.06	0.08 J	--	ND	--	--
Calcium	**--**	237000	109000	142000	--	236000	--	--
Chromium	**50**	3.24	3.81	4.2	--	1.85 J	--	--
Cobalt	**--**	2.67	2.48	2.36	--	1.58 J	--	--
Copper	**200**	5.61	6.18	4.49	--	2.74	--	--
Iron	**300**	**4360**	**4910**	**6090**	--	**3370**	--	--
Lead	**25**	4.62	7.79	14.91	--	3.71 J	--	--
Magnesium	**35000**	**126000**	**51000**	**105000**	--	**54900**	--	--
Manganese	**300**	158.8	148.7	268.8	--	171	--	--
Mercury	**0.7**	ND	ND	ND	--	ND	--	--
Nickel	**100**	6.22	6	10.44	--	4.34	--	--
Potassium	**--**	6310	6440	4890	--	13600	--	--
Selenium	**10**	2.31	2.45	2.47 J	--	ND	--	--
Silver	**50**	ND	ND	ND	--	ND	--	--
Sodium	**20000**	**1000000**	**399000**	**78500**	--	**174000**	--	--
Thallium	**0.5**	ND	ND	ND	--	ND	--	--
Vanadium	**--**	4.16	4.75	5.74	--	2.5 J	--	--
Zinc	**2000**	20.23	18.89	22.54	--	13.68	--	--
Pesticides and Herbicides - ug/L								
4,4'-DDD	**0.3**	ND	ND	0.012 J	--	0.02 J	--	--
beta-BHC	**0.01**	ND	ND	ND	--	0.008 JPI	--	--
cis-Chlordane	**--**	ND	ND	ND	--	ND	--	--
Endrin	**ND**	ND	ND	**0.012 NJ**	--	ND	--	--
Heptachlor	**0.04**	**0.047**	0.039	ND	--	ND	--	--
Heptachlor epoxide	**0.03**	ND	ND	ND	--	ND	--	--
trans-Chlordane	**--**	ND	ND	ND	--	0.01 JPI	--	--

Notes:
1. Only parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC TOGS 1.1.1 Class GA Groundwater Quality Standards.
3. Sample results were reported by the laboratory in mg/L and converted to ug/L for comparisons to GWQSs

Qualifiers:
ND = Parameter not detected above laboratory detection limit.
"--" = Sample not analyzed for parameter or no GWQS available for the parameter.
J = Estimated Value - Below calibration range
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.
P = The dual column RPD's are above the acceptance criteria, the lower of the two results is reported.
I = The lower value for the two columns has been reported due to obvious interference.
* = Guidance value for total phenols used for comparison to GWQSs

BOLD = Result exceeds GWQS.

TABLE 5

SUMMARY OF RI AIR SAMPLING ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Parameter [1]	Sample Location					
	SSV-1	AMBIENT-1	SSV-2	AMBIENT-2	AMBIENT-3	OUTDOOR
	2/12/2018					
Volatile Organics Compounds (VOCs) - ug/^{3}						
1,1,2-Trichloro-1,2,2-Trifluloroethane	9.35	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	ND	1.34	3.22	1.17	ND	ND
1,3,5-Trimethylbenzene	ND	ND	1.38	ND	ND	ND
1,3-Butadiene	ND	ND	1.36	ND	ND	ND
2-Butanone	11.4 J	15.3	8.2	12.6	7.76	ND
Acetone	R	25.4	73.6 J+	19.8	17.9	2.42 J-
Benzene	92.3 J	0.639	19.6	ND	0.642	ND
Carbon disulfide	95.6 J	ND	10.7	ND	ND	ND
Chloroform	ND	ND	1.9	ND	ND	ND
Chloromethane	ND	0.793	ND	0.727	0.673	0.653
Cyclohexane	1560 J	ND	29.5	ND	ND	ND
Dichlorodifluoromethane	ND	1.94	0.999	2.21	1.58	1.54
Ethyl Alcohol	154	ND	28.5	ND	ND	ND
Ethylbenzene	ND	4.33	5.13	4.56	1.56	ND
Isopropyl alcohol	13.2 J	1.61	3.76	1.34	ND	ND
n-Heptane	225 J	0.877	30.1	0.857	ND	ND
n-Hexane	1160 J	1.19	51.5	1.09	1.02	ND
tert-Butyl alcohol	ND	6.43	1.7	5.52	2.89	ND
Tetrahydrofuran	ND	13.7	1.76	12.6	8.11	ND
Toluene	22.3	4.94	44.1	4.48	3.68	ND
o-Xylene	4.78	8.17	7.3	8.38	2.88	ND
p/m-Xylene	16	25.2	20.3	25.1	8.56	ND
Volatile Organics Compounds (VOCs) in SIM - ug/m^3						
Carbon tetrachloride [2]	ND	0.371	ND	0.365	0.359	0.315

Notes:

1. Only those parameters detected above the method detection limit, at a minimum of one location, are presented in this table.
2. Constituent monitored under NYSDOH Vapor/ Indoor Air Quality Standards - (Matricies A,B,C- Updated May 2017)

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
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 high.
J- = The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased low.

TABLE 6

COMPARISON OF RI AIR SAMPLING RESULTS TO NYSDOH MATRICIES
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Sample Location	Trichloroethene (TCE)		Carbon Tetrachloride		cis-1,2-Dichloroethene		1,1-Dichloroethene		Tetrachloroethene (PCE)		1,1,1 -Trichloroethane		Methylene Chloride		Vinyl Chloride	
	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix A	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix B	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix B	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix B	Lab Reported Concentration (ug/m^3)	Soil Vapor / Indoor Air Matrix C
SSV-1	ND (< 5.37)	NFA	ND (< 6.29)	NFA	ND (< 3.96)	NFA	ND (< 4.05)	NFA	ND (< 6.78)	NFA	ND (< 5.46)	NFA	ND (< 8.69)	NFA	ND (< 2.56)	NFA
AMBIENT - 1	ND (< 0.107)		0.371		ND (< 0.079)		ND (< 0.079)		ND (< 0.136)		ND (< 0.109)		ND (< 1.74)		ND (< 0.051)	
SSV-2	ND (< 1.07)	NFA	ND (< 1.26)	NFA	ND (< 0.793)	NFA	ND (< 0.793)	NFA	ND (< 1.36)	NFA	ND (< 1.09)	NFA	ND (< 1.74)	NFA	ND (< 0.511)	NFA
AMBIENT - 2	ND (< 0.107)		0.365		ND (< 0.079)		ND (< 0.079)		ND (< 0.136)		ND (< 0.109)		ND (< 1.74)		ND (< 0.051)	

Notes:
ND = Not Detected. Value in "()" is the detection limit reported by the laboratory.
NFA = No further action.
I, R = Take reasonable and practical actions to identify source(s) and reduce exposures.

= NYSDOH Matrix A Compounds
= NYSDOH Matrix B Compounds
= NYSDOH Matrix C Compounds

Analytes Assigned:
Trichloroethene (TCE), cis-1,2-Dichloroethene (c12-DCE), 1,1-Dichloroethene (11-DCE), Carbon Tetrachloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m³)		
	< 0.2	0.2 to < 1	1 and above
< 6	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	4. No further action	5. MONITOR	6. MITIGATE
60 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

Analytes Assigned:
Tetrachloroethene (PCE), 1,1,1-Trichloroethane (111-TCA), Methylene Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m³)		
	< 3	3 to < 10	10 and above
< 100	1. No further action	2. No Further Action	3. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
100 to < 1,000	4. No further action	5. MONITOR	6. MITIGATE
1,000 and above	7. MITIGATE	8. MITIGATE	9. MITIGATE

Analytes Assigned:
Vinyl Chloride

SUB-SLAB VAPOR CONCENTRATION of COMPOUND (mcg/m³)	INDOOR AIR CONCENTRATION of COMPOUND (mcg/m³)	
	< 0.2	0.2 and above
< 6	1. No further action	2. IDENTIFY SOURCE(S) and RESAMPLE or MITIGATE
6 to < 60	3. MONITOR	4. MITIGATE
60 and above	5. MITIGATE	6. MITIGATE

TABLE 7

SUMMARY OF UST IRM POST-EXCAVATION CONFIRMATORY SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	SAMPLE LOCATION (DEPTH)												
			UST AREA							PUMP ISLAND AREA					
			BOTTOM-1 (15')	SW-1 (13-15')	SW-2 (7-9')	SW-3 (7-9')	SW-4 (7-9')	SW-5 (9-11')	SW-6 (7-9')	B-2 (13')	SW-1 (8-10')	SW-2 (8-10')	SW-3 (8-10')	SW-4 (8-10')
			10/24/2017							10/25/2017				
Volatile Organic Compounds (VOCs) - mg/Kg [3]														
1,2,4-Trimethylbenzene	**3.6**	**52**	0.012	0.0016 J	ND	ND	0.00083 J	0.001 J	0.0061 J+	ND	ND	ND	0.012	ND
1,3,5-Trimethylbenzene	**8.4**	**52**	0.00087 J	0.0006 J	ND	ND	0.00024 J	ND	0.001 J+	ND	ND	ND	0.0087	ND
Benzene	**0.06**	**4.8**	ND	ND	ND	ND	ND	0.00043 J	ND	ND	ND	ND	ND	ND
Ethylbenzene	**1**	**41**	0.0026	0.00029 J	ND	ND	0.00088 J	0.013	0.0039 J+	ND	ND	ND	0.0043	ND
Isopropylbenzene (Cumene)	**--**	**--**	0.00091 J	ND	ND	ND	0.00084 J	0.0034	0.007 J+	ND	ND	ND	0.003	ND
Methyl tert butyl ether (MTBE)	**0.93**	**100**	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	**12**	**100**	0.0021	0.001	ND	ND	0.0023	ND	0.028 J+	0.0044	0.014	ND	0.003	ND
n-Propylbenzene	**3.9**	**100**	0.003	0.0012	ND	ND	0.0012	0.002	0.025 J+	0.0012	0.0013	ND	0.0089	ND
p-Isopropyltoluene	**--**	**--**	0.0014	0.00081 J	ND	ND	0.0022	ND	0.017 J+	ND	0.0027	ND	0.0034	ND
sec-Butylbenzene	**11**	**100**	0.0011	0.00083 J	ND	0.00018 J	0.0047	ND	0.022 J+	0.002	0.0098	ND	0.0046	ND
tert-Butylbenzene	**5.9**	**100**	ND	ND	ND	ND	0.0003 J	ND	0.0014 J+	ND	ND	ND	0.00045 J	ND
Toluene	**0.7**	**100**	ND	ND	ND	0.00023 J	0.00057 J	0.00038 J	ND	0.00034 J	ND	ND	0.00024 J	ND
Total Xylenes	**0.26**	**100**	0.00276	0.00079 J	ND	ND	ND	0.0152	0.00174 J+	ND	ND	ND	0.00802	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]														
Acenaphthene	**20**	**100**	ND	0.031 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoranthene	**100**	**100**	ND	0.063 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluorene	**30**	**100**	ND	0.042 J	ND	ND	0.018 J	ND	ND	ND	ND	ND	ND	ND
Naphthalene	**12**	**100**	ND	0.068 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**100**	**100**	ND	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pyrene	**100**	**100**	ND	0.041 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
J+ = The analyte was positively identified; the associated numerical value is an estimated quantity that may be biased high.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.

TABLE 8

SUMMARY OF AST IRM SOIL ANALYTICAL RESULTS
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs [2]	Restricted Residential Use SCOs [2]	SAMPLE LOCATION (DEPTH)	
			FORMER BASEMENT AST AREA	
			BSB-1 (1-2')	BSB-2 (4-5')
			11/13/2017	
Volatile Organic Compounds (VOCs) - mg/Kg [3]				
1,2,4-Trimethylbenzene	**3.6**	**52**	**4.9**	**25**
1,3,5-Trimethylbenzene	**8.4**	**52**	1.5 J	6.2
Benzene	**0.06**	**4.8**	ND	**0.066 J**
Ethylbenzene	**1**	**41**	0.55	**2.9**
Isopropylbenzene (Cumene)	**--**	**--**	0.23 J	1.8
n-Butylbenzene	**12**	**100**	1.4	5.2
n-Propylbenzene	**3.9**	**100**	0.61	3
p-Isopropyltoluene	**--**	**--**	0.41	1.8
sec-Butylbenzene	**11**	**100**	0.38	1.7
tert-Butylbenzene	**5.9**	**100**	0.033 J	0.15 J
Toluene	**0.7**	**100**	ND	0.33
Total Xylenes	**0.26**	**100**	**1.639 J**	**10.7**
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]				
Acenaphthene	**20**	**100**	1.2	2.1
Acenaphthylene	**100**	**100**	ND	ND
Anthracene	**100**	**100**	0.46 J	0.85 J
Fluorene	**30**	**100**	2.3	4.6
Naphthalene	**12**	**100**	8.4	**16**
Phenanthrene	**100**	**100**	5.3	10
Pyrene	**100**	**100**	0.13 J	0.28 J

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs

Definitions:
ND = Parameter not detected above laboratory detection limit.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.

TABLE 9

COST ESTIMATE FOR TRACK 1 UNRESTRICTED USE CLEANUP ALTERNATIVE
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Item	Quantity	Units	Unit Cost	Total Cost
Completed IRMs (UST and AST)	1	CM	$ 100,000	**$ 100,000**
Impacted Soil/Fill Removal				
USCO Excavation				
Shoring (Internal Bldg and boudnary)	1	EST	$ 500,000	$ 500,000
Soil/Fill Excavation & Hauling	11650	CY	$ 30.00	$ 349,500
Disposal at TSDF (1.6 tons per CY)	18640	TON	$ 45.00	$ 838,800
Waste Characterization Analytical	8	EA	$ 600.00	$ 4,800
Post-Excavation Confirmatory Sampling	100	EA	$ 500.00	$ 50,000
Subtotal:				**$ 1,243,100**
Backfill Excavation with Off-Site Soil/Fill				
Haul, Place & Compact	11650	CY	$ 35.00	$ 407,750
Backfill Characterization and Sampling	15	EA	$ 750.00	$ 11,250
Subtotal:				**$ 419,000**
Groundwater Management				
Temporary Groundwater Treatment System	1	EST	$ 50,000.00	$ 50,000
Temporary Discharge Permit/Fees	1	EST	$ 1,000.00	$ 1,000
Confirmatory and Waste Characterization Analytical	2	EST	$ 2,000.00	$ 4,000
Subtotal:				**$ 55,000**
Subtotal Capital Cost				**$ 1,817,100**
Contractor Mobilization/Demobilization (5%)				$ 90,855
Health and Safety (2%)				$ 36,342
Engineering/Contingency (35%)				$ 635,985
Total Cost				**$ 2,581,000**

TABLE 10

COST ESTIMATE FOR TRACK 2 RESIDENTIAL USE CLEANUP ALTERNATIVE
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Item	Quantity	Units	Unit Cost	Total Cost
Completed IRMs (UST and AST)	1	CM	$ 100,000	**$ 100,000**
Impacted Soil/Fill Removal				
RSCO Excavation				
Soil/Fill Excavation & Hauling	7500	CY	$ 30.00	$ 225,000
Disposal at TSDF (1.6 tons per CY)	12000	TON	$ 45.00	$ 540,000
Waste Characterization Analytical	8	EA	$ 600.00	$ 4,800
Post-Excavation Confirmatory Sampling	100	EA	$ 500.00	$ 50,000
Subtotal:				**$ 819,800**
Backfill Excavation with Off-Site Soil/Fill				
Haul, Place & Compact	7500	CY	$ 35.00	$ 262,500
Backfill Characterization and Sampling	15	EA	$ 750.00	$ 11,250
Subtotal:				**$ 273,750**
Groundwater Management				
Temporary Groundwater Treatment System	1	EST	$ 35,000.00	$ 35,000
Temporary Discharge Permit/Fees	1	EST	$ 1,000.00	$ 1,000
Confirmatory and Waste Characterization Analytical	2	EST	$ 2,000.00	$ 4,000
Subtotal:				**$ 40,000**
Subtotal Capital Cost				**$ 1,233,550**
Contractor Mobilization/Demobilization (5%)				$ 61,678
Health and Safety (2%)				$ 24,671
Engineering/Contingency (35%)				$ 431,743
Total Cost				**$ 1,751,641**

TABLE 11

COST ESTIMATE FOR TRACK 4 RESTRICTED RESIDENTIAL USE CLEANUP ALTERNATIVE
REMEDIAL INVESTIGATION/ INTERIM REMEDIAL MEASURES/ ALTERNATIVES ANALYSIS REPORT

MAIN & EAST BALCOM STREET SITE (BCP SITE NO. C915306)
BUFFALO, NEW YORK

Item	Quantity	Units	Unit Cost	Total Cost
Completed IRMs (UST and AST)	1	NA	$ 100,000	**$ 100,000**
Confirmatory SVI and MW-4 cVOC Assessment	1	EST	$ 25,000.00	**$ 25,000**
Impacted Soil/Fill Removal				
RRSCO Excavation				
Soil/Fill Excavation & Hauling	1200	CY	$ 30.00	$ 36,000
Disposal at TSDF (1.6 tons per CY)	1920	TON	$ 45.00	$ 86,400
Waste Characterization Analytical	8	EA	$ 600.00	$ 4,800
Post-Excavation Confirmatory Sampling	100	EA	$ 500.00	$ 50,000
Subtotal:				**$ 177,200**
Backfill Excavation with Off-Site Soil/Fill				
Haul, Place & Compact	1200	CY	$ 35.00	$ 42,000
Backfill Characterization and Sampling	5	EA	$ 750.00	$ 3,750
Subtotal:				**$ 45,750**
Additional Soil/Fill Exceeding SCOs				
Soil/Fill Excavation & Hauling	1000	CY	$ 30.00	$ 30,000
Disposal at TSDF (1.6 tons per CY)	1600	TON	$ 45.00	$ 72,000
Waste Characterization Analytical	2	EA	$ 600.00	$ 1,200
Post-Excavation Confirmatory Sampling	25	EA	$ 500.00	$ 12,500
Subtotal:				**$ 115,700**
Cover System				
Asphalt, concrete and soil cover	1	EST	$ 150,000.00	$ 150,000
Cover Soil Characterization and Sampling	5	EA	$ 750.00	$ 3,750
Subtotal:				**$ 161,250**
Subtotal Capital Cost				**$ 624,900**
Contractor Mobilization/Demobilization (5%)				$ 31,245
Health and Safety (2%)				$ 12,498
Engineering/Contingency (35%)				$ 218,715
Total Capital Cost				**$ 887,358**
Institutional Controls				
Environmental Easement	1	LS	$ 10,000.00	$ 10,000
Site Management Plan	1	LS	$ 15,000.00	$ 15,000
Subtotal:				**$ 25,000**
Annual Operation Maintenance & Monitoring (OM&M):				
Groundwater Monitoring	2	EA	$ 5,000.00	$ 10,000
Annual Certification	1	YR	$ 3,500.00	$ 3,500
Total Annual OM&M Cost				**$ 13,500**
Engineering Controls (GWM) OM&M Present Worth (PW):				
Number of Years (n):				5
Interest Rate (I):				3%
p/A value:				4.58
EC OM&M Present Worth (PW):				**$ 45,790**
Annual Certification OM&M Present Worth (PW):				
Number of Years (n):				30
Interest Rate (I):				3%
p/A value:				19.6
Annual Certification OM&M Present Worth (PW):				**$ 68,600**
Total OM&M Present Worth (PW):				**$ 114,390**
Total Cost				**$ 1,027,000**

TABLE 12

COMPARISON OF REMEDIAL ALTERNATIVES

MAIN & EAST BALCOM STREET SITE

BUFFALO, NEW YORK

Remedial Alternative	NYSDEC DER-10 Evaluation Criteria								
	1. Overall	2. SCGs	3. Eff & Perm	4. Reduction	5. Imp & Eff	6. Implement	7. Cost Eff	8. Community	9. Land Use
Alternative 1 - No Further Action						✓	✓	TBE	
Alternative 2 - Track 1 Cleanup	✓	✓	✓	✓				TBE	
Alternative 3 - Track 2 Cleanup	✓	✓	✓	✓				TBE	✓
Alternative 4 - Track 4 Cleanup	✓	✓	✓	✓	✓	✓	✓	TBE	✓

Notes:

1. Overall Protectiveness of Public Health and the Environment
2. Compliance with Standards, Criteria, and Guidance (SCGs)
3. Long-Term Effectiveness and Permanence
4. Reduction of Toxicity, Mobility, or Volume of Contamination through Treatment
5. Short-Term Impacts and Effectiveness
6. Implementability (Technical and Administrative)
7. Cost Effectiveness (Costs noted include costs of the IRMs completed)
8. Community Acceptance
9. Land Use

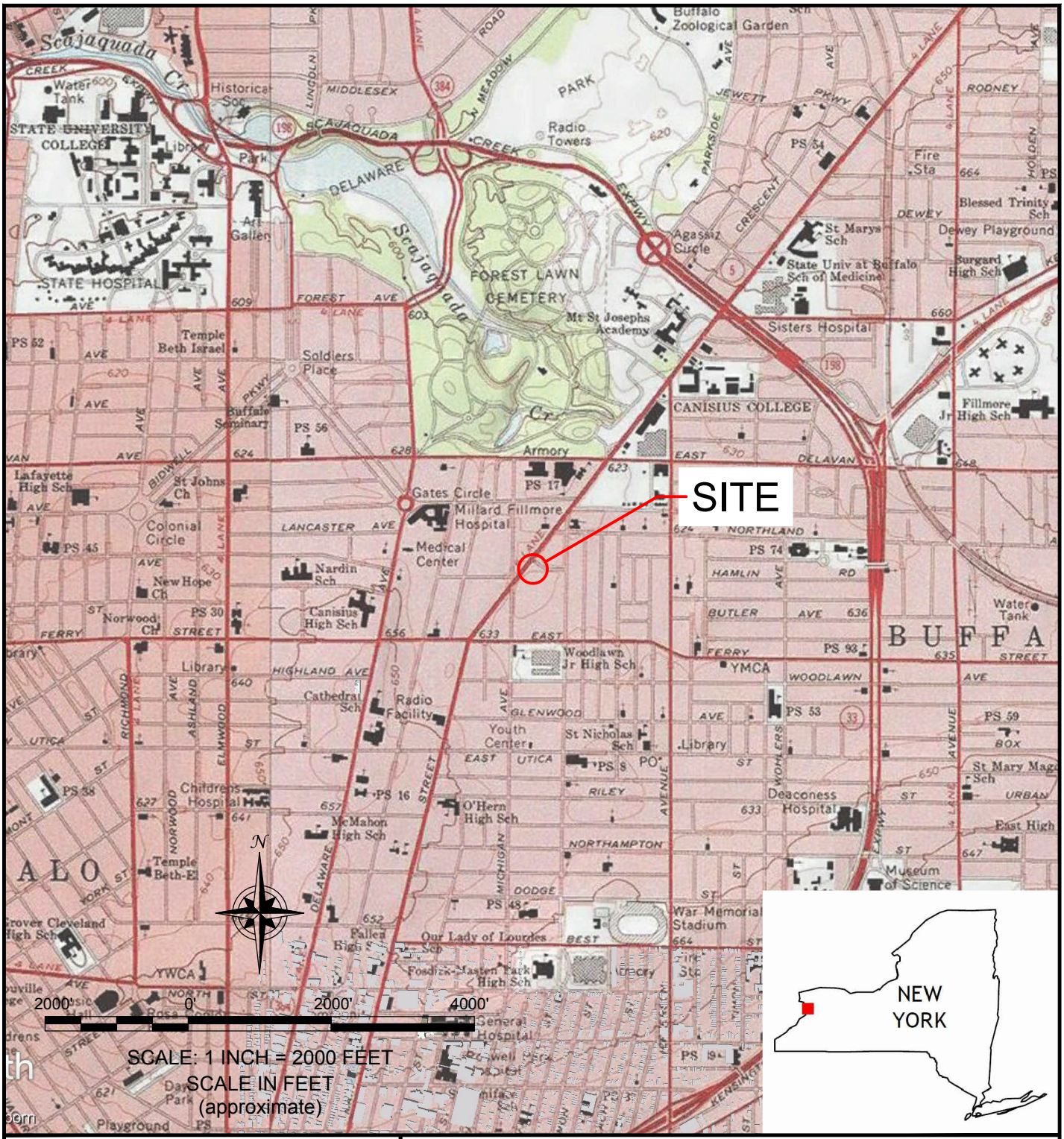
✓ = Alternative satisfies criterion

TBE = To be evaluated following public comment period

FIGURES

F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\RI-IRM-AAR Report\Figure 1 - Site Location and Vicinity Map.dwg

FIGURE 1



BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

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

PROJECT NO.: B0239-016-001

DATE: DECEMBER 2017

DRAFTED BY: CMS

SITE LOCATION AND VICINITY MAP

RI/IRM/AA REPORT

MAIN & EAST BALCOM STREET SITE
BCP SITE NO. C915306
BUFFALO, NEW YORK

PREPARED FOR

1665 MAIN STREET GROUP, LLC

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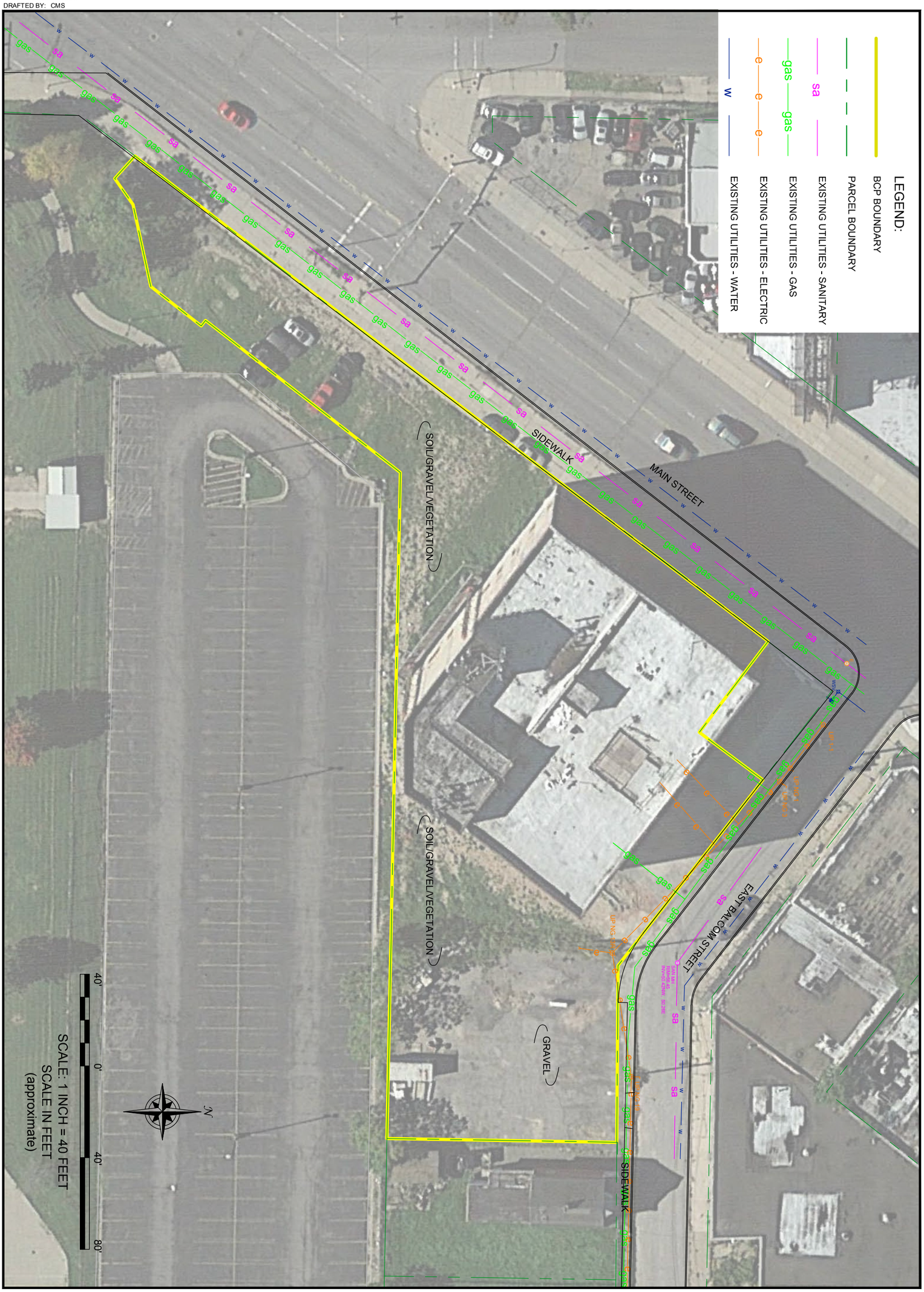
F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\RI-IRM-AAR Report\Figure 2 - Site Plan_Aerial.dwg

DATE: DECEMBER 2017
DRAFTED BY: CMS



SITE PLAN (AERIAL)

FIGURE 2

RI/IRM/AA REPORT

MAIN & EAST BALCOM STREET SITE
BCP SITE NO. C915306
BUFFALO, NEW YORK

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BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

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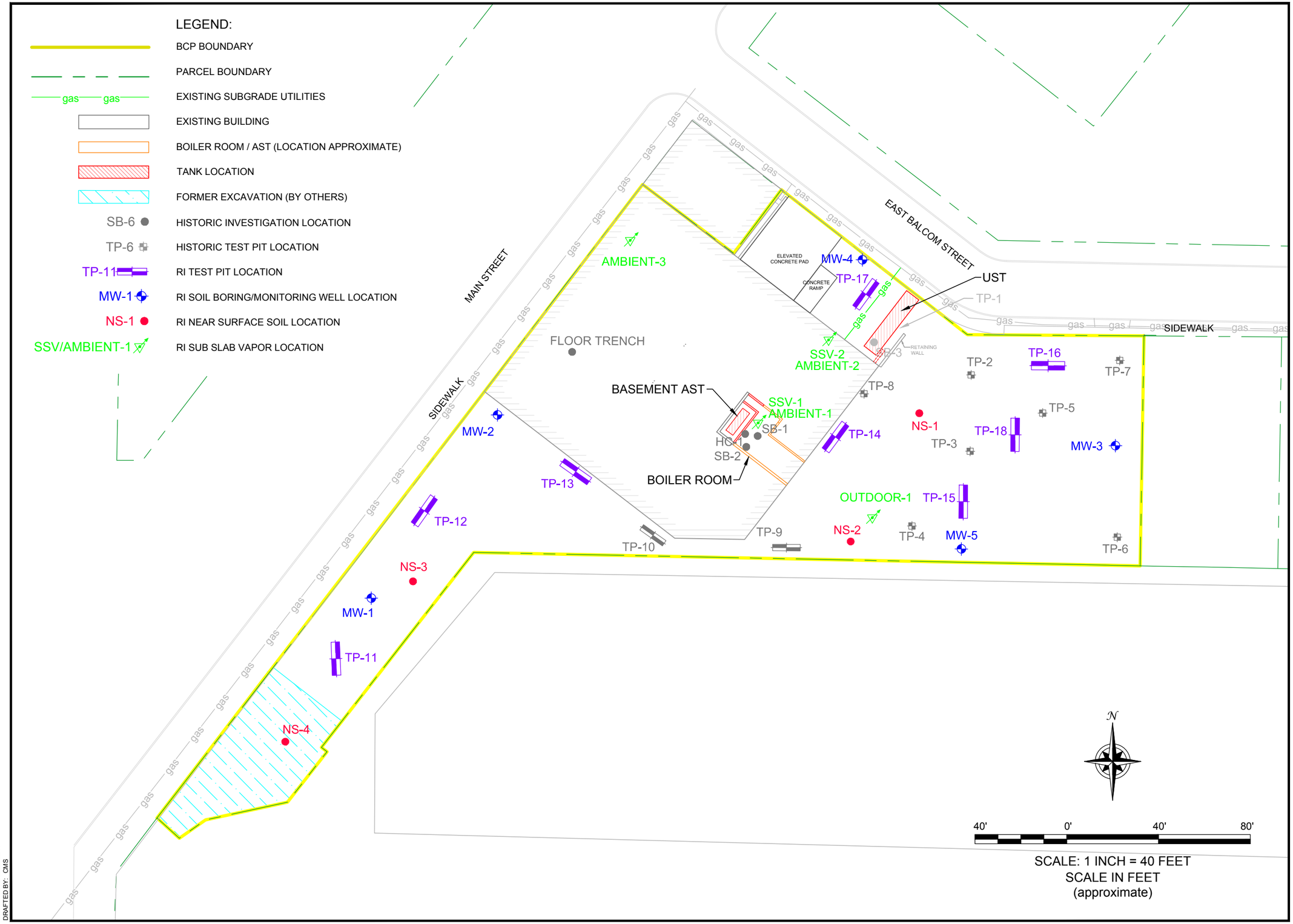
F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\RI-IRM-AAR Report\Figure 3 - Investigation Locations.dwg

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- gas gas — EXISTING SUBGRADE UTILITIES
- EXISTING BUILDING
- BOILER ROOM / AST (LOCATION APPROXIMATE)
- TANK LOCATION
- FORMER EXCAVATION (BY OTHERS)
- SB-6 — HISTORIC INVESTIGATION LOCATION
- TP-6 — HISTORIC TEST PIT LOCATION
- TP-11 — RI TEST PIT LOCATION
- MW-1 — RI SOIL BORING/MONITORING WELL LOCATION
- NS-1 — RI NEAR SURFACE SOIL LOCATION
- SSV/AMBIENT-1 — RI SUB SLAB VAPOR LOCATION



SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

DATE: NOVEMBER 2017
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2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0239-016-001

REMEDIAL INVESTIGATION SAMPLE LOCATIONS

RI/IRM/AA REPORT

MAIN & EAST BALCOM STREET SITE
BCP SITE NO. C915306
BUFFALO, NEW YORK

PREPARED FOR
1665 MAIN STREET GROUP, LLC

FIGURE 3

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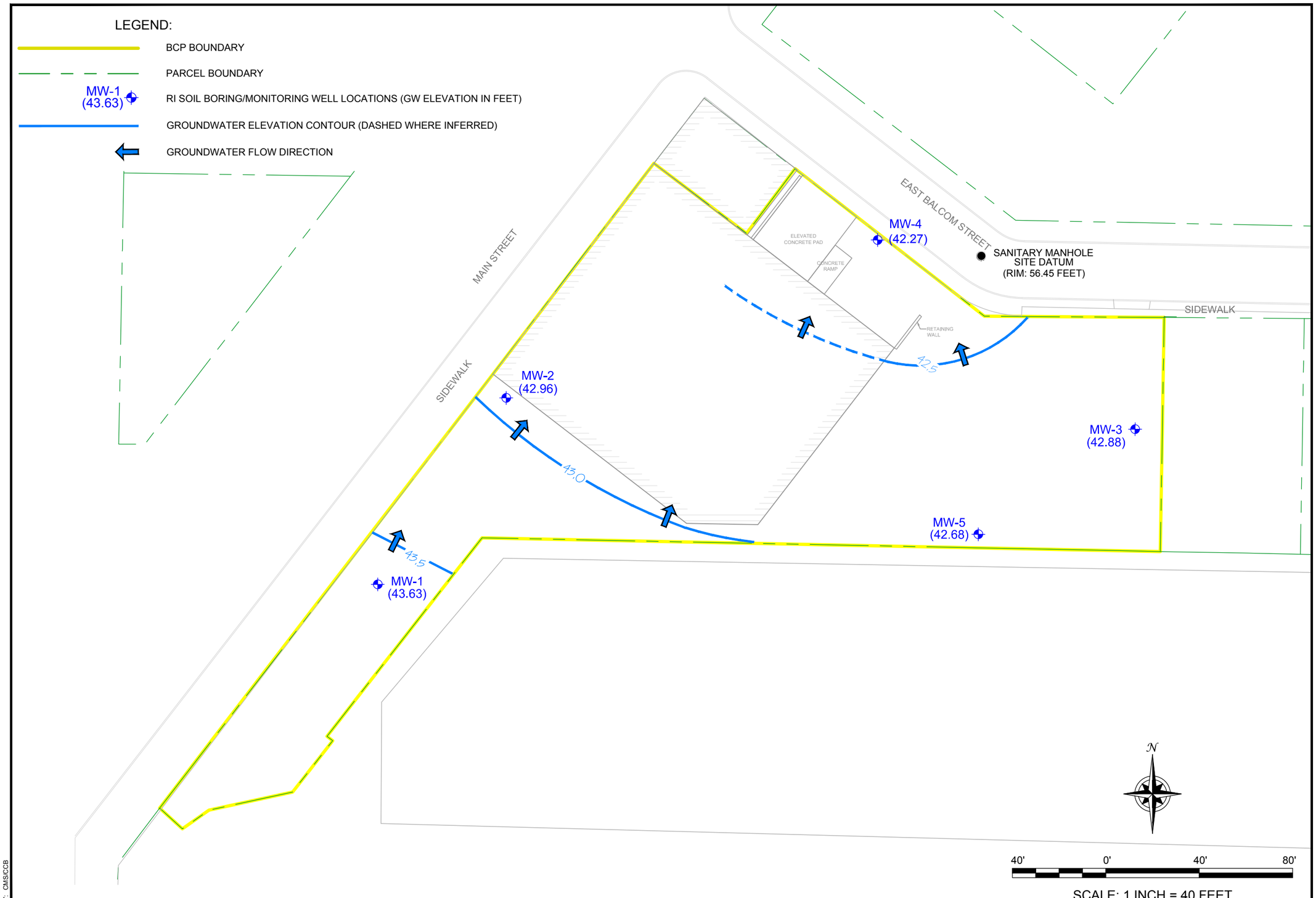
F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\RI-IRM-AAR Report\Figure 4 - Groundwater Isopotential Map.dwg

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- MW-1 (43.63) — RI SOIL BORING/MONITORING WELL LOCATIONS (GW ELEVATION IN FEET)
- GROUNDWATER ELEVATION CONTOUR (DASHED WHERE INFERRED)
- GROUNDWATER FLOW DIRECTION



SCALE: 1 INCH = 40 FEET
SCALE IN FEET
(approximate)

NOTE :
ALL ELEVATIONS ARE FEET RELATIVE TO THE RIM ELEVATION 56.45 FEET OF THE SANITARY MANHOLE LOCATED IN THE CENTER OF EAST BALCOM STREET, ESTABLISHED BY WATTS ARCHITECTURE & ENGINEERING

DATE: APRIL 2018
DRAFTED BY: CMS/CCB

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0239-016-001

GROUNDWATER ISOPOTENTIAL MAP

RI/IRM/AA REPORT

MAIN & EAST BALCOM STREET SITE
BCP SITE NO. C915306
BUFFALO, NEW YORK

PREPARED FOR
1665 MAIN STREET GROUP, LLC

FIGURE 4

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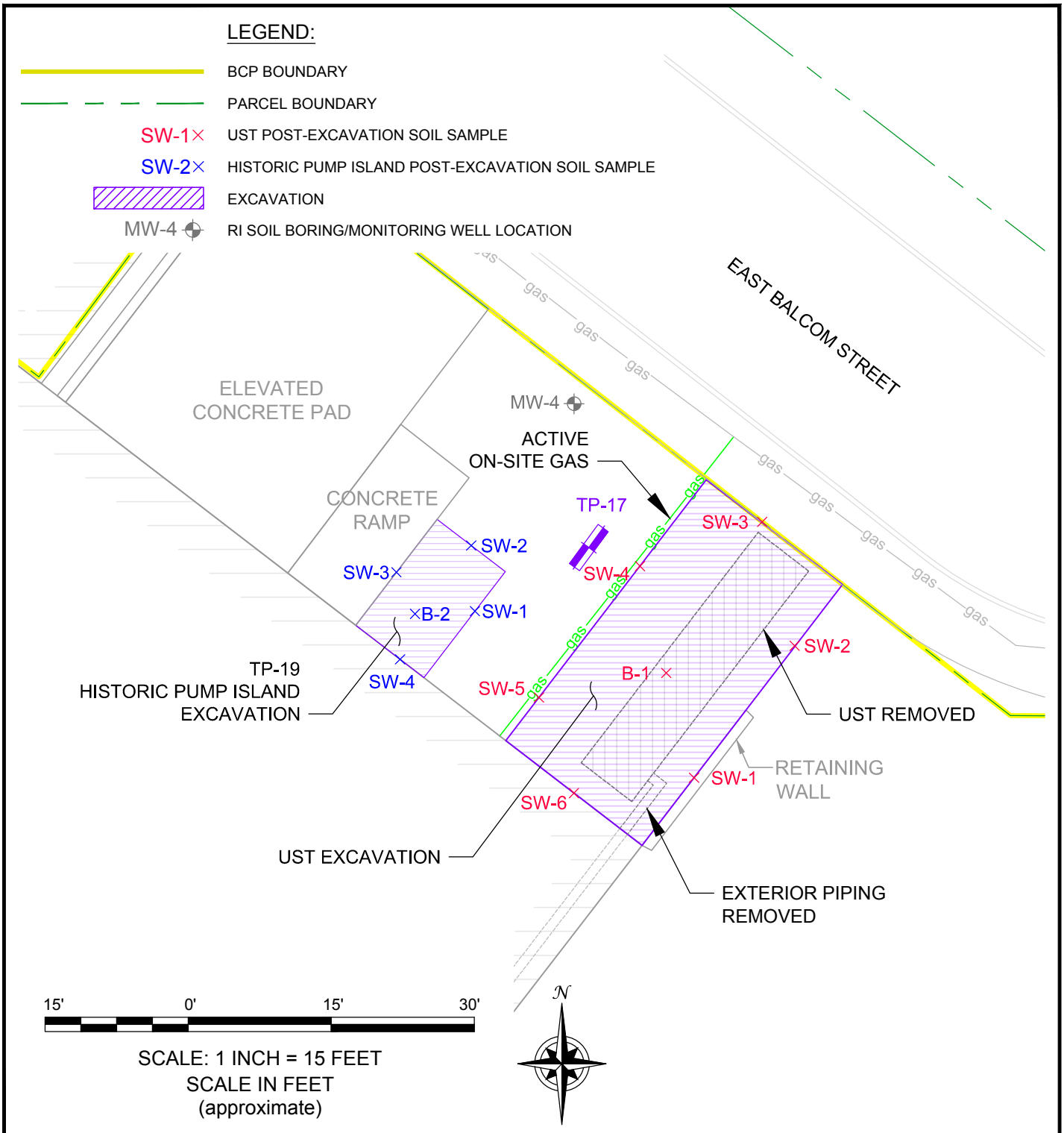
F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\RI-IRM-AAR Report\Figure 5 - UST Interim Remedial Measures.dwg

FIGURE 5



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PROJECT NO.: 0239-016-001

DATE: DECEMBER 2017

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EXTERIOR UST IRM ACTIVITIES

RI/IRM/AA REPORT

MAIN & EAST BALCOM STREET SITE
BCP SITE NO. C915306
BUFFALO, NEW YORK

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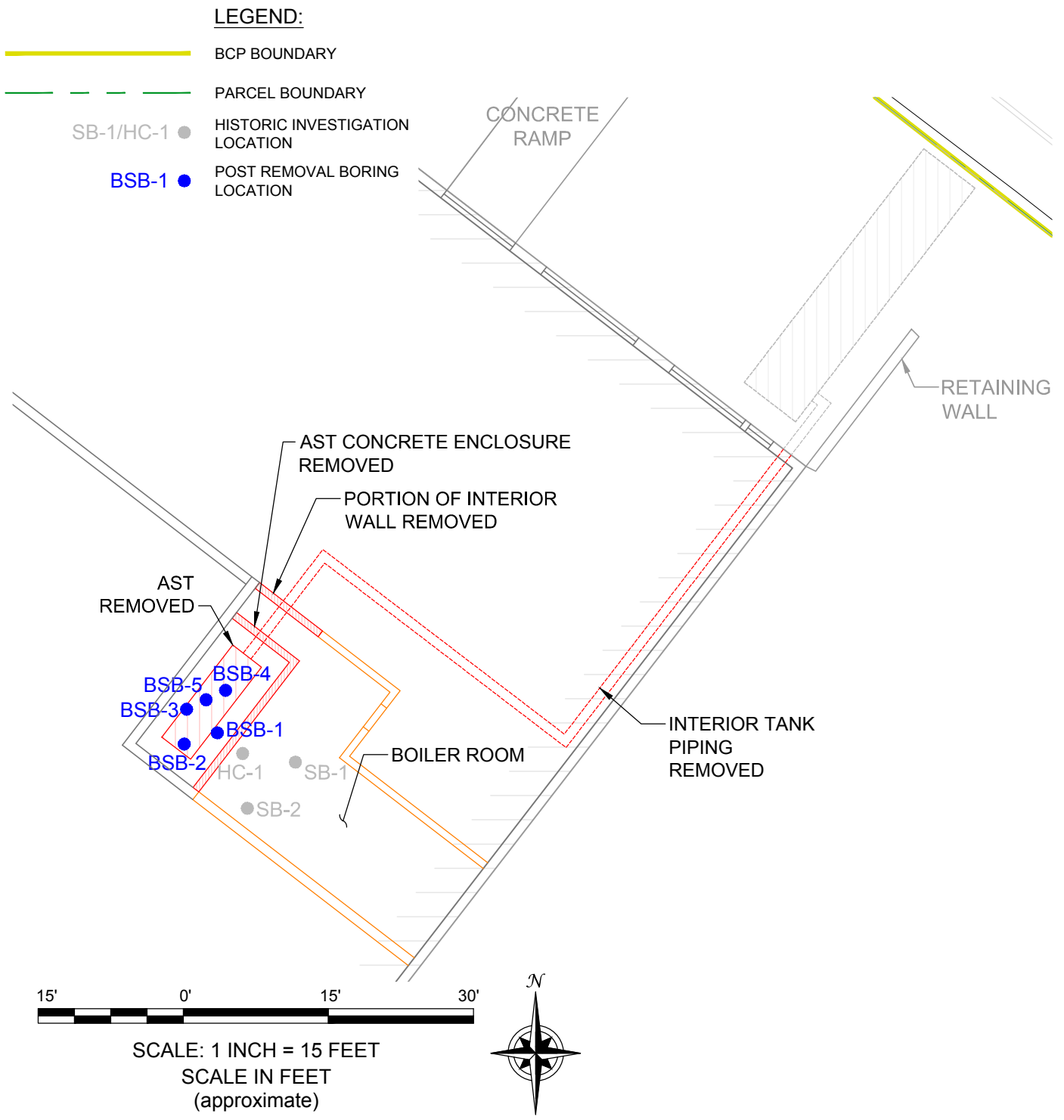
F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\RI-IRM-AAR Report\Figure 6 - AST Interim Remedial Measures.dwg

FIGURE 6



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PROJECT NO.: 0239-016-001

DATE: DECEMBER 2017

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INTERIOR AST IRM ACTIVITIES

RI/IRM/AA REPORT

MAIN & EAST BALCOM STREET SITE
BCP SITE NO. C915306
BUFFALO, NEW YORK

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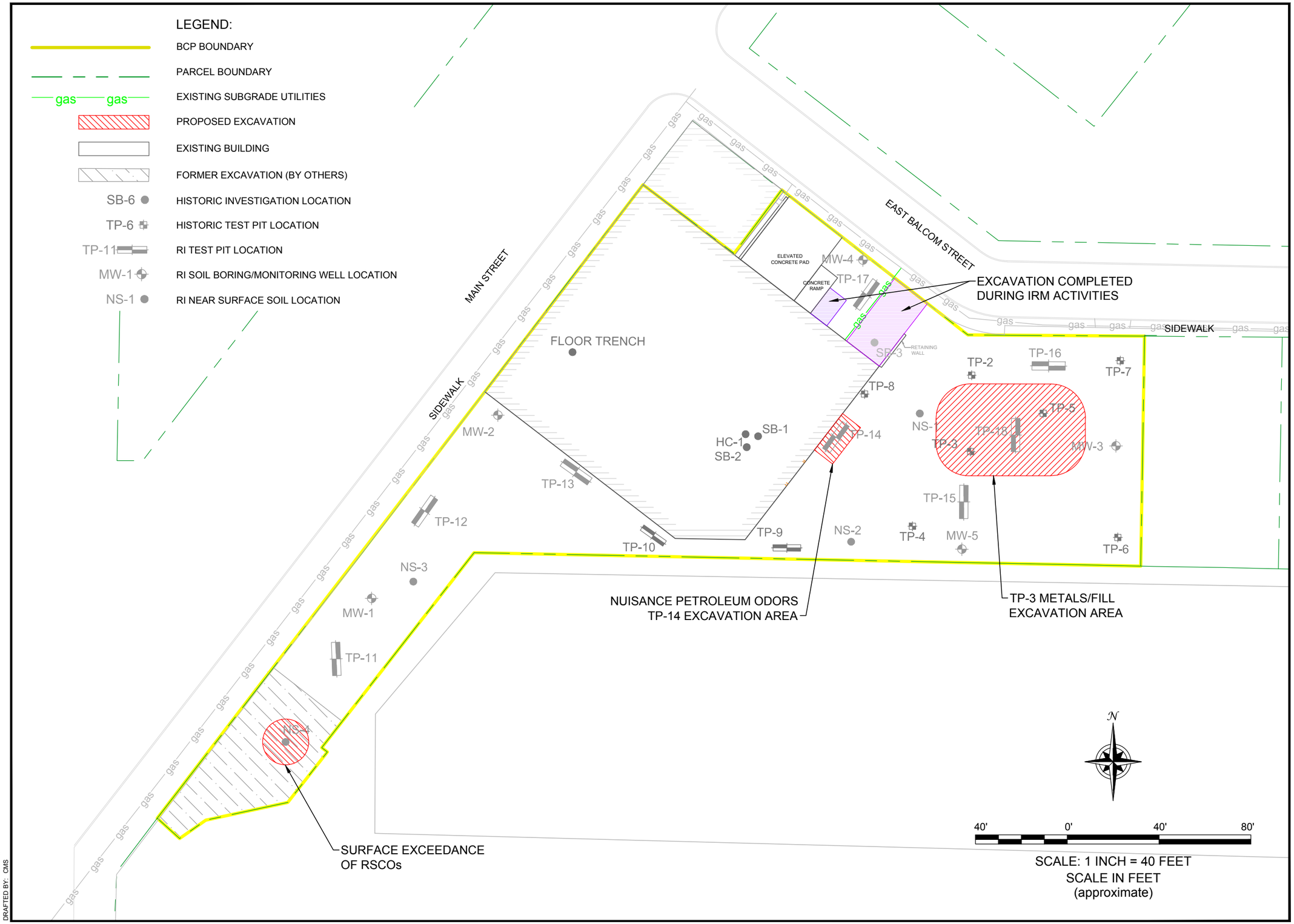
F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\RI-IRM-AAR Report\Figure 7 - Track 4 Restricted Residential Cleanup Alternative.dwg

LEGEND:

- BCP BOUNDARY
- PARCEL BOUNDARY
- EXISTING SUBGRADE UTILITIES
- PROPOSED EXCAVATION
- EXISTING BUILDING
- FORMER EXCAVATION (BY OTHERS)
- SB-6 — HISTORIC INVESTIGATION LOCATION
- TP-6 — HISTORIC TEST PIT LOCATION
- TP-11 — RI TEST PIT LOCATION
- MW-1 — RI SOIL BORING/MONITORING WELL LOCATION
- NS-1 — RI NEAR SURFACE SOIL LOCATION



DATE: NOVEMBER 2017
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TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

JOB NO.: 0239-016-001

TRACK 4 RESTRICTED RESIDENTIAL CLEANUP ALTERNATIVE

RI/IRM/AA REPORT

MAIN & EAST BALCOM STREET SITE
BCP SITE NO. C915306
BUFFALO, NEW YORK

PREPARED FOR
1665 MAIN STREET GROUP, LLC

FIGURE 7

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APPENDIX A

PROJECT PHOTOLOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: RI Test Pit (TP) – TP-14
Photo 2: RI TP – TP-14 soil-fill horizons – grey soils at 9-10'.
Photo 3: RI-TP – TP-15
Photo 4: RI TP - TP-15 (East Balcom parking lot) – fill horizons to 8 ft.

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 5: RI TP – TP-18 (East Balcom parking lot)
Photo 6: RI TP – TP-18 subgrade fill material ranging from 6-8 ft.
Photo 7: RI TP – Representative subgrade fill material East Balcom parking lot.
Photo 8: RI TP – TP-16 fill material.

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

Photo 11:

Photo 12:

Photo 9: RI TP – TP-13 Fill material
Photo 10: RI Near Surface (NS) – NS-3.
Photo 11: RI NS – NS-4 soil-fill horizon (former building demolition backfill).
Photo 12: RI NS – NS-1 Soil-fill.

SITE PHOTOGRAPHS

Photo 13:

Photo 14:

Photo 15:

Photo 16:

Photo 13: RI Soil Boring (SB) – Representative soil boring and well installation (MW-3)
Photo 14: RI SB – Representative soil-fill sample retrieved.
Photo 15: RI MW – Installation of MW-2.
Photo 16: RI MW – Surface finished MW-2.

SITE PHOTOGRAPHS

Photo 17:

Photo 18:

Photo 19:

Photo 20:

Photo 17: RI Soil Vapor Intrusion (SVI) Sampling – Pre-sampling conditions (SSV-2)
Photo 18: RI SVI – SSV-2 with BD.
Photo 19: RI SVI - SSV-1 (note basement sheeting).
Photo 20: RI SVI – SSV-1.

SITE PHOTOGRAPHS

Photo 21:

Photo 22:

Photo 23:

Photo 24:

Photo 21: UST IRM: Excavation and uncovering of UST.
Photo 22: UST IRM: Uncovering UST.
Photo 23: UST IRM: Temporary stockpiling excavation spoils.
Photo 24: UST IRM: Uncovering UST fill and vent lines.

SITE PHOTOGRAPHS

Photo 25:

Photo 26:

Photo 27:

Photo 28:

Photo 25: UST IRM: Vacuuming/Cleaning out UST contents
Photo 26: UST IRM: Removing UST and staging on temporary stockpile.
Photo 27: UST IRM: Cleaning of exterior soils.
Photo 28: UST IRM: Loading for offsite recycling as scrap.

SITE PHOTOGRAPHS

Photo 29:

Photo 30:

Photo 31:

Photo 32:

Photo 29: UST IRM: Excavation of petroleum impacted soil-fill
Photo 30: UST IRM: Excavation of petroleum impacted soil-fill
Photo 31: UST IRM: Excavation of petroleum impacted soil-fill
Photo 32: UST IRM: UST excavation – note active gas line.

SITE PHOTOGRAPHS

Photo 33:

Photo 34:

Photo 35:

Photo 36:

Photo 33: UST IRM: Confirmatory TP-17 – westside of gas line (no impacts)
Photo 34: UST IRM: Confirmatory TP-17 – westside of gas line (no impacts)
Photo 35: UST IRM: Backfilling UST excavation
Photo 36: Pump Island IRM: Excavation of TP-19 in vicinity of suspect pump island.

SITE PHOTOGRAPHS

Photo 37:

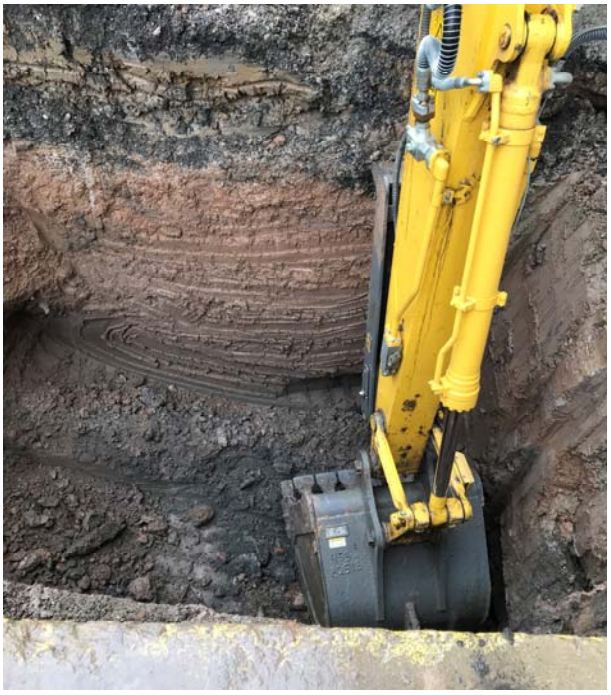


Photo 38:

Photo 39:

Photo 40:

Photo 37: Pump Island IRM: Excavation of petroleum impacts.
Photo 38: Pump Island IRM: Excavation of petroleum impacts
Photo 39: Pump Island IRM: Backfilling Pump Island excavation
Photo 40: UST & Pump Island IRMs: Backfill.

SITE PHOTOGRAPHS

Photo 41:

Photo 42:

Photo 43:

Photo 44:

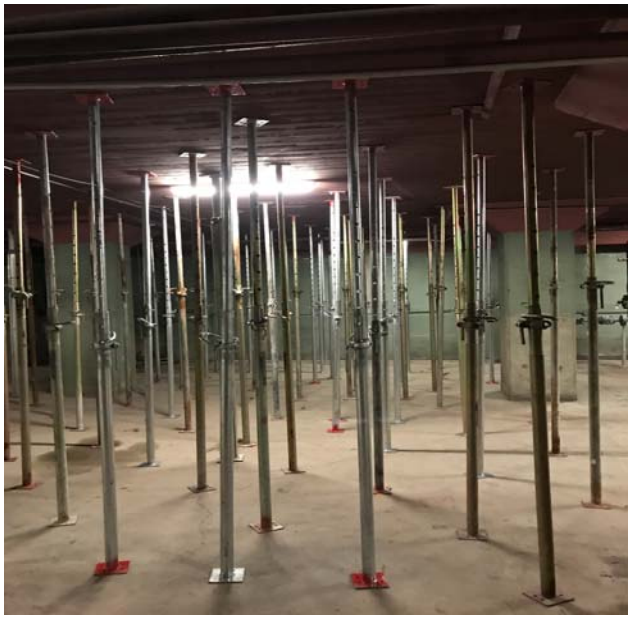


Photo 41: AST IRM: Basement AST within concrete enclosure
Photo 42: AST IRM: Exterior of concrete basement AST enclosure
Photo 43: AST IRM: Post shoring installation
Photo 44: AST IRM: Post shoring installation.

SITE PHOTOGRAPHS

Photo 45:

Photo 46:

Photo 47:

Photo 48:

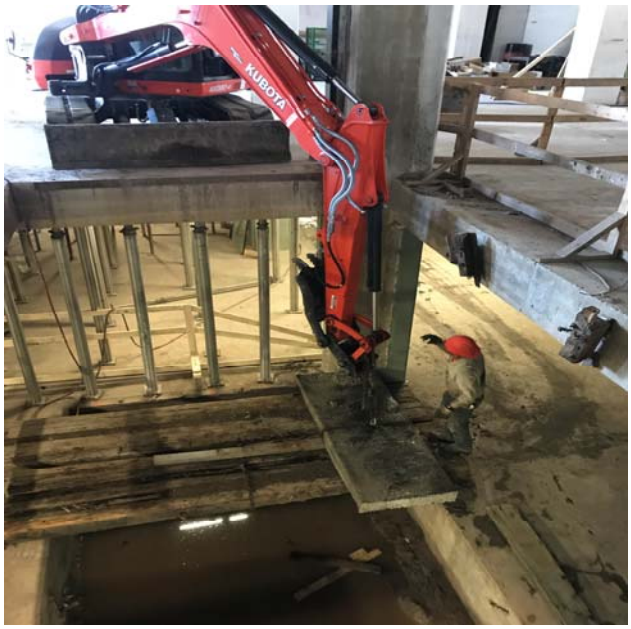


Photo 45: AST IRM: Lowering equipment for AST removal.
Photo 46: AST IRM: Cutting of concrete enclosure.
Photo 47: AST IRM:
Photo 48: AST IRM: Removal of concrete from basement.

SITE PHOTOGRAPHS

Photo 49:

Photo 50:

Photo 51:

Photo 52:

Photo 49: AST IRM: Removal of contents from AST and lines.
Photo 50: AST IRM: Removal of AST
Photo 51: AST IRM: Removal of AST.
Photo 52: AST IRM: Removal of AST from basement.

SITE PHOTOGRAPHS

Photo 53:

Photo 54:

Photo 55:

Photo 56:

Photo 53: AST IRM: AST fill and vent line removal.
Photo 54: AST IRM: Former AST enclosure area (post-removal).
Photo 55: AST IRM: Post-AST Removal subslab confirmatory sampling
Photo 56: AST IRM: Patching concrete floor post-sampling.

APPENDIX B

FIELD BOREHOLE LOGS AND WELL COMPLETION DETAILS

TEST PIT EXCAVATION LOG

Project No: B0239-016-001

Project: Main & East Balcom Street Site

Client: 1665 Main Street Group, LLC

Site Location: Buffalo, NY

Test Pit I.D.: TP-11

Logged By: CCB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Topsoil/Overburden Fill*** Brown/grey, moist, loose when disturbed mostly low plasticity fines, some subrounded gravel, trace fine sand, no odors.		0.0		
	-1.5					
	1.5	***Clay*** Reddish brown, moist, mostly medium plasticity fines, few subrounded gravel, stiff, no odors.		0.0		
5.0				0.0	Sample Collected	
	-8.0			0.0		
	8.0	End of Test Pit				
10.0						

PID VOCs scale: 0 100 300 500 ppm

Excavated By: R.E. Lorenze, Inc.
Excavator Type: Case
Excavation Date(s): 7/18/2017
Comments:

Length: 10
Width: 2
Depth: 8

Depth to Water: None
Visual Impacts: None
Olfactory Observations: None

TEST PIT EXCAVATION LOG

Project No: B0239-016-001 | ***Test Pit I.D.:*** TP-12

Project: Main & East Balcom Street Site | ***Logged By:*** CCB

Client: 1665 Main Street Group, LLC | ***Checked By:***

Site Location: Buffalo, NY

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Topsoil*** Brown, moist, loose when disturbed, mostly low plasticity fines, some fine sand, no odors.		0.0		
	-1.5 / 1.5	***Fill*** Brown/black/grey, moist, loose when disturbed, mostly low to medium plasticity fines, few fine sand, few coarse gravel, trace brick, no odors.				
	-4.5 / 4.5	***Fill with Slag and Ash*** Black, moist, mostly non-plastic fines, some low plasticity fines, some slag, some coarse gravel, few wood, slight sewer odor.		0.3	Sample Collected	
	-6.5 / 6.5	***Fill*** Brown/black/grey, moist, loose when disturbed, mostly low to medium plasticity fines, few fine sand, few coarse gravel, trace brick, no odors.		0.0		
10.0		Building foundation observed at 11 fbgs.				
	-11.0 / 11.0	***Reworked Sandy Clay*** Brown/grey, moist, mostly medium plasticity fines, some fine sand, few subrounded gravel, few brick, no odors.				
	-12.0 / 12.0	***Sandy Clay*** Brown, moist to wet (12.5'), mostly medium plasticity fines, some fine sand, few subrounded gravel, no odors.		0.0		
	-13.0 / 13.0	End of Test Pit				
15.0						

Excavated By: R.E. Lorenze, Inc. | ***Length: 10*** | ***Depth to Water: None***

Excavator Type: Case | ***Width: 2*** | ***Visual Impacts: None***

Excavation Date(s): 7/18/2017 | ***Depth: 13*** | ***Olfactory Observations: Slight Sewer Odor***

Comments:

TEST PIT EXCAVATION LOG

Project No: B0239-016-001

Project: Main & East Balcom Street Site

Client: 1665 Main Street Group, LLC

Site Location: Buffalo, NY

Test Pit I.D.: TP-13

Logged By: CCB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Topsoil/Overburden Fill*** Brown, moist, loose when disturbed mostly low plasticity fines, some subrounded gravel, trace fine sand, no odors.		0.0		
	-2.0					
	2.0	***Reworked Overburden Fill*** Reddish/brown, moist, mostly low to medium plasticity fines, some coarse gravel, no odors.		0.0		
	-4.0					
	4.0	***Fine Sand*** Brown, moist, loose, mostly non-plastic fines, few medium plasticity fines, few coarse gravel, no odors.		0.0	Sample Collected	
5.0						
	-9.0					
	9.0	***Sandy Clay*** Brown, wet (9.5) to moist, mostly medium plasticity fines, some fine sand, few subrounded gravel, trace silt stiff, no odors.		0.0		
10.0						
	-13.0					
	13.0	End of Test Pit		0.0		
15.0						

Excavated By: R.E. Lorenze, Inc.
Excavator Type: Case
Excavation Date(s): 7/18/2017
Comments:

Length: 15
Width: 2
Depth: 13

Depth to Water: None
Visual Impacts: None
Olfactory Observations: None

TEST PIT EXCAVATION LOG

Project No: B0239-016-001
Project: Main & East Balcom Street Site
Client: 1665 Main Street Group, LLC
Site Location: Buffalo, NY

Test Pit I.D.: TP-14
Logged By: CCB
Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Topsoil*** Brown, moist, loose when disturbed, low plasticity fines, trace sand, no odors.		0.0		
	-1.0 1.0	***Fill*** Brown, moist, mostly low to medium plasticity fines, few fine sand, few coarse gravel, trace brick, stiff, no odors.		0.0		
5.0		Sanitary pipe observed at 5.5 fbgs				
	-8.0 8.0	***Grey Sandy Clay*** Grey, moist, mostly medium plasticity fines, little fine sand, stiff, slight petroleum-like odor.		56.0		
	-9.0 9.0	***Reddish Brown Sandy Clay*** Reddish brown, moist to wet (10.75'), mostly medium to high plasticity fines, little fine sand, few subrounded gravel, stiff, slight petroleum-like odor.		105.0	Sample Collected	
10.0	-11.0 11.0	End of Test Pit		0.0		

PID VOCs: 0 | 100 | 300 | 500 ppm

Excavated By: R.E. Lorenze, Inc.
Excavator Type: Case
Excavation Date(s): 7/18/2017
Comments:

Length: 10
Width: 2
Depth: 11

Depth to Water: 10.75 fbgs
Visual Impacts: Slight sheen on water
Olfactory Observations: Sllight Petroleum-like Odor

TEST PIT EXCAVATION LOG

Project No: B0239-016-001

Project: Main & East Balcom Street Site

Client: 1665 Main Street Group, LLC

Site Location: Buffalo, NY

Test Pit I.D.: TP-15

Logged By: CCB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Asphalt and Gravel*** Black/grey, dry, no odors.				
		Overburden Fill Dark brown, moist, mostly low plasticity fines, some well sorted gravel, trace fine sand, no odors.		0.0		
	-1.5 1.5	***Reworked Overburden Fill*** Reddish orange and black, moist, mostly low to medium plasticity fines, some coarse gravel and slag, no odors.		0.0	Sample Collected	
	-3.5 3.5	***Clay*** Reddish brown, moist, mostly medium plasticity fines, few subrounded gravel, stiff, no odors.		0.0		
5.0				0.0		
10.0				0.0		
	-10.5 10.5	End of Test Pit				

PID VOCs: ppm, 0, 100, 300, 500

Excavated By: ***R.E. Lorenze, Inc.***
Excavator Type: ***Case***
Excavation Date(s): ***7/18/2017***
Comments:

Length: ***10***
Width: ***2***
Depth: ***10.5***

Depth to Water: ***None***
Visual Impacts: ***None***
Olfactory Observations: ***None***

TEST PIT EXCAVATION LOG

Project No: B0239-016-001

Project: Main & East Balcom Street Site

Client: 1665 Main Street Group, LLC

Site Location: Buffalo, NY

Test Pit I.D.: TP-16

Logged By: CCB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Overburden Fill*** Grey/brown, moist, loose, ashy, mostly low plasticity fines, some subrounded gravel, trace fine sand, no odors.		0.0	Sample Collected	
	-2.0					
	2.0	***Clay*** Reddish brown, moist, mostly medium plasticity fines, few subrounded gravel, stiff, no odors.		0.0		
5.0						
	-6.5			0.0		
	6.5	End of Test Pit				

PID VOCs ppm: 0 100 300 500

Excavated By: R.E. Lorenze, Inc.
Excavator Type: Case
Excavation Date(s): 7/18/2017
Comments:

Length: 10
Width: 2
Depth: 6.5

Depth to Water: None
Visual Impacts: None
Olfactory Observations: None

TEST PIT EXCAVATION LOG

Project No: B0239-016-001

Project: Main & East Balcom Street Site

Client: 1665 Main Street Group, LLC

Site Location: Buffalo, NY

Test Pit I.D.: TP-18

Logged By: CCB

Checked By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE

Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0 / -0.3 / 0.3	***Asphalt and Gravel*** Black/grey, dry, no odors.				
		Fill Black/ dark brown, moist,very loose when disturbed, ashy mostly low plasticity fines, some brick, some wood, no odors. Likely basment fill from former residence.		0.0		
				0.0		
	-4.5 / 4.5	***Concrete Floor***				
5.0	-5.0 / 5.0	***Clay*** Brown, wet, mostly medium plasticity fines, trace subrounded gravel, no odors.		0.0		
	-6.0 / 6.0	***Clay*** Reddish brown, moist, mostly medium plasticity fines, few subrounded gravel, stiff, no odors.			Sample Collected	
	-9.0 / 9.0	End of Test Pit		0.0		
10.0						

Excavated By: R.E. Lorenze, Inc.
Excavator Type: Case
Excavation Date(s): 7/18/2017
Comments:

Length: 10
Width: 2
Depth: 9

Depth to Water: None
Visual Impacts: None
Olfactory Observations: None

Project No: B0239-016-001

Borehole Number: MW-1

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

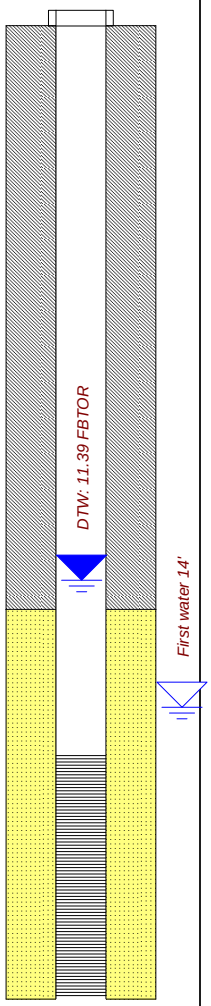
Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
-1.0									
	0.0 / 0.0	Ground Surface							
	0.0	***Fill*** Brown, dry, mostly medium plasticity fines, few fine sand, little well sorted gravel, few brick, few cinders, firm, no odors	1		3		0.0		
4.0			2		4		0.0		
	-8.0 / 8.0	***Sandy Lean Clay*** Reddish brown, moist, mostly medium plasticity fines, little fine sand, trace subrounded gravel, stiff, massive, no odors	3		4		0.0		
9.0									
	-11.0 / 11.0	***Fine Sand*** Tannish brown, moist to wet (14'), mostly fine sand, few medium plasticity fines, medium dense, no odors	4		4		0.0		
14.0									
			5		4		0.0	Sampled (16'-19')	
19.0	-19.0 / 19.0	***Sandy Lean Clay*** Reddish brown, moist, mostly medium plasticity fines, little fine sand, trace subrounded gravel, stiff, massive, no odors							
	-20.0 / 20.0	End of Borehole							



Drilled By: Trec Environmental
Drill Rig Type: Track mounted Geoprobe 6620DT
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 9/18/17

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: MW-2

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

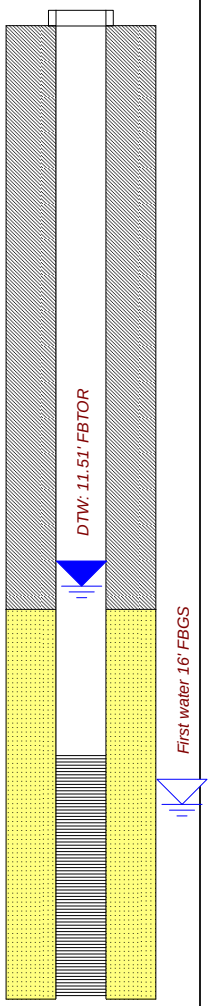
Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 50 – 100)	Lab Sample	Well Completion Details or Remarks
-1.0									
	0.0	Ground Surface							
	0.0	***Fill*** Dark brown, moist, mostly medium plasticity fines, few fine sand, little well sorted gravel, few brick, few cinders, loose when disturbed, no odors	1		.5		0.0		
4.0			2		.5		0.0		
	-8.5 8.5	***Sandy Lean Clay*** Reddish brown, moist, mostly medium plasticity fines, little fine sand, trace subrounded gravel, stiff, massive, no odors	3		3		0.0		
9.0	-11.0 11.0	***Fine Sand*** Tannish brown, moist to wet (16), mostly fine sand, few medium plasticity fines, medium dense, no odors	4		4		0.0		
14.0			5		4		0.0	Sampled (18-20')	
19.0	-20.0 20.0	End of Borehole					0.0		



Drilled By: Trec Environmental
Drill Rig Type: Track mounted Geoprobe 6620DT
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 9/18/17

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: MW-3

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

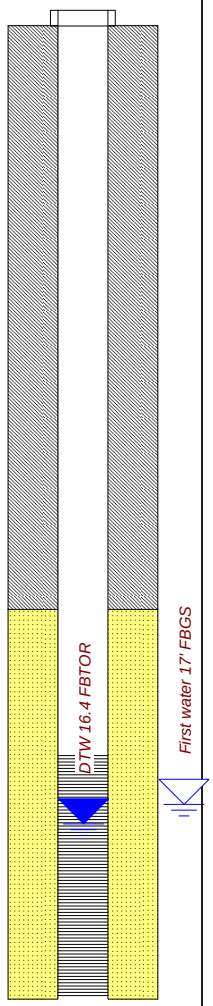
Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
-1.0	0.0	Ground Surface							
	0.0	***Fill*** Black/ tan, moist, mostly slag, asphalt, some subangular gravel, some well graded sand,few cinders , loose when disturbed, no odors	1		.5		0.0		
	-1.0 1.0	***Fill*** Tannish brown, moist, mostly medium plasticity fines, little fine sand,few subangular gravel, appears reworked, loose when distubed, no odors					0.0		
4.0			2		.5		0.0		
	-5.0 5.0	***Sandy Lean Clay*** Reddish brown, moist, mostly medium plasticity fines, little fine sand, trace subrounded gravel, stiff, massive, no odors					0.0		
9.0			3		3		0.0		
							0.0		
							0.0		
14.0			4		4		0.0		
							0.0		
							0.0		
	-17.0 17.0	***Fine Sand*** Tannish brown, moist to wet (17), mostly fine sand, few medium plasticity fines decreasing with depth, medium dense, no odors	5		4		0.0		
19.0							0.0	Sampled (18-20')	
	-20.0 20.0	End of Borehole							



Drilled By: Trec Environmental
Drill Rig Type: Track mounted Geoprobe 6620DT
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 9/19/17

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: MW-4

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

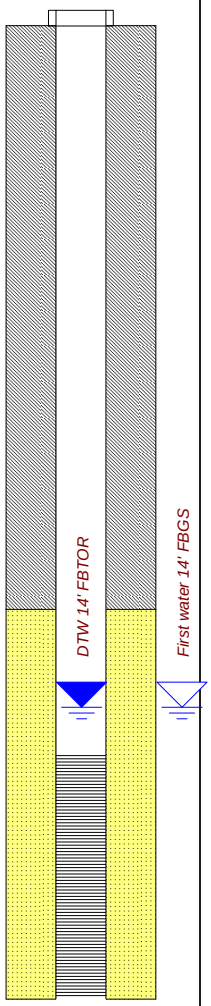
Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm	Lab Sample	Well Completion Details or Remarks
-1.0	0.0	Ground Surface							
	0.0	***Fill*** Black/ tan, moist, mostly asphalt, some subangular gravel, some well graded sand,few cinders , loose when disturbed, no odors							
	-1.0 1.0	***Fill*** Tan, reddish brown, moist, mostly medium plasticity fines, little fine sand,few subangular gravel, few cinders, appears reworked, loose when distubed, no odors	1		3.5		0.0 0.0 0.0 0.0		
4.0	-5.0 5.0	***Sandy Lean Clay*** Reddish brown, moist, mostly medium plasticity fines, little fine sand, trace subrounded gravel, stiff, massive, no odors	2		4		0.0 0.0 0.0 0.0		
9.0			3		4		0.0 0.0 0.0 0.0		
14.0	-14.0 14.0	***Silty Fine Sand*** Tannish brown, moist to wet (14), mostly fine sand, few medium plasticity fines decreasing with depth, medium dense, no odors	4		4		0.0 0.0 0.0 0.0		
19.0	-20.0 20.0	End of Borehole	5		3		0.0 0.0 0.0 0.0	Sampled (18-20')	



Drilled By: Trec Environmental
Drill Rig Type: Track mounted Geoprobe 6620DT
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 11/13/17

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: MW-5

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

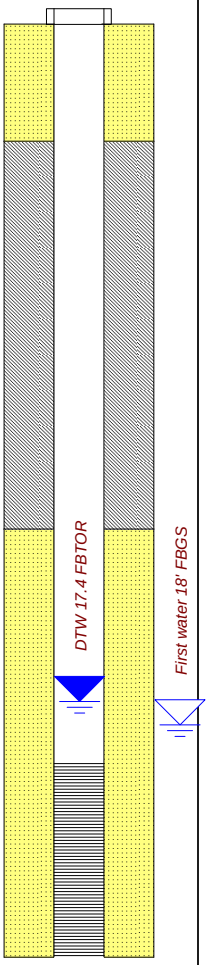
Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

Depth (ftbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
	0.0	Ground Surface							
	0.0	***Fill*** Black/ tan, moist, mostly Well graded sand,some asphalt, some subrounded gravel, some well graded sand,few cinders , loose when disturbed, no odors	1		2		0.0		
	-1.5 / 1.5	***Fill*** Tannish brown, moist, mostly medium plasticity fines, little fine sand,few subangular gravel, appears reworked, loose when distubed, no odors					0.0		
4.0	-4.0 / 4.0	***Reworked Sandy Lean Clay*** Reddish brown, moist, mostly medium plasticity fines, little fine sand, trace subrounded gravel, no odors	2		4		0.0		
							0.0		
							0.0		
9.0	-10.0 / 10.0	***Sandy Lean Clay*** Reddish brown, moist, mostly medium plasticity fines, little fine sand, trace subrounded gravel, stiff, massive, no odors	3		4		0.0		
							0.0		
							0.0		
14.0			4		4		0.0		
							0.0		
							0.0		
	-17.0 / 17.0	***Fine Sand*** Grey, moist to wet (18), mostly fine sand, few medium plasticity fines decreasing with depth, medium dense, no odors	5		4		0.0		
19.0							0.0		
							0.0		
			6		4		0.0	Sampled (20-24')	
							0.0		
							0.0		
24.0	-24.0 / 24.0	End of Borehole							
29.0									



Drilled By: Trec Environmental
Drill Rig Type: Track mounted Geoprobe 6620DT
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 2/8/2018

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: BSB-1

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete***							
	-0.5								
	0.5	***Silty Sand*** Tannish brown, moist to wet (5'), mostly fine sand, few silt, medium dense, petroleum-like odors	1		1.5		75.0, 120.0, 125.0, 130.0	Sampled (1'-2')	
			2		2		100.0, 88.0, 56.0, 50.0		
5.0			3		2		30.0, 17.0		
	-8.0								
	8.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 420M
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 11/13/2017

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: BSB-2

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete***							
	-0.5								
	0.5	***Silty Sand*** Tannish brown with minor black staining, moist to wet (5'), mostly fine sand, few silt, medium dense, Petroleum-like odors	1		2		80.0, 104.0, 108.0	Sampled (1'-2')	
			2		3		140.0, 230.0		
5.0			3		2		170.0, 160.0, 128.0		
	-8.0						105.0		
	8.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 420M
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 11/13/2017

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: BSB-3

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete***							
	-0.5 / 0.5	***Silty Sand*** Tannish brown with minor black staining, moist, mostly fine sand, few silt, medium dense, Petroleum-like odors	1		1		80.0 – 115.0		
	-1.0 / 1.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 420M
Drill Method: Direct Push with 4' Macro-core Sampler
Comments:
Drill Date(s): 11/13/2017

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: BSB-4

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm 0 250 500	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete***							
	-0.5 0.5	***Silty Sand*** Tannish brown with minor black staining, moist, mostly fine sand, few silt, medium dense, Petroleum-like odors	1		2		80.0 125.0 190.0		
	-2.0 2.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 420M
Drill Method: Direct Push with 4' Macro-core Sampler
Comments: Refusal at 2 Fbgs
Drill Date(s): 11/13/2017

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: B0239-016-001

Borehole Number: BSB-5

Project: Main & East Balcom Street Site

A.K.A.:

Client: 1665 Main Street Group. LLC

Logged By: NAS

Site Location: Buffalo NY

Checked By: NTM

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete***							
	-0.5 / 0.5	***Silty Sand*** Tannish brown, moist, mostly fine sand, few silt, medium dense, Petroleum-like odors	1		2		72.0; 80.0; 160.0		
	-2.0 / 2.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 420M
Drill Method: Direct Push with 4' Macro-core Sampler
Comments: Refusal at 2 Fbgs
Drill Date(s): 11/13/2017

Hole Size: 3"
Stick-up: N/A
Datum: Mean Sea Level

Sheet: 1 of 1

APPENDIX C

SOIL VAPOR INTRUSION - INVENTORY AND FIELD LOG

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project: Main & East Balcom Street Site
Job No: B0239-016-001-004-002 (005) For Samples
Location: Buffalo, NY
Field Staff: NAS
Client: Sinatra

SAMPLE I.D.: SSV-1

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:
Ambient Air Temp. - P.M.:
Wind Direction:
Wind Speed:
Precipitation:

Size of Canister: 6L
Canister Serial No.: 2270
Flow Controller No.: ~~0239~~ 0635
Sample Date(s): 2/11 - 2/12/18
Shipping Date:
Sample Type: ☐ Indoor Air ☐ Outdoor Air ☒ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	11:30	-30	2/11/18	NAS
Field Vacuum Check [1]	12:07	-29.48	2/11/18	NAS
Initial Field Vacuum [2]	12:07	-29.47	2/11/18	NAS
Final Field Vacuum [3]	5:46	-8.03	2/12/18	NAS
Duration of Sample Collection	~~[illegible]~~ 17:39			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-29.48	
Final Pressure (~~psia~~) in Hg	-8.03	
Pressurization Gas	Nitrogen	

SUBSLAB SHROUD:

Shroud Helium Concentration: 85
Calculated tubing volume: ~~[illegible]~~ 12 x 3 = 36
Purged Tubing Volume Concentration: 0
Is the purged volume concentration less than or equal to 10% in shroud?
☒ YES, continue sampling
☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed: [signature]

AIR - Air Canister Field Record.xls

Standard Cat B lower detection limit

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project: Main & East Bolivar Street Site
Job No: B0239-016-001
Location: Buffalo, NY
Field Staff: NAS
Client: Sinatra

SAMPLE I.D.: BD

Size of Canister: 6L
Canister Serial No.: ~~2200~~ 2129
Flow Controller No.: ~~0287~~ 0334
Sample Date(s): 2/11/18 - 2/12/18
Shipping Date:
Sample Type: ☐ Indoor Air ☐ Outdoor Air
☒ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:
Ambient Air Temp. - P.M.:
Wind Direction:
Wind Speed:
Precipitation:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	11:20	-30	2/11/18	NAS
Field Vacuum Check [1]	12:07	-29.28	2/11/18	NAS
Initial Field Vacuum [2]	12:07	-29.27	2/11/18	NAS
Final Field Vacuum [3]	5:47	-7.89	2/12/18	NAS
Duration of Sample Collection	~~12:07~~ 17:40			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-29.27	
Final Pressure (~~psia~~) in Hg	-7.84	
Pressurization Gas	Nitrogen	

SUBSLAB SHROUD:

Shroud Helium Concentration: 85
Calculated tubing volume: 12 x 3 = 36
Purged Tubing Volume Concentration: 0
Is the purged volume concentration less than or equal to 10% in shroud?
☒ YES, continue sampling
☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project: Main & East Ballony St. Site
Job No: B0239-014-001-004-002
Location: Buffalo, NY
Field Staff: NAS
Client: Sinatra

SAMPLE I.D.: Ambient-1

Size of Canister: 6L
Canister Serial No.: 649
Flow Controller No.: 0868
Sample Date(s): 2/1/18 - 2/2/18
Shipping Date:
Sample Type: [X] Indoor Air [ ] Outdoor Air
[X] Subslab, complete section below [ ] Soil Gas
Soil Gas Probe Depth:

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:
Ambient Air Temp. - P.M.:
Wind Direction:
Wind Speed:
Precipitation:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	11:20	-30	2/1/18	NAS
Field Vacuum Check [1]	12:09	-29.70	2/1/18	NAS
Initial Field Vacuum [2]	12:09	-29.18	2/1/18	NAS
Final Field Vacuum [3]	5:47	-8.30	2/2/18	NAS
Duration of Sample Collection	17:38			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-29.18	
Final Pressure (psia) IN Hg	-8.30	
Pressurization Gas	Nitrogen	

SUBSLAB SHROUD: N/A

Shroud Helium Concentration:
Calculated tubing volume: x 3 =
Purged Tubing Volume Concentration:
Is the purged volume concentration less than or equal to 10% in shroud?
[ ] YES, continue sampling
[ ] NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project: Main & East Balcom St Site
Job No: B0234-016-001-004-002
Location: Buffalo, NY
Field Staff: NAS
Client: Sinatra

SAMPLE I.D.: SSV-2

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:
Ambient Air Temp. - P.M.:
Wind Direction:
Wind Speed:
Precipitation:

Size of Canister: 6L
Canister Serial No.: 1709
Flow Controller No.: 0037
Sample Date(s): 2/11-2/12/18
Shipping Date:
Sample Type: ☐ Indoor Air ☐ Outdoor Air
☒ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	12:57	-30	2/11/18	NAS
Field Vacuum Check [1]	13:05	-24.71	2/11/18	NAS
Initial Field Vacuum [2]	13:04	-24.70	2/11/18	NAS
Final Field Vacuum [3]	5:50	-11.82	2/12/18	NAS
Duration of Sample Collection	~~10:20~~ 16:44			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-29.70	
Final Pressure (~~psia~~) in Hg	-11.82	
Pressurization Gas	Nitrogen	

SUBSLAB SHROUD:

Shroud Helium Concentration: 80
Calculated tubing volume: 12 x 3 = 36
Purged Tubing Volume Concentration: 0
Is the purged volume concentration less than or equal to 10% in shroud?
☒ YES, continue sampling
☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL
ENGINEERING &
SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project: Main; East Bullock St. Site
Job No: B0234-06-001-004-002
Location: Buffalo, NY
Field Staff: NAS
Client: Sinatra

SAMPLE I.D.: Ambient-2

Size of Canister: 6L
Canister Serial No.: 1780
Flow Controller No.: 0150
Sample Date(s): 2/11/18 - 2/12/18
Shipping Date:
Sample Type: [X] Indoor Air [ ] Outdoor Air
[ ] Subslab, complete section below [ ] Soil Gas
Soil Gas Probe Depth:

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:
Ambient Air Temp. - P.M.:
Wind Direction:
Wind Speed:
Precipitation:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	12:53	-30	2/11/18	NAS
Field Vacuum Check [1]	12:54	-24.06	2/11/18	NAS
Initial Field Vacuum [2]	13:05	-29.02	2/11/18	NAS
Final Field Vacuum [3]	5:44	-11.90	2/12/18	NAS
Duration of Sample Collection	16:44			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-29.02	
Final Pressure (~~psia~~) in Hg	-11.40	
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration: N/A
Calculated tubing volume: x 3 =
Purged Tubing Volume Concentration:
Is the purged volume concentration less than or equal to 10% in shroud?
[X] YES, continue sampling
[ ] NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK
ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project: Main & East Bellcom St site
Job No: B0239-016-OLX-004-002
Location: Buffalo, NY
Field Staff: NAS
Client: Sinatra

SAMPLE I.D.: Ambient-3

Size of Canister: 6L
Canister Serial No.: 2275
Flow Controller No.: 0408
Sample Date(s): 2/11 - 2/12 - 18
Shipping Date: 2/12/18
Sample Type: [X] Indoor Air [ ] Outdoor Air
[ ] Subslab, complete section below [ ] Soil Gas
Soil Gas Probe Depth:

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.:
Ambient Air Temp. - P.M.:
Wind Direction:
Wind Speed:
Precipitation:

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	13:10	-30	2/11/18	NAS
Field Vacuum Check [1]	13:12	-28.98	2/11/18	NAS
Initial Field Vacuum [2]	13:14	-28.95	2/11/18	NAS
Final Field Vacuum [3]	5:43	-13.35	2/12/18	NAS
Duration of Sample Collection		16:29		

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	-28.95	
Final Pressure ~~(psia)~~ In Hg	-13.35	
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration: NA
Calculated tubing volume: x 3 =
Purged Tubing Volume Concentration:
Is the purged volume concentration less than or equal to 10% in shroud?
[X] YES, continue sampling
[ ] NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

AIR CANISTER FIELD RECORD

PROJECT INFORMATION:

Project: Main? East Bayview St Site
Job No: B0234-016-001-004-002
Location: Buffalo, NY
Field Staff: NAS
Client: Sinutra

SAMPLE I.D.: Outdoor-1

Size of Canister: 6L
Canister Serial No.: 1988
Flow Controller No.: 0237
Sample Date(s): 2/11-2/12/18
Shipping Date:
Sample Type: ☐ Indoor Air ☒ Outdoor Air
☐ Subslab, complete section below ☐ Soil Gas
Soil Gas Probe Depth:

WEATHER CONDITIONS:

Ambient Air Temp. - A.M.: 29°
Ambient Air Temp. - P.M.: 36°
Wind Direction: NW mph
Wind Speed: 7 mph
Precipitation: None / Rain

FIELD SAMPLING INFORMATION:

READING	TIME	VACUUM (inches Hg) or PRESSURE (psig)	DATE	INITIALS
Lab Vacuum (on tag)	13:25	-30	2/11/18	NAS
Field Vacuum Check [1]	13:26	-29.72	2/11/18	NAS
Initial Field Vacuum [2]	13:27	-28.64	2/11/18	NAS
Final Field Vacuum [3]	5:50	-13.18	2/12/18	NAS
Duration of Sample Collection	~~16:25~~ 16:23			

LABORATORY CANISTER PRESSURIZATION:

Initial Vacuum (inches Hg and psia)	~~-30~~ -28.64	
Final Pressure (~~psia~~) (in Hg)	13.18	
Pressurization Gas		

SUBSLAB SHROUD:

Shroud Helium Concentration: NA
Calculated tubing volume: x 3 =
Purged Tubing Volume Concentration:
Is the purged volume concentration less than or equal to 10% in shroud?
☒ YES, continue sampling
☐ NO, improve surface seal and retest

COMPOSITE TIME (hours)	FLOW RATE RANGE (ml/min)
15 Min.	316 - 333
0.5 Hours	158 - 166.7
1	79.2 - 83.3
2	39.6 - 41.7
4	19.8 - 20.8
6	13.2 - 13.9
8	9.9 - 10.4
10	7.92 - 8.3
12	6.6 - 6.9
24	3.5 - 4.0

NOTES:

1 Vacuum measured using portable vacuum gauge (provided by Lab)
2 Vacuum measured by canister gauge upon opening valve
3 Vacuum measured by canister gauge prior to closing valve

Signed:

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

Project Name: Main & East Ballom Street site | Project No. B0239-016-001

Project Location: Buffalo, NY | Client: Sinatra

Preparer's Name: Nick Suraci | Date/Time: 2/11/18 9:00

Preparer's Affiliation: Bench Mark EES | Phone No: 716-713-3937

Purpose of Investigation: Remedial Investigation

1. OCCUPANT:

Interviewed: yes (no) N/A

Last Name: First Name:

Address:

County:

Home Phone: Office Phone:

Number of Occupants/persons at this location: Age of Occupants:

2. OWNER OR LANDLORD: (check if same as occupant_____)

Interviewed: yes (no)

Last Name: First Name:

Address:

County:

Home Phone: Office Phone:

3. BUILDING CHARACTERISTICS

Type of Building: check appropriate response)

☒ Residential	☐ School	☒ Commercial/Multi-use
☐ Industrial	☐ Church	☐ Other:

If the property is residential, type? (check appropriate response)

☐ Ranch	☐ 2-Family	☐ 3-Family
☐ Raised Ranch	☐ Split Level	☐ Colonial
☐ Cape Cod	☐ Contemporary	☐ Mobile Home
☐ Duplex	☒ Apartment House	☐ Townhouse/Condo
☐ Modular	☐ Log Home	☐ Other:

If multiple units, how many?

If the property is commercial, type?

Business Type(s):

Does it include residences (i.e., multi-use)? (yes) no If yes, how many?

Other Characteristics:

Number of floors Building age

Is the building insulated? (yes) no How air tight? tight (average) not tight

4. AIR FLOW

Use air current tubes or tracer smoke to evaluate air flow patterns and qualitatively describe:

Airflow between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

5. BASEMENT AND CONSTRUCTION CHARACTERISTICS (check all that apply)

a. Above grade construction:	☐ wood frame	☒ concrete	☐ stone
b. Basement type:	☐ full	☐ crawlspace	☒ slab
c. Basement floor:	☒ concrete	☐ dirt	☐ stone
d. Basement floor:	☒ uncovered	☐ covered	☐ covered with
e. Concreter floor:	☐ unsealed	☐ sealed	☐ sealed with
f. Foundation walls:	☐ poured	☐ block	☐ stone
g. Foundation walls:	☐ unsealed	☐ sealed	☐ sealed with
h. The basement is:	☐ wet	☐ damp	☐ dry
i. The basement is:	☐ finished	☐ unfinished	☐ partially finished
j. Sump present?	☒ yes	☐ no	
k. Water in Sump?	☒ yes	☐ no	☐ not applicable

Basement/Lowest level depth below grade: 10'

Identify potential soil vapor entry points and approximate size (e.g., cracks, utility ports, drains)

6. HEATING, VENTING, and AIR CONDITIONING (check all that apply)

Type of heating system(s) used in this building: (check all that apply - note primary)

- [x] Hot air circulation
- [ ] Heat pump
- [ ] Hot water baseboard
- [x] Space Heaters
- [ ] Steam radiation
- [ ] Radiant floor
- [ ] Electric baseboard
- [ ] Wood stove
- [ ] Outdoor wood boiler
- [ ] Other _____

The primary type of fuel used is:

- [x] Natural Gas
- [ ] Fuel oil
- [ ] Kerosene
- [ ] Electric
- [x] Propane
- [ ] Solar
- [ ] Wood
- [ ] Coal
- [ ] Other _____

Domestic hot water tank fueled by: _____

Boiler/furnace located in:

- [ ] Basement
- [ ] Outdoors
- [ ] Main Floor
- [x] Other Utility Floor / Stairchamber

Air Conditioning:

- [x] Central Air
- [ ] Window units
- [ ] Open Windows
- [ ] None

Are there air distribution ducts present? [x] yes [ ] no

Describe the supply and cold air return ductwork, and its condition where visible, including whether there is a cold air return and the tightness of duct joints. Indicate the locations on the floor plan diagram.

Duct work on other floors

7. OCCUPANCY

Is basement/lowest level occupied? [ ] Full-time [ ] Occaisionally [ ] Seldom [ ] Almost Never

Level	**General Use of Each Floor** (e.g., family room, bedroom, laundry, workshop, storage)
Basement	Storage
First Floor	Commercial
Second Floor	residential
Third Floor	res
Fourth Floor	res

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

a. Is there an attached garage? ☒ yes ☐ no

b. Does the garage have a separate heating unit? ☐ yes ☐ no ☐ NA

c. Are petroleum-powered machines or vehicles stored in the garage? ☒ yes ☐ no ☐ NA
(e.g., lawnmower, atv, car) If yes, please specify: Fork Lift

d. Has the building ever had a fire? ☐ yes ☐ no
If yes, when? _____

e. Is a kerosene or unvented gas space heater present? ☐ yes ☐ no
If yes, where? _____

f. Is there a workshop or hobby/craft area? ☐ yes ☐ no
If yes, where and type? _____

g. Is there smoking in the building? ☒ yes ☐ no
If yes, how frequently? _____

h. Have cleaning products been used recently? ☐ yes ☐ no
If yes, when & type? _____

i. Have cosmetic products been used recently? ☒ yes ☐ no
If yes, when & type? Paint, Primer

j. Has painting/staining been done in the last 6 months? ☒ yes ☐ no
If yes, where & when? _____

k. Is there new carpet, drapes, or other textiles? ☐ yes ☒ no
If yes, where & when? _____

l. Have air fresheners been used recently? ☐ yes ☒ no
If yes, when & type? _____

m. Is there a kitchen exhaust fan? ☐ yes ☒ no
If yes, where vented? _____

n. Is there a bathroom exhaust fan? ☐ yes ☒ no
If yes, where vented? _____

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY (continued)

o. Is there a clothes dryer? ☐ yes ☒ no

If yes, is it vented outside? yes no

p. Has there been a pesticide application? ☐ yes ☒ no

If yes, when & type?

q. Are there odors in the building? ☐ yes ☒ no

If yes, please describe?

r. Do any of the building occupants use solvents at work? ☒ yes ☐ no

(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide application, cosmetologist)

If yes, what types of solvents are used? Paint

If yes, are their clothes washed at work? ☐ yes ☒ no

s. Do any of the building occupants regularly use or work at a dry-cleaning service?

(check appropriate response)

☐ yes, use dry-cleaning regularly (weekly) ☐ no

☐ yes, use dry-cleaning infrequently (monthly or less) ☒ unknown

☐ yes, work at a dry-cleaning service

t. Is there a radon mitigation system for the building/structure? ☐ yes ☒ no

If yes, date of installation?

Is the system active or passive?

9. WATER AND SEWAGE

Water Supply: ☒ Public Water ☐ Drilled Well ☐ Driven Well ☐ Dug Well

☐ Other:

Sewage Disposal: ☒ Public Sewer ☐ Septic Tank ☐ Leach Field ☐ Dry Well

☐ Other:

10. RELOCATION INFORMATION (for oil spill residential emergency)

a. Provide reasons why relocation is recommended:

b. Residents choose to: ☐ remain in home ☐ relocate to friends/family ☐ relocate to hotel/motel

c. Responsibility for costs associated with reimbursement explained? ☐ yes ☐ no

d. Relocation package provided and explained to residents? ☐ yes ☐ no

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

INDOOR AIR QUALITY QUESTIONNAIRE & BUILDING INVENTORY

13. PRODUCT INVENTORY FORM

Make & Model of field instrument used: Mini Rae 3000

List specific products found in the structure that have the potential to affect indoor air quality.

Location	Product Description	Size (units)	Condition [1]	Chemical Ingredients	Field Instrument Reading (units)	Photo (Y/N)
1st Floor	Paint	18-5 gallon cans	UO/U		0	Y
1st Floor	3 gasoline cans - 2 diesel	3-5 gallon cans	U		80	Y
1st Floor	Portland Cement	3 pallets	UO/U		0	Y
1st Floor	Anti Freeze	2 gallons	UO		0	Y
1st Floor	PVC Pipe Glue	30 cans	U/UO		0	Y
1st Floor	Primer 5 buckets	5 gallon	U/UO		0	Y
1st Floor	Gasoline Power Unit	1 portion		gasoline	0	Y
Basement	Oxygen tank	10 gallon	U		0	Y

Notes:

1. Describe the condition of the product containers as **Unopened (UO), Used (U),** or **Deteriorated (D).**
2. Photographs of the **front and back** of product containers can replace the handwritten list of chemical ingredients. However, the photographs must be of good quality and ingredient labels must be legible.

APPENDIX D

LABORATORY ANALYTICAL DATA
(PROVIDED ELECTRONICALLY ON ENCLOSED CD)

ANALYTICAL REPORT

Lab Number:	L1724590
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 225-3314
Project Name:	MAIN & E. BALCOM
Project Number:	0239-016-001
Report Date:	07/25/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1724590-01	TP-14	SOIL	Not Specified	07/18/17 09:40	07/18/17
L1724590-02	NS-1	SOIL	Not Specified	07/18/17 10:00	07/18/17
L1724590-03	TP-15	SOIL	Not Specified	07/18/17 10:40	07/18/17
L1724590-04	TP-18	SOIL	Not Specified	07/18/17 11:30	07/18/17
L1724590-05	TP-16	SOIL	Not Specified	07/18/17 11:50	07/18/17
L1724590-06	NS-2	SOIL	Not Specified	07/18/17 12:30	07/18/17
L1724590-07	TP-13	SOIL	Not Specified	07/18/17 13:15	07/18/17
L1724590-08	BLINDDUP	SOIL	Not Specified	07/18/17 12:00	07/18/17
L1724590-09	TP-12	SOIL	Not Specified	07/18/17 13:50	07/18/17
L1724590-10	TP-11	SOIL	Not Specified	07/18/17 14:45	07/18/17
L1724590-11	NS-3	SOIL	Not Specified	07/18/17 14:30	07/18/17
L1724590-12	NS-4	SOIL	Not Specified	07/18/17 15:00	07/18/17

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590
Project Number: 0239-016-001 **Report Date:** 07/25/17

Case Narrative (continued)

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

Volatile Organics
L1724590-11: Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Semivolatile Organics
L1724590-12: The sample has elevated detection limits due to the dilution required by the sample matrix.
The WG1023759-4/-5 MS/MSD recoveries, performed on L1724590-01, are below the acceptance criteria for 2,4-dinitrophenol (0%/0%) due to the concentration of this compound falling below the reported detection limit.

Herbicides
The WG1023826-2 LCS recovery, associated with L1724590-01, -04, -08, and -11, is below the acceptance criteria for dinoseb (7%); however, the recovery is due to a noted method interference caused by the hydrolysis step of the extraction procedure. The results of the associated samples are reported.
The WG1023826-4/-5 MS/MSD recoveries, performed on L1724590-01, are below the acceptance criteria for dinoseb (6%/2%); however, the recoveries are due to a noted method interference caused by the hydrolysis step of the extraction procedure. The results of the associated samples are reported.

Total Metals
L1724590-01 through -12: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.
The WG1023996-3/-4 MS/MSD recoveries for aluminum (610%/744%), calcium (158%/617%), iron (903%/1540%), magnesium (56%/242%) manganese (MSD 148%), performed on L1724590-01, do not apply because the sample concentrations are greater than four times the spike amounts added.
The WG1023996-3/-4 MS/MSD recoveries, performed on L1724590-01, are outside the acceptance criteria

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590
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Case Narrative (continued)

for antimony (MS 71%), cobalt (MS 72%), lead (MS 74%), nickel (MS 73%), potassium (MSD 126%) and thallium (58%/65%). A post digestion spike was performed and yielded unacceptable recoveries for cobalt (72%), lead (75%), nickel (72%), potassium (57%) and thallium (67%); all other compounds were within acceptance criteria. This has been attributed to sample matrix.

The WG1024082-3/-4 MS/MSD recoveries, performed on L1724590-01, are outside the acceptance criteria for mercury (126%/126%). A post digestion spike was performed and was within acceptance criteria.

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

Authorized Signature: Melissa Cripps

Title: Technical Director/Representative Date: 07/25/17

ORGANICS

VOLATILES

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified

Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/20/17 13:48
Analyst: BD
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.4	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.23	1
Chloroform	ND		ug/kg	1.3	0.31	1
Carbon tetrachloride	ND		ug/kg	0.84	0.29	1
1,2-Dichloropropane	ND		ug/kg	2.9	0.19	1
Dibromochloromethane	ND		ug/kg	0.84	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.26	1
Tetrachloroethene	ND		ug/kg	0.84	0.25	1
Chlorobenzene	ND		ug/kg	0.84	0.29	1
Trichlorofluoromethane	ND		ug/kg	4.2	0.35	1
1,2-Dichloroethane	ND		ug/kg	0.84	0.21	1
1,1,1-Trichloroethane	ND		ug/kg	0.84	0.29	1
Bromodichloromethane	ND		ug/kg	0.84	0.26	1
trans-1,3-Dichloropropene	ND		ug/kg	0.84	0.17	1
cis-1,3-Dichloropropene	ND		ug/kg	0.84	0.19	1
Bromoform	ND		ug/kg	3.4	0.20	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.84	0.25	1
Benzene	ND		ug/kg	0.84	0.16	1
Toluene	ND		ug/kg	1.3	0.16	1
Ethylbenzene	ND		ug/kg	0.84	0.14	1
Chloromethane	ND		ug/kg	4.2	0.37	1
Bromomethane	ND		ug/kg	1.7	0.28	1
Vinyl chloride	ND		ug/kg	1.7	0.26	1
Chloroethane	ND		ug/kg	1.7	0.26	1
1,1-Dichloroethene	ND		ug/kg	0.84	0.31	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.20	1
Trichloroethene	ND		ug/kg	0.84	0.25	1
1,2-Dichlorobenzene	ND		ug/kg	4.2	0.15	1
1,3-Dichlorobenzene	ND		ug/kg	4.2	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	4.2	0.15	1

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified
Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.7	0.13	1
p/m-Xylene	ND		ug/kg	1.7	0.30	1
o-Xylene	ND		ug/kg	1.7	0.28	1
cis-1,2-Dichloroethene	ND		ug/kg	0.84	0.29	1
Styrene	ND		ug/kg	1.7	0.34	1
Dichlorodifluoromethane	ND		ug/kg	8.4	0.42	1
Acetone	5.5	J	ug/kg	8.4	1.9	1
Carbon disulfide	ND		ug/kg	8.4	0.92	1
2-Butanone	ND		ug/kg	8.4	0.58	1
4-Methyl-2-pentanone	ND		ug/kg	8.4	0.20	1
2-Hexanone	ND		ug/kg	8.4	0.56	1
Bromochloromethane	ND		ug/kg	4.2	0.30	1
1,2-Dibromoethane	ND		ug/kg	3.4	0.17	1
n-Butylbenzene	ND		ug/kg	0.84	0.19	1
sec-Butylbenzene	ND		ug/kg	0.84	0.18	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.2	0.33	1
Isopropylbenzene	ND		ug/kg	0.84	0.16	1
p-Isopropyltoluene	ND		ug/kg	0.84	0.17	1
n-Propylbenzene	ND		ug/kg	0.84	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.2	0.21	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.2	0.18	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.2	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.2	0.16	1
Methyl Acetate	ND		ug/kg	17	0.39	1
Cyclohexane	ND		ug/kg	17	0.36	1
1,4-Dioxane	ND		ug/kg	34	12.	1
Freon-113	ND		ug/kg	17	0.43	1
Methyl cyclohexane	ND		ug/kg	3.4	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	**137**	Q	70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	112		70-130

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-03
Client ID: TP-15
Sample Location: Not Specified

Date Collected: 07/18/17 10:40
Date Received: 07/18/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/20/17 15:07
Analyst: BD
Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	13	2.2	1
1,1-Dichloroethane	ND		ug/kg	2.0	0.36	1
Chloroform	ND		ug/kg	2.0	0.49	1
Carbon tetrachloride	ND		ug/kg	1.3	0.46	1
1,2-Dichloropropane	ND		ug/kg	4.7	0.30	1
Dibromochloromethane	ND		ug/kg	1.3	0.24	1
1,1,2-Trichloroethane	ND		ug/kg	2.0	0.42	1
Tetrachloroethene	ND		ug/kg	1.3	0.40	1
Chlorobenzene	ND		ug/kg	1.3	0.46	1
Trichlorofluoromethane	ND		ug/kg	6.7	0.56	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.33	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	0.47	1
Bromodichloromethane	ND		ug/kg	1.3	0.41	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.28	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	0.31	1
Bromoform	ND		ug/kg	5.3	0.32	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	0.40	1
Benzene	ND		ug/kg	1.3	0.26	1
Toluene	ND		ug/kg	2.0	0.26	1
Ethylbenzene	ND		ug/kg	1.3	0.23	1
Chloromethane	ND		ug/kg	6.7	0.58	1
Bromomethane	ND		ug/kg	2.7	0.45	1
Vinyl chloride	ND		ug/kg	2.7	0.42	1
Chloroethane	ND		ug/kg	2.7	0.42	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.50	1
trans-1,2-Dichloroethene	ND		ug/kg	2.0	0.32	1
Trichloroethene	ND		ug/kg	1.3	0.40	1
1,2-Dichlorobenzene	ND		ug/kg	6.7	0.24	1
1,3-Dichlorobenzene	ND		ug/kg	6.7	0.29	1
1,4-Dichlorobenzene	ND		ug/kg	6.7	0.24	1

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-03
Client ID: TP-15
Sample Location: Not Specified
Date Collected: 07/18/17 10:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.7	0.20	1
p/m-Xylene	ND		ug/kg	2.7	0.47	1
o-Xylene	ND		ug/kg	2.7	0.45	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.46	1
Styrene	ND		ug/kg	2.7	0.54	1
Dichlorodifluoromethane	ND		ug/kg	13	0.67	1
Acetone	4.8	J	ug/kg	13	3.0	1
Carbon disulfide	ND		ug/kg	13	1.5	1
2-Butanone	ND		ug/kg	13	0.92	1
4-Methyl-2-pentanone	ND		ug/kg	13	0.32	1
2-Hexanone	ND		ug/kg	13	0.89	1
Bromochloromethane	ND		ug/kg	6.7	0.48	1
1,2-Dibromoethane	ND		ug/kg	5.3	0.26	1
n-Butylbenzene	ND		ug/kg	1.3	0.30	1
sec-Butylbenzene	ND		ug/kg	1.3	0.29	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.7	0.53	1
Isopropylbenzene	ND		ug/kg	1.3	0.26	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.27	1
n-Propylbenzene	ND		ug/kg	1.3	0.29	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.7	0.34	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.7	0.29	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.7	0.22	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.7	0.25	1
Methyl Acetate	ND		ug/kg	27	0.62	1
Cyclohexane	ND		ug/kg	27	0.58	1
1,4-Dioxane	ND		ug/kg	53	19.	1
Freon-113	ND		ug/kg	27	0.69	1
Methyl cyclohexane	ND		ug/kg	5.3	0.32	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	105		70-130

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified

Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/20/17 15:34
Analyst: BD
Percent Solids: 85%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.5	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.26	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.95	0.33	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.22	1
Dibromochloromethane	ND		ug/kg	0.95	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.30	1
Tetrachloroethene	ND		ug/kg	0.95	0.29	1
Chlorobenzene	ND		ug/kg	0.95	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.40	1
1,2-Dichloroethane	ND		ug/kg	0.95	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.95	0.33	1
Bromodichloromethane	ND		ug/kg	0.95	0.29	1
trans-1,3-Dichloropropene	ND		ug/kg	0.95	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.95	0.22	1
Bromoform	ND		ug/kg	3.8	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.95	0.28	1
Benzene	ND		ug/kg	0.95	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.95	0.16	1
Chloromethane	ND		ug/kg	4.8	0.42	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.95	0.35	1
trans-1,2-Dichloroethene	ND		ug/kg	1.4	0.23	1
Trichloroethene	ND		ug/kg	0.95	0.29	1
1,2-Dichlorobenzene	ND		ug/kg	4.8	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	4.8	0.17	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04 Date Collected: 07/18/17 11:30

Client ID: TP-18 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.95	0.32	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.5	0.48	1
Acetone	ND		ug/kg	9.5	2.2	1
Carbon disulfide	ND		ug/kg	9.5	1.0	1
2-Butanone	ND		ug/kg	9.5	0.66	1
4-Methyl-2-pentanone	ND		ug/kg	9.5	0.23	1
2-Hexanone	ND		ug/kg	9.5	0.63	1
Bromochloromethane	ND		ug/kg	4.8	0.34	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
n-Butylbenzene	ND		ug/kg	0.95	0.22	1
sec-Butylbenzene	ND		ug/kg	0.95	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.8	0.38	1
Isopropylbenzene	ND		ug/kg	0.95	0.18	1
p-Isopropyltoluene	ND		ug/kg	0.95	0.19	1
n-Propylbenzene	ND		ug/kg	0.95	0.20	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.8	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.8	0.20	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.8	0.15	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.8	0.18	1
Methyl Acetate	ND		ug/kg	19	0.44	1
Cyclohexane	ND		ug/kg	19	0.41	1
1,4-Dioxane	ND		ug/kg	38	14.	1
Freon-113	ND		ug/kg	19	0.49	1
Methyl cyclohexane	ND		ug/kg	3.8	0.23	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	113		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	103		70-130

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-07
Client ID: TP-13
Sample Location: Not Specified

Date Collected: 07/18/17 13:15
Date Received: 07/18/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/20/17 16:00
Analyst: BD
Percent Solids: 86%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.8	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.29	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.1	0.36	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.1	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.32	1
Chlorobenzene	ND		ug/kg	1.1	0.37	1
Trichlorofluoromethane	ND		ug/kg	5.3	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.37	1
Bromodichloromethane	ND		ug/kg	1.1	0.33	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.24	1
Bromoform	ND		ug/kg	4.2	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.32	1
Benzene	ND		ug/kg	1.1	0.20	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.18	1
Chloromethane	ND		ug/kg	5.3	0.46	1
Bromomethane	ND		ug/kg	2.1	0.36	1
Vinyl chloride	ND		ug/kg	2.1	0.33	1
Chloroethane	ND		ug/kg	2.1	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.39	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.26	1
Trichloroethene	ND		ug/kg	1.1	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	5.3	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.3	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	5.3	0.19	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-07 Date Collected: 07/18/17 13:15

Client ID: TP-13 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.37	1
o-Xylene	ND		ug/kg	2.1	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.36	1
Styrene	ND		ug/kg	2.1	0.42	1
Dichlorodifluoromethane	ND		ug/kg	11	0.53	1
Acetone	12		ug/kg	11	2.4	1
Carbon disulfide	1.4	J	ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.73	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
2-Hexanone	ND		ug/kg	11	0.71	1
Bromochloromethane	ND		ug/kg	5.3	0.38	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.21	1
n-Butylbenzene	ND		ug/kg	1.1	0.24	1
sec-Butylbenzene	ND		ug/kg	1.1	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	0.42	1
Isopropylbenzene	ND		ug/kg	1.1	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.21	1
n-Propylbenzene	ND		ug/kg	1.1	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.3	0.27	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.3	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.3	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.3	0.20	1
Methyl Acetate	ND		ug/kg	21	0.49	1
Cyclohexane	ND		ug/kg	21	0.46	1
1,4-Dioxane	ND		ug/kg	42	15.	1
Freon-113	ND		ug/kg	21	0.54	1
Methyl cyclohexane	ND		ug/kg	4.2	0.25	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	110		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	102		70-130

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified

Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/20/17 16:26
Analyst: BD
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.8	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.29	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.1	0.37	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.1	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.32	1
Chlorobenzene	ND		ug/kg	1.1	0.37	1
Trichlorofluoromethane	ND		ug/kg	5.3	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.37	1
Bromodichloromethane	ND		ug/kg	1.1	0.33	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.24	1
Bromoform	ND		ug/kg	4.2	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.32	1
Benzene	ND		ug/kg	1.1	0.20	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.18	1
Chloromethane	ND		ug/kg	5.3	0.46	1
Bromomethane	ND		ug/kg	2.1	0.36	1
Vinyl chloride	ND		ug/kg	2.1	0.33	1
Chloroethane	ND		ug/kg	2.1	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.40	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.26	1
Trichloroethene	ND		ug/kg	1.1	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	5.3	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.3	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	5.3	0.19	1

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified
Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.37	1
o-Xylene	ND		ug/kg	2.1	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.36	1
Styrene	ND		ug/kg	2.1	0.42	1
Dichlorodifluoromethane	ND		ug/kg	11	0.53	1
Acetone	ND		ug/kg	11	2.4	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.73	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
2-Hexanone	ND		ug/kg	11	0.71	1
Bromochloromethane	ND		ug/kg	5.3	0.38	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.21	1
n-Butylbenzene	ND		ug/kg	1.1	0.24	1
sec-Butylbenzene	ND		ug/kg	1.1	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	0.42	1
Isopropylbenzene	ND		ug/kg	1.1	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.21	1
n-Propylbenzene	ND		ug/kg	1.1	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.3	0.27	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.3	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.3	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.3	0.20	1
Methyl Acetate	ND		ug/kg	21	0.49	1
Cyclohexane	ND		ug/kg	21	0.46	1
1,4-Dioxane	ND		ug/kg	42	15.	1
Freon-113	ND		ug/kg	21	0.54	1
Methyl cyclohexane	ND		ug/kg	4.2	0.25	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	107		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	107		70-130

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified

Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 07/23/17 17:10
Analyst: MV
Percent Solids: 88%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.8	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.30	1
Chloroform	ND		ug/kg	1.6	0.41	1
Carbon tetrachloride	ND		ug/kg	1.1	0.38	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.25	1
Dibromochloromethane	ND		ug/kg	1.1	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.33	1
Chlorobenzene	ND		ug/kg	1.1	0.38	1
Trichlorofluoromethane	ND		ug/kg	5.5	0.46	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.27	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.38	1
Bromodichloromethane	ND		ug/kg	1.1	0.34	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.23	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.25	1
Bromoform	ND		ug/kg	4.4	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.33	1
Benzene	ND		ug/kg	1.1	0.21	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.19	1
Chloromethane	ND		ug/kg	5.5	0.48	1
Bromomethane	ND		ug/kg	2.2	0.37	1
Vinyl chloride	ND		ug/kg	2.2	0.34	1
Chloroethane	ND		ug/kg	2.2	0.35	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.41	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.26	1
Trichloroethene	ND		ug/kg	1.1	0.33	1
1,2-Dichlorobenzene	ND		ug/kg	5.5	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	5.5	0.24	1
1,4-Dichlorobenzene	ND		ug/kg	5.5	0.20	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11 Date Collected: 07/18/17 14:30

Client ID: NS-3 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.2	0.17	1
p/m-Xylene	ND		ug/kg	2.2	0.38	1
o-Xylene	ND		ug/kg	2.2	0.37	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.38	1
Styrene	ND		ug/kg	2.2	0.44	1
Dichlorodifluoromethane	ND		ug/kg	11	0.55	1
Acetone	ND		ug/kg	11	2.5	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.76	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.27	1
2-Hexanone	ND		ug/kg	11	0.73	1
Bromochloromethane	ND		ug/kg	5.5	0.39	1
1,2-Dibromoethane	ND		ug/kg	4.4	0.22	1
n-Butylbenzene	ND		ug/kg	1.1	0.25	1
sec-Butylbenzene	ND		ug/kg	1.1	0.24	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.5	0.43	1
Isopropylbenzene	ND		ug/kg	1.1	0.21	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.22	1
n-Propylbenzene	ND		ug/kg	1.1	0.24	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.5	0.28	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.5	0.24	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.5	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.5	0.20	1
Methyl Acetate	ND		ug/kg	22	0.51	1
Cyclohexane	ND		ug/kg	22	0.48	1
1,4-Dioxane	ND		ug/kg	44	16.	1
Freon-113	ND		ug/kg	22	0.56	1
Methyl cyclohexane	ND		ug/kg	4.4	0.26	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	90		70-130
Dibromofluoromethane	100		70-130

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/20/17 08:58
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01,03-04,07-08 Batch: WG1024239-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	0.55	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/20/17 08:58
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01,03-04,07-08 Batch: WG1024239-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	3.1	J	ug/kg	10	2.3
Carbon disulfide	8.3	J	ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/20/17 08:58
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01,03-04,07-08 Batch: WG1024239-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	101		70-130
Dibromofluoromethane	104		70-130

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/23/17 10:15
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1025127-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/23/17 10:15
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1025127-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 07/23/17 10:15
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 11 Batch: WG1025127-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	111		70-130
Toluene-d8	100		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab	Associated sample(s):		01,03-04,07-08	Batch:	WG1024239-3	WG1024239-4		
Methylene chloride	93		96		70-130	3		30
1,1-Dichloroethane	97		96		70-130	1		30
Chloroform	92		97		70-130	5		30
Carbon tetrachloride	103		104		70-130	1		30
1,2-Dichloropropane	96		97		70-130	1		30
Dibromochloromethane	95		97		70-130	2		30
1,1,2-Trichloroethane	97		98		70-130	1		30
Tetrachloroethene	101		101		70-130	0		30
Chlorobenzene	98		100		70-130	2		30
Trichlorofluoromethane	92		92		70-139	0		30
1,2-Dichloroethane	94		96		70-130	2		30
1,1,1-Trichloroethane	102		101		70-130	1		30
Bromodichloromethane	96		99		70-130	3		30
trans-1,3-Dichloropropene	98		102		70-130	4		30
cis-1,3-Dichloropropene	92		90		70-130	2		30
Bromoform	92		93		70-130	1		30
1,1,2,2-Tetrachloroethane	96		92		70-130	4		30
Benzene	94		96		70-130	2		30
Toluene	102		101		70-130	1		30
Ethylbenzene	102		104		70-130	2		30
Chloromethane	85		85		52-130	0		30
Bromomethane	84		87		57-147	4		30
Vinyl chloride	97		97		67-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab	Associated sample(s):		01,03-04,07-08	Batch:	WG1024239-3	WG1024239-4		
Chloroethane	88		88		50-151	0		30
1,1-Dichloroethene	90		90		65-135	0		30
trans-1,2-Dichloroethene	92		92		70-130	0		30
Trichloroethene	99		99		70-130	0		30
1,2-Dichlorobenzene	99		97		70-130	2		30
1,3-Dichlorobenzene	99		99		70-130	0		30
1,4-Dichlorobenzene	97		99		70-130	2		30
Methyl tert butyl ether	88		88		66-130	0		30
p/m-Xylene	100		102		70-130	2		30
o-Xylene	99		100		70-130	1		30
cis-1,2-Dichloroethene	92		93		70-130	1		30
Styrene	98		99		70-130	1		30
Dichlorodifluoromethane	84		83		30-146	1		30
Acetone	104		101		54-140	3		30
Carbon disulfide	62		61		59-130	2		30
2-Butanone	75		82		70-130	9		30
4-Methyl-2-pentanone	96		94		70-130	2		30
2-Hexanone	92		89		70-130	3		30
Bromochloromethane	85		90		70-130	6		30
1,2-Dibromoethane	95		96		70-130	1		30
n-Butylbenzene	105		105		70-130	0		30
sec-Butylbenzene	106		103		70-130	3		30
1,2-Dibromo-3-chloropropane	84		84		68-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,07-08 Batch: WG1024239-3 WG1024239-4								
Isopropylbenzene	106		105		70-130	1		30
p-Isopropyltoluene	103		104		70-130	1		30
n-Propylbenzene	106		107		70-130	1		30
1,2,3-Trichlorobenzene	95		95		70-130	0		30
1,2,4-Trichlorobenzene	100		98		70-130	2		30
1,3,5-Trimethylbenzene	106		106		70-130	0		30
1,2,4-Trimethylbenzene	103		106		70-130	3		30
Methyl Acetate	89		88		51-146	1		30
Cyclohexane	101		104		59-142	3		30
1,4-Dioxane	103		94		65-136	9		30
Freon-113	96		95		50-139	1		30
Methyl cyclohexane	103		101		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	107		106		70-130
Toluene-d8	110		108		70-130
4-Bromofluorobenzene	108		107		70-130
Dibromofluoromethane	103		100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1025127-3 WG1025127-4								
Methylene chloride	102		99		70-130	3		30
1,1-Dichloroethane	109		102		70-130	7		30
Chloroform	105		101		70-130	4		30
Carbon tetrachloride	103		96		70-130	7		30
1,2-Dichloropropane	109		103		70-130	6		30
Dibromochloromethane	100		98		70-130	2		30
1,1,2-Trichloroethane	112		109		70-130	3		30
Tetrachloroethene	107		101		70-130	6		30
Chlorobenzene	104		98		70-130	6		30
Trichlorofluoromethane	**165**	Q	**153**	Q	70-139	8		30
1,2-Dichloroethane	111		106		70-130	5		30
1,1,1-Trichloroethane	107		100		70-130	7		30
Bromodichloromethane	104		100		70-130	4		30
trans-1,3-Dichloropropene	99		96		70-130	3		30
cis-1,3-Dichloropropene	101		98		70-130	3		30
Bromoform	84		86		70-130	2		30
1,1,2,2-Tetrachloroethane	112		110		70-130	2		30
Benzene	107		102		70-130	5		30
Toluene	107		102		70-130	5		30
Ethylbenzene	110		105		70-130	5		30
Chloromethane	86		84		52-130	2		30
Bromomethane	130		117		57-147	11		30
Vinyl chloride	126		119		67-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1025127-3 WG1025127-4								
Chloroethane	**179**	Q	**167**	Q	50-151	7		30
1,1-Dichloroethene	129		121		65-135	6		30
trans-1,2-Dichloroethene	99		91		70-130	8		30
Trichloroethene	110		99		70-130	11		30
1,2-Dichlorobenzene	101		98		70-130	3		30
1,3-Dichlorobenzene	101		98		70-130	3		30
1,4-Dichlorobenzene	98		96		70-130	2		30
Methyl tert butyl ether	96		94		66-130	2		30
p/m-Xylene	110		105		70-130	5		30
o-Xylene	105		100		70-130	5		30
cis-1,2-Dichloroethene	97		93		70-130	4		30
Styrene	105		100		70-130	5		30
Dichlorodifluoromethane	91		83		30-146	9		30
Acetone	103		94		54-140	9		30
Carbon disulfide	96		91		59-130	5		30
2-Butanone	99		91		70-130	8		30
4-Methyl-2-pentanone	96		94		70-130	2		30
2-Hexanone	95		91		70-130	4		30
Bromochloromethane	98		94		70-130	4		30
1,2-Dibromoethane	103		99		70-130	4		30
n-Butylbenzene	119		113		70-130	5		30
sec-Butylbenzene	114		107		70-130	6		30
1,2-Dibromo-3-chloropropane	80		81		68-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 11 Batch: WG1025127-3 WG1025127-4								
Isopropylbenzene	103		99		70-130	4		30
p-Isopropyltoluene	109		104		70-130	5		30
n-Propylbenzene	108		102		70-130	6		30
1,2,3-Trichlorobenzene	94		92		70-130	2		30
1,2,4-Trichlorobenzene	94		89		70-130	5		30
1,3,5-Trimethylbenzene	106		102		70-130	4		30
1,2,4-Trimethylbenzene	104		100		70-130	4		30
Methyl Acetate	109		103		51-146	6		30
Cyclohexane	120		114		59-142	5		30
1,4-Dioxane	103		100		65-136	3		30
Freon-113	**141**	Q	131		50-139	7		30
Methyl cyclohexane	115		108		70-130	6		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		110		70-130
Toluene-d8	103		102		70-130
4-Bromofluorobenzene	92		92		70-130
Dibromofluoromethane	97		95		70-130

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,07-08 QC Batch ID: WG1024239-6 WG1024239-7 QC Sample: L1724590-01 Client ID: TP-14												
Methylene chloride	ND	17.1	14	80		16	85		70-130	17		30
1,1-Dichloroethane	ND	17.1	15	89		18	95		70-130	17		30
Chloroform	ND	17.1	15	87		18	92		70-130	17		30
Carbon tetrachloride	ND	17.1	18	106		21	112		70-130	16		30
1,2-Dichloropropane	ND	17.1	14	80		16	86		70-130	17		30
Dibromochloromethane	ND	17.1	11	**65**	Q	14	74		70-130	25		30
1,1,2-Trichloroethane	ND	17.1	13	73		16	83		70-130	24		30
Tetrachloroethene	ND	17.1	15	88		17	90		70-130	14		30
Chlorobenzene	ND	17.1	12	**68**	Q	14	74		70-130	19		30
Trichlorofluoromethane	ND	17.1	18	105		21	110		70-139	15		30
1,2-Dichloroethane	ND	17.1	13	77		16	85		70-130	20		30
1,1,1-Trichloroethane	ND	17.1	18	102		20	107		70-130	15		30
Bromodichloromethane	ND	17.1	12	70		17	86		70-130	**32**	Q	30
trans-1,3-Dichloropropene	ND	17.1	10	**60**	Q	13	**69**	Q	70-130	26		30
cis-1,3-Dichloropropene	ND	17.1	11	**63**	Q	14	71		70-130	22		30
Bromoform	ND	17.1	9.8	**58**	Q	13	**67**	Q	70-130	26		30
1,1,2,2-Tetrachloroethane	ND	17.1	12	**69**	Q	14	74		70-130	18		30
Benzene	ND	17.1	15	85		17	90		70-130	16		30
Toluene	ND	17.1	14	82		17	88		70-130	18		30
Ethylbenzene	ND	17.1	14	80		16	84		70-130	16		30
Chloromethane	ND	17.1	16	92		18	94		52-130	13		30
Bromomethane	ND	17.1	14	83		17	88		57-147	17		30
Vinyl chloride	ND	17.1	19	110		21	112		67-130	13		30

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,07-08 QC Batch ID: WG1024239-6 WG1024239-7 QC Sample: L1724590-01 Client ID: TP-14												
Chloroethane	ND	17.1	15	88		18	93		50-151	16		30
1,1-Dichloroethene	ND	17.1	16	94		19	98		65-135	16		30
trans-1,2-Dichloroethene	ND	17.1	15	86		17	91		70-130	18		30
Trichloroethene	ND	17.1	14	84		16	86		70-130	13		30
1,2-Dichlorobenzene	ND	17.1	9.1	**53**	Q	12	**60**	Q	70-130	24		30
1,3-Dichlorobenzene	ND	17.1	9.0	**53**	Q	12	**61**	Q	70-130	25		30
1,4-Dichlorobenzene	ND	17.1	8.7	**51**	Q	11	**58**	Q	70-130	25		30
Methyl tert butyl ether	ND	17.1	13	75		15	77		66-130	13		30
p/m-Xylene	ND	34.2	26	77		31	80		70-130	15		30
o-Xylene	ND	34.2	25	74		30	80		70-130	18		30
cis-1,2-Dichloroethene	ND	17.1	14	82		16	86		70-130	15		30
Styrene	ND	34.2	21	**62**	Q	27	71		70-130	25		30
Dichlorodifluoromethane	ND	17.1	18	102		20	103		30-146	12		30
Acetone	5.5J	17.1	18	105		21	111		54-140	17		30
Carbon disulfide	ND	17.1	11	62		13	66		59-130	16		30
2-Butanone	ND	17.1	16	92		18	93		70-130	12		30
4-Methyl-2-pentanone	ND	17.1	13	74		15	78		70-130	16		30
2-Hexanone	ND	17.1	11	**67**	Q	13	**66**	Q	70-130	10		30
Bromochloromethane	ND	17.1	13	76		15	80		70-130	16		30
1,2-Dibromoethane	ND	17.1	10	**59**	Q	13	**69**	Q	70-130	27		30
n-Butylbenzene	ND	17.1	13	78		14	76		70-130	7		30
sec-Butylbenzene	ND	17.1	15	88		17	88		70-130	10		30
1,2-Dibromo-3-chloropropane	ND	17.1	8.7	**51**	Q	12	**62**	Q	68-130	**31**	Q	30

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01,03-04,07-08 QC Batch ID: WG1024239-6 WG1024239-7 QC Sample: L1724590-01 Client ID: TP-14												
Isopropylbenzene	ND	17.1	15	90		17	90		70-130	11		30
p-Isopropyltoluene	ND	17.1	15	86		16	83		70-130	8		30
n-Propylbenzene	ND	17.1	14	84		16	84		70-130	11		30
1,2,3-Trichlorobenzene	ND	17.1	6.0	**35**	Q	9.2	**48**	Q	70-130	**43**	Q	30
1,2,4-Trichlorobenzene	ND	17.1	5.9	**34**	Q	8.4	**44**	Q	70-130	**35**	Q	30
1,3,5-Trimethylbenzene	ND	17.1	14	84		16	86		70-130	13		30
1,2,4-Trimethylbenzene	ND	17.1	14	80		16	82		70-130	13		30
Methyl Acetate	ND	17.1	13J	77		15.J	81		51-146	15		30
Cyclohexane	ND	17.1	20	117		23	121		59-142	14		30
1,4-Dioxane	ND	854	620	72		810	85		65-136	27		30
Freon-113	ND	17.1	19	110		21	111		50-139	12		30
Methyl cyclohexane	ND	17.1	18	106		21	112		70-130	16		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		115		70-130
4-Bromofluorobenzene	113		113		70-130
Dibromofluoromethane	109		107		70-130
Toluene-d8	108		108		70-130

SEMIVOLATILES

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 11:54
Analyst: PS
Percent Solids: 87%

Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01 Date Collected: 07/18/17 09:40

Client ID: TP-14 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	ND		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	ND		ug/kg	180	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Carbazole	ND		ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified
Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	76		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	75		10-136
4-Terphenyl-d14	74		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-02
Client ID: NS-1
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 14:44
Analyst: PS
Percent Solids: 87%

Date Collected: 07/18/17 10:00
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	45	J	ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	880		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	23	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	430		ug/kg	110	21.	1
Benzo(a)pyrene	410		ug/kg	150	46.	1
Benzo(b)fluoranthene	560		ug/kg	110	32.	1
Benzo(k)fluoranthene	160		ug/kg	110	30.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-02 Date Collected: 07/18/17 10:00

Client ID: NS-1 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	390		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	120		ug/kg	110	37.	1
Benzo(ghi)perylene	280		ug/kg	150	22.	1
Fluorene	42	J	ug/kg	190	18.	1
Phenanthrene	510		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	65	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	300		ug/kg	150	26.	1
Pyrene	750		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	79.	1
Dibenzofuran	24	J	ug/kg	190	18.	1
2-Methylnaphthalene	37	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	910	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	91.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	78	J	ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1
Caprolactam	ND		ug/kg	190	58.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-02
Client ID: NS-1
Sample Location: Not Specified
Date Collected: 07/18/17 10:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	93		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	96		10-136
4-Terphenyl-d14	70		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-03
Client ID: TP-15
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 15:12
Analyst: PS
Percent Solids: 83%

Date Collected: 07/18/17 10:40
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	150		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	84	J	ug/kg	120	22.	1
Benzo(a)pyrene	82	J	ug/kg	160	48.	1
Benzo(b)fluoranthene	110	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	31	J	ug/kg	120	31.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-03 Date Collected: 07/18/17 10:40

Client ID: TP-15 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	79	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	55	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	64	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	64	J	ug/kg	160	27.	1
Pyrene	120		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	38.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	81.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	93.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	19.	1
Atrazine	ND		ug/kg	160	68.	1
Benzaldehyde	ND		ug/kg	260	52.	1
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-03
Client ID: TP-15
Sample Location: Not Specified
Date Collected: 07/18/17 10:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**15**	Q	25-120
Phenol-d6	27		10-120
Nitrobenzene-d5	**19**	Q	23-120
2-Fluorobiphenyl	30		30-120
2,4,6-Tribromophenol	50		10-136
4-Terphenyl-d14	32		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 12:50
Analyst: PS
Percent Solids: 85%

Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	32.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04 Date Collected: 07/18/17 11:30

Client ID: TP-18 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	150	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	150	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	19.	1
Atrazine	ND		ug/kg	150	67.	1
Benzaldehyde	ND		ug/kg	250	52.	1
Caprolactam	ND		ug/kg	190	58.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified
Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	76		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	76		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-05
Client ID: TP-16
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/25/17 14:24
Analyst: PS
Percent Solids: 89%

Date Collected: 07/18/17 11:50
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	350		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	51	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	82	J	ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	180		ug/kg	110	21.	1
Benzo(a)pyrene	190		ug/kg	150	45.	1
Benzo(b)fluoranthene	250		ug/kg	110	31.	1
Benzo(k)fluoranthene	77	J	ug/kg	110	30.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-05 Date Collected: 07/18/17 11:50

Client ID: TP-16 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	190		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	44	J	ug/kg	110	36.	1
Benzo(ghi)perylene	160		ug/kg	150	22.	1
Fluorene	19	J	ug/kg	180	18.	1
Phenanthrene	230		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	42	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	140	J	ug/kg	150	26.	1
Pyrene	290		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	29	J	ug/kg	180	17.	1
2-Methylnaphthalene	91	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Carbazole	25	J	ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-05
Client ID: TP-16
Sample Location: Not Specified
Date Collected: 07/18/17 11:50
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	87		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	69		10-136
4-Terphenyl-d14	63		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-06
Client ID: NS-2
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 15:48
Analyst: PS
Percent Solids: 73%

Date Collected: 07/18/17 12:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	27	J	ug/kg	180	23.	1
Hexachlorobenzene	ND		ug/kg	130	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	59.	1
2,4-Dinitrotoluene	ND		ug/kg	220	45.	1
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1
Fluoranthene	870		ug/kg	130	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachlorobutadiene	ND		ug/kg	220	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	640	200	1
Hexachloroethane	ND		ug/kg	180	36.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	ND		ug/kg	220	27.	1
Nitrobenzene	ND		ug/kg	200	33.	1
NDPA/DPA	ND		ug/kg	180	25.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	34.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	77.	1
Butyl benzyl phthalate	ND		ug/kg	220	56.	1
Di-n-butylphthalate	ND		ug/kg	220	42.	1
Di-n-octylphthalate	ND		ug/kg	220	76.	1
Diethyl phthalate	ND		ug/kg	220	21.	1
Dimethyl phthalate	ND		ug/kg	220	47.	1
Benzo(a)anthracene	490		ug/kg	130	25.	1
Benzo(a)pyrene	390		ug/kg	180	54.	1
Benzo(b)fluoranthene	590		ug/kg	130	38.	1
Benzo(k)fluoranthene	180		ug/kg	130	36.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-06 Date Collected: 07/18/17 12:30

Client ID: NS-2 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	440		ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	34.	1
Anthracene	100	J	ug/kg	130	44.	1
Benzo(ghi)perylene	220		ug/kg	180	26.	1
Fluorene	27	J	ug/kg	220	22.	1
Phenanthrene	370		ug/kg	130	27.	1
Dibenzo(a,h)anthracene	74	J	ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	260		ug/kg	180	31.	1
Pyrene	700		ug/kg	130	22.	1
Biphenyl	ND		ug/kg	510	52.	1
4-Chloroaniline	ND		ug/kg	220	41.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	92.	1
Dibenzofuran	ND		ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	42.	1
p-Chloro-m-cresol	ND		ug/kg	220	33.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	220	74.	1
2-Nitrophenol	ND		ug/kg	480	84.	1
4-Nitrophenol	ND		ug/kg	310	91.	1
2,4-Dinitrophenol	ND		ug/kg	1100	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	580	110	1
Pentachlorophenol	ND		ug/kg	180	49.	1
Phenol	ND		ug/kg	220	34.	1
2-Methylphenol	ND		ug/kg	220	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	320	35.	1
2,4,5-Trichlorophenol	ND		ug/kg	220	43.	1
Carbazole	54	J	ug/kg	220	22.	1
Atrazine	ND		ug/kg	180	78.	1
Benzaldehyde	ND		ug/kg	300	60.	1
Caprolactam	ND		ug/kg	220	68.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	220	45.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-06
Client ID: NS-2
Sample Location: Not Specified
Date Collected: 07/18/17 12:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		25-120
Phenol-d6	97		10-120
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	88		10-136
4-Terphenyl-d14	52		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-07
Client ID: TP-13
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 16:16
Analyst: PS
Percent Solids: 86%

Date Collected: 07/18/17 13:15
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	410		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	240		ug/kg	120	22.	1
Benzo(a)pyrene	220		ug/kg	160	47.	1
Benzo(b)fluoranthene	320		ug/kg	120	33.	1
Benzo(k)fluoranthene	100	J	ug/kg	120	31.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-07 Date Collected: 07/18/17 13:15

Client ID: TP-13 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	240		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	46	J	ug/kg	120	38.	1
Benzo(ghi)perylene	140	J	ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	190		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	39	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	160		ug/kg	160	27.	1
Pyrene	340		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	23	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	43	J	ug/kg	190	19.	1
Atrazine	ND		ug/kg	160	68.	1
Benzaldehyde	ND		ug/kg	260	52.	1
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-07
Client ID: TP-13
Sample Location: Not Specified
Date Collected: 07/18/17 13:15
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	99		25-120
Phenol-d6	106		10-120
Nitrobenzene-d5	100		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	98		10-136
4-Terphenyl-d14	80		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 13:19
Analyst: PS
Percent Solids: 87%

Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08 Date Collected: 07/18/17 12:00

Client ID: BLINDDUP Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	37.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	ND		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1
Caprolactam	ND		ug/kg	190	57.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08 Date Collected: 07/18/17 12:00

Client ID: BLINDDUP Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	93		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	77		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-09
Client ID: TP-12
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 16:44
Analyst: PS
Percent Solids: 74%

Date Collected: 07/18/17 13:50
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	30	J	ug/kg	180	23.	1
Hexachlorobenzene	ND		ug/kg	130	25.	1
Bis(2-chloroethyl)ether	ND		ug/kg	200	30.	1
2-Chloronaphthalene	ND		ug/kg	220	22.	1
3,3'-Dichlorobenzidine	ND		ug/kg	220	60.	1
2,4-Dinitrotoluene	ND		ug/kg	220	45.	1
2,6-Dinitrotoluene	ND		ug/kg	220	38.	1
Fluoranthene	620		ug/kg	130	26.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	220	24.	1
4-Bromophenyl phenyl ether	ND		ug/kg	220	34.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	270	38.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	240	22.	1
Hexachlorobutadiene	ND		ug/kg	220	33.	1
Hexachlorocyclopentadiene	ND		ug/kg	640	200	1
Hexachloroethane	ND		ug/kg	180	36.	1
Isophorone	ND		ug/kg	200	29.	1
Naphthalene	39	J	ug/kg	220	27.	1
Nitrobenzene	ND		ug/kg	200	33.	1
NDPA/DPA	ND		ug/kg	180	26.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	220	35.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	220	78.	1
Butyl benzyl phthalate	ND		ug/kg	220	56.	1
Di-n-butylphthalate	ND		ug/kg	220	42.	1
Di-n-octylphthalate	ND		ug/kg	220	76.	1
Diethyl phthalate	ND		ug/kg	220	21.	1
Dimethyl phthalate	ND		ug/kg	220	47.	1
Benzo(a)anthracene	280		ug/kg	130	25.	1
Benzo(a)pyrene	300		ug/kg	180	55.	1
Benzo(b)fluoranthene	440		ug/kg	130	38.	1
Benzo(k)fluoranthene	140		ug/kg	130	36.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-09 Date Collected: 07/18/17 13:50

Client ID: TP-12 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	300		ug/kg	130	23.	1
Acenaphthylene	ND		ug/kg	180	35.	1
Anthracene	91	J	ug/kg	130	44.	1
Benzo(ghi)perylene	230		ug/kg	180	26.	1
Fluorene	41	J	ug/kg	220	22.	1
Phenanthrene	380		ug/kg	130	27.	1
Dibenzo(a,h)anthracene	56	J	ug/kg	130	26.	1
Indeno(1,2,3-cd)pyrene	240		ug/kg	180	31.	1
Pyrene	480		ug/kg	130	22.	1
Biphenyl	ND		ug/kg	510	52.	1
4-Chloroaniline	ND		ug/kg	220	41.	1
2-Nitroaniline	ND		ug/kg	220	43.	1
3-Nitroaniline	ND		ug/kg	220	42.	1
4-Nitroaniline	ND		ug/kg	220	93.	1
Dibenzofuran	25	J	ug/kg	220	21.	1
2-Methylnaphthalene	ND		ug/kg	270	27.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	220	23.	1
Acetophenone	ND		ug/kg	220	28.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	42.	1
p-Chloro-m-cresol	ND		ug/kg	220	33.	1
2-Chlorophenol	ND		ug/kg	220	26.	1
2,4-Dichlorophenol	ND		ug/kg	200	36.	1
2,4-Dimethylphenol	ND		ug/kg	220	74.	1
2-Nitrophenol	ND		ug/kg	480	84.	1
4-Nitrophenol	ND		ug/kg	310	91.	1
2,4-Dinitrophenol	ND		ug/kg	1100	100	1
4,6-Dinitro-o-cresol	ND		ug/kg	580	110	1
Pentachlorophenol	ND		ug/kg	180	49.	1
Phenol	ND		ug/kg	220	34.	1
2-Methylphenol	ND		ug/kg	220	35.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	320	35.	1
2,4,5-Trichlorophenol	ND		ug/kg	220	43.	1
Carbazole	57	J	ug/kg	220	22.	1
Atrazine	ND		ug/kg	180	78.	1
Benzaldehyde	ND		ug/kg	300	60.	1
Caprolactam	ND		ug/kg	220	68.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	220	45.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-09
Client ID: TP-12
Sample Location: Not Specified
Date Collected: 07/18/17 13:50
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	91		25-120
Phenol-d6	98		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	68		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-10
Client ID: TP-11
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 13:47
Analyst: PS
Percent Solids: 84%

Date Collected: 07/18/17 14:45
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	40.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	50	J	ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	42.	1
Benzo(a)anthracene	33	J	ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	34	J	ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-10 Date Collected: 07/18/17 14:45

Client ID: TP-11 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	27	J	ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	26	J	ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	28.	1
Pyrene	37	J	ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	82.	1
Dibenzofuran	ND		ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	430	74.	1
4-Nitrophenol	ND		ug/kg	280	81.	1
2,4-Dinitrophenol	ND		ug/kg	950	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	95.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	31.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Carbazole	ND		ug/kg	200	19.	1
Atrazine	ND		ug/kg	160	69.	1
Benzaldehyde	ND		ug/kg	260	53.	1
Caprolactam	ND		ug/kg	200	60.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	40.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-10
Client ID: TP-11
Sample Location: Not Specified
Date Collected: 07/18/17 14:45
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	72		25-120
Phenol-d6	87		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	81		10-136
4-Terphenyl-d14	70		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/24/17 14:16
Analyst: PS
Percent Solids: 88%

Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	110	J	ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	1300		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	42	J	ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	610		ug/kg	110	21.	1
Benzo(a)pyrene	570		ug/kg	150	46.	1
Benzo(b)fluoranthene	730		ug/kg	110	32.	1
Benzo(k)fluoranthene	240		ug/kg	110	30.	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11 Date Collected: 07/18/17 14:30

Client ID: NS-3 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	540		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	240		ug/kg	110	37.	1
Benzo(ghi)perylene	360		ug/kg	150	22.	1
Fluorene	100	J	ug/kg	190	18.	1
Phenanthrene	980		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	92	J	ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	410		ug/kg	150	26.	1
Pyrene	1000		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	53	J	ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	410	71.	1
4-Nitrophenol	ND		ug/kg	260	77.	1
2,4-Dinitrophenol	ND		ug/kg	900	88.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	140	J	ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1
Caprolactam	ND		ug/kg	190	57.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1724590
Project Number: 0239-016-001
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified
Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	83		25-120
Phenol-d6	94		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	60		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-12 D
Client ID: NS-4
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 07/25/17 13:57
Analyst: PS
Percent Solids: 88%

Date Collected: 07/18/17 15:00
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:58

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	940		ug/kg	600	78.	4
Hexachlorobenzene	ND		ug/kg	450	84.	4
Bis(2-chloroethyl)ether	ND		ug/kg	680	100	4
2-Chloronaphthalene	ND		ug/kg	750	75.	4
3,3'-Dichlorobenzidine	ND		ug/kg	750	200	4
2,4-Dinitrotoluene	ND		ug/kg	750	150	4
2,6-Dinitrotoluene	ND		ug/kg	750	130	4
Fluoranthene	15000		ug/kg	450	86.	4
4-Chlorophenyl phenyl ether	ND		ug/kg	750	80.	4
4-Bromophenyl phenyl ether	ND		ug/kg	750	110	4
Bis(2-chloroisopropyl)ether	ND		ug/kg	900	130	4
Bis(2-chloroethoxy)methane	ND		ug/kg	810	75.	4
Hexachlorobutadiene	ND		ug/kg	750	110	4
Hexachlorocyclopentadiene	ND		ug/kg	2200	680	4
Hexachloroethane	ND		ug/kg	600	120	4
Isophorone	ND		ug/kg	680	98.	4
Naphthalene	860		ug/kg	750	92.	4
Nitrobenzene	ND		ug/kg	680	110	4
NDPA/DPA	ND		ug/kg	600	86.	4
n-Nitrosodi-n-propylamine	ND		ug/kg	750	120	4
Bis(2-ethylhexyl)phthalate	600	J	ug/kg	750	260	4
Butyl benzyl phthalate	ND		ug/kg	750	190	4
Di-n-butylphthalate	ND		ug/kg	750	140	4
Di-n-octylphthalate	ND		ug/kg	750	260	4
Diethyl phthalate	ND		ug/kg	750	70.	4
Dimethyl phthalate	ND		ug/kg	750	160	4
Benzo(a)anthracene	6600		ug/kg	450	85.	4
Benzo(a)pyrene	4900		ug/kg	600	180	4
Benzo(b)fluoranthene	6800		ug/kg	450	130	4
Benzo(k)fluoranthene	2400		ug/kg	450	120	4

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-12 D Date Collected: 07/18/17 15:00

Client ID: NS-4 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	6300		ug/kg	450	78.	4
Acenaphthylene	470	J	ug/kg	600	120	4
Anthracene	2400		ug/kg	450	150	4
Benzo(ghi)perylene	2700		ug/kg	600	88.	4
Fluorene	1000		ug/kg	750	73.	4
Phenanthrene	9900		ug/kg	450	92.	4
Dibenzo(a,h)anthracene	710		ug/kg	450	87.	4
Indeno(1,2,3-cd)pyrene	2900		ug/kg	600	100	4
Pyrene	12000		ug/kg	450	75.	4
Biphenyl	ND		ug/kg	1700	170	4
4-Chloroaniline	ND		ug/kg	750	140	4
2-Nitroaniline	ND		ug/kg	750	140	4
3-Nitroaniline	ND		ug/kg	750	140	4
4-Nitroaniline	ND		ug/kg	750	310	4
Dibenzofuran	750		ug/kg	750	71.	4
2-Methylnaphthalene	350	J	ug/kg	900	91.	4
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	750	79.	4
Acetophenone	ND		ug/kg	750	93.	4
2,4,6-Trichlorophenol	ND		ug/kg	450	140	4
p-Chloro-m-cresol	ND		ug/kg	750	110	4
2-Chlorophenol	ND		ug/kg	750	89.	4
2,4-Dichlorophenol	ND		ug/kg	680	120	4
2,4-Dimethylphenol	ND		ug/kg	750	250	4
2-Nitrophenol	ND		ug/kg	1600	280	4
4-Nitrophenol	ND		ug/kg	1000	310	4
2,4-Dinitrophenol	ND		ug/kg	3600	350	4
4,6-Dinitro-o-cresol	ND		ug/kg	2000	360	4
Pentachlorophenol	ND		ug/kg	600	160	4
Phenol	ND		ug/kg	750	110	4
2-Methylphenol	ND		ug/kg	750	120	4
3-Methylphenol/4-Methylphenol	ND		ug/kg	1100	120	4
2,4,5-Trichlorophenol	ND		ug/kg	750	140	4
Carbazole	1300		ug/kg	750	73.	4
Atrazine	ND		ug/kg	600	260	4
Benzaldehyde	ND		ug/kg	990	200	4
Caprolactam	ND		ug/kg	750	230	4
2,3,4,6-Tetrachlorophenol	ND		ug/kg	750	150	4

Project Name: MAIN & E. BALCOM **Lab Number:** L1724590

Project Number: 0239-016-001 **Report Date:** 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-12 D Date Collected: 07/18/17 15:00

Client ID: NS-4 Date Received: 07/18/17

Sample Location: Not Specified Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		25-120
Phenol-d6	68		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	11		10-136
4-Terphenyl-d14	64		18-120

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/24/17 07:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-12 Batch: WG1023759-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/24/17 07:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-12 Batch: WG1023759-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 07/24/17 07:10
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 07/19/17 07:34

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-12 Batch: WG1023759-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	79		25-120
Phenol-d6	89		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	82		10-136
4-Terphenyl-d14	102		18-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 Batch: WG1023759-2 WG1023759-3								
Acenaphthene	90		89		31-137	1		50
Hexachlorobenzene	93		89		40-140	4		50
Bis(2-chloroethyl)ether	92		89		40-140	3		50
2-Chloronaphthalene	83		82		40-140	1		50
3,3'-Dichlorobenzidine	91		82		40-140	10		50
2,4-Dinitrotoluene	113		103		40-132	9		50
2,6-Dinitrotoluene	98		94		40-140	4		50
Fluoranthene	100		95		40-140	5		50
4-Chlorophenyl phenyl ether	93		90		40-140	3		50
4-Bromophenyl phenyl ether	94		91		40-140	3		50
Bis(2-chloroisopropyl)ether	90		88		40-140	2		50
Bis(2-chloroethoxy)methane	97		94		40-117	3		50
Hexachlorobutadiene	77		77		40-140	0		50
Hexachlorocyclopentadiene	66		68		40-140	3		50
Hexachloroethane	79		80		40-140	1		50
Isophorone	97		93		40-140	4		50
Naphthalene	80		81		40-140	1		50
Nitrobenzene	92		90		40-140	2		50
NDPA/DPA	99		94		36-157	5		50
n-Nitrosodi-n-propylamine	97		94		32-121	3		50
Bis(2-ethylhexyl)phthalate	115		108		40-140	6		50
Butyl benzyl phthalate	116		108		40-140	7		50
Di-n-butylphthalate	104		98		40-140	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 Batch: WG1023759-2 WG1023759-3								
Di-n-octylphthalate	111		105		40-140	6		50
Diethyl phthalate	100		95		40-140	5		50
Dimethyl phthalate	96		90		40-140	6		50
Benzo(a)anthracene	100		94		40-140	6		50
Benzo(a)pyrene	108		101		40-140	7		50
Benzo(b)fluoranthene	107		99		40-140	8		50
Benzo(k)fluoranthene	102		96		40-140	6		50
Chrysene	97		90		40-140	7		50
Acenaphthylene	88		85		40-140	3		50
Anthracene	96		91		40-140	5		50
Benzo(ghi)perylene	107		99		40-140	8		50
Fluorene	92		90		40-140	2		50
Phenanthrene	94		89		40-140	5		50
Dibenzo(a,h)anthracene	107		99		40-140	8		50
Indeno(1,2,3-cd)pyrene	112		103		40-140	8		50
Pyrene	100		93		35-142	7		50
Biphenyl	88		85		54-104	3		50
4-Chloroaniline	67		62		40-140	8		50
2-Nitroaniline	104		99		47-134	5		50
3-Nitroaniline	92		87		26-129	6		50
4-Nitroaniline	102		96		41-125	6		50
Dibenzofuran	90		87		40-140	3		50
2-Methylnaphthalene	82		82		40-140	0		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 Batch: WG1023759-2 WG1023759-3								
1,2,4,5-Tetrachlorobenzene	81		81		40-117	0		50
Acetophenone	96		94		14-144	2		50
2,4,6-Trichlorophenol	98		94		30-130	4		50
p-Chloro-m-cresol	100		96		26-103	4		50
2-Chlorophenol	98		95		25-102	3		50
2,4-Dichlorophenol	106		100		30-130	6		50
2,4-Dimethylphenol	103		98		30-130	5		50
2-Nitrophenol	101		98		30-130	3		50
4-Nitrophenol	104		100		11-114	4		50
2,4-Dinitrophenol	72		73		4-130	1		50
4,6-Dinitro-o-cresol	105		102		10-130	3		50
Pentachlorophenol	87		83		17-109	5		50
Phenol	**100**	Q	**98**	Q	26-90	2		50
2-Methylphenol	102		98		30-130.	4		50
3-Methylphenol/4-Methylphenol	107		101		30-130	6		50
2,4,5-Trichlorophenol	95		91		30-130	4		50
Carbazole	102		96		54-128	6		50
Atrazine	104		100		40-140	4		50
Benzaldehyde	76		77		40-140	1		50
Caprolactam	114		106		15-130	7		50
2,3,4,6-Tetrachlorophenol	97		91		40-140	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 Batch: WG1023759-2 WG1023759-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	84		82		25-120
Phenol-d6	91		87		10-120
Nitrobenzene-d5	81		79		23-120
2-Fluorobiphenyl	74		73		30-120
2,4,6-Tribromophenol	90		85		10-136
4-Terphenyl-d14	87		80		18-120

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 QC Batch ID: WG1023759-4 WG1023759-5 QC Sample: L1724590-01 Client ID: TP-14												
Acenaphthene	ND	1510	1300	86		1100	73		31-137	17		50
Hexachlorobenzene	ND	1510	1400	93		1100	73		40-140	24		50
Bis(2-chloroethyl)ether	ND	1510	1400	93		1200	79		40-140	15		50
2-Chloronaphthalene	ND	1510	1200	80		1100	73		40-140	9		50
3,3'-Dichlorobenzidine	ND	1510	1500	99		1200	79		40-140	22		50
2,4-Dinitrotoluene	ND	1510	1600	110		1300	86		40-132	21		50
2,6-Dinitrotoluene	ND	1510	1400	93		1200	79		40-140	15		50
Fluoranthene	ND	1510	1500	99		1200	79		40-140	22		50
4-Chlorophenyl phenyl ether	ND	1510	1400	93		1200	79		40-140	15		50
4-Bromophenyl phenyl ether	ND	1510	1400	93		1100	73		40-140	24		50
Bis(2-chloroisopropyl)ether	ND	1510	1300	86		1200	79		40-140	8		50
Bis(2-chloroethoxy)methane	ND	1510	1400	93		1200	79		40-117	15		50
Hexachlorobutadiene	ND	1510	1100	73		1000	66		40-140	10		50
Hexachlorocyclopentadiene	ND	1510	520J	**34**	Q	510J	**34**	Q	40-140	2		50
Hexachloroethane	ND	1510	1000	66		1000	66		40-140	0		50
Isophorone	ND	1510	1400	93		1300	86		40-140	7		50
Naphthalene	ND	1510	1200	80		1100	73		40-140	9		50
Nitrobenzene	ND	1510	1300	86		1200	79		40-140	8		50
NDPA/DPA	ND	1510	1500	99		1200	79		36-157	22		50
n-Nitrosodi-n-propylamine	ND	1510	1400	93		1300	86		32-121	7		50
Bis(2-ethylhexyl)phthalate	ND	1510	1700	110		1400	93		40-140	19		50
Butyl benzyl phthalate	ND	1510	1700	110		1300	86		40-140	27		50
Di-n-butylphthalate	ND	1510	1600	110		1200	79		40-140	29		50

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 QC Batch ID: WG1023759-4 WG1023759-5 QC Sample: L1724590-01 Client ID: TP-14												
Di-n-octylphthalate	ND	1510	1700	110		1400	93		40-140	19		50
Diethyl phthalate	ND	1510	1500	99		1200	79		40-140	22		50
Dimethyl phthalate	ND	1510	1400	93		1200	79		40-140	15		50
Benzo(a)anthracene	ND	1510	1500	99		1200	79		40-140	22		50
Benzo(a)pyrene	ND	1510	1600	110		1200	79		40-140	29		50
Benzo(b)fluoranthene	ND	1510	1500	99		1200	79		40-140	22		50
Benzo(k)fluoranthene	ND	1510	1500	99		1200	79		40-140	22		50
Chrysene	ND	1510	1500	99		1200	79		40-140	22		50
Acenaphthylene	ND	1510	1300	86		1100	73		40-140	17		50
Anthracene	ND	1510	1500	99		1200	79		40-140	22		50
Benzo(ghi)perylene	ND	1510	1500	99		1200	79		40-140	22		50
Fluorene	ND	1510	1400	93		1100	73		40-140	24		50
Phenanthrene	ND	1510	1400	93		1100	73		40-140	24		50
Dibenzo(a,h)anthracene	ND	1510	1600	110		1200	79		40-140	29		50
Indeno(1,2,3-cd)pyrene	ND	1510	1600	110		1300	86		40-140	21		50
Pyrene	ND	1510	1500	99		1200	79		35-142	22		50
Biphenyl	ND	1510	1300	86		1100	73		54-104	17		50
4-Chloroaniline	ND	1510	1100	73		910	60		40-140	19		50
2-Nitroaniline	ND	1510	1600	110		1300	86		47-134	21		50
3-Nitroaniline	ND	1510	1400	93		1100	73		26-129	24		50
4-Nitroaniline	ND	1510	1500	99		1200	79		41-125	22		50
Dibenzofuran	ND	1510	1300	86		1100	73		40-140	17		50
2-Methylnaphthalene	ND	1510	1200	80		1100	73		40-140	9		50

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 QC Batch ID: WG1023759-4 WG1023759-5 QC Sample: L1724590-01 Client ID: TP-14												
1,2,4,5-Tetrachlorobenzene	ND	1510	1200	80		1100	73		40-117	9		50
Acetophenone	ND	1510	1400	93		1300	86		14-144	7		50
2,4,6-Trichlorophenol	ND	1510	1500	99		1200	79		30-130	22		50
p-Chloro-m-cresol	ND	1510	1500	99		1300	86		26-103	14		50
2-Chlorophenol	ND	1510	1400	93		1300	86		25-102	7		50
2,4-Dichlorophenol	ND	1510	1600	110		1400	93		30-130	13		50
2,4-Dimethylphenol	ND	1510	1500	99		1400	93		30-130	7		50
2-Nitrophenol	ND	1510	1500	99		1400	93		30-130	7		50
4-Nitrophenol	ND	1510	1600	110		1200	79		11-114	29		50
2,4-Dinitrophenol	ND	1510	ND	**0**	Q	ND	**0**	Q	4-130	NC		50
4,6-Dinitro-o-cresol	ND	1510	760	50		650	43		10-130	16		50
Pentachlorophenol	ND	1510	920	61		720	48		17-109	24		50
Phenol	ND	1510	1400	**93**	Q	1300	86		26-90	7		50
2-Methylphenol	ND	1510	1500	99		1300	86		30-130.	14		50
3-Methylphenol/4-Methylphenol	ND	1510	1500	99		1400	93		30-130	7		50
2,4,5-Trichlorophenol	ND	1510	1400	93		1200	79		30-130	15		50
Carbazole	ND	1510	1600	110		1200	79		54-128	29		50
Atrazine	ND	1510	1600	110		1300	86		40-140	21		50
Benzaldehyde	ND	1510	1100	73		1100	73		40-140	0		50
Caprolactam	ND	1510	1500	99		1300	86		15-130	14		50
2,3,4,6-Tetrachlorophenol	ND	1510	1500	99		1200	79		40-140	22		50

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	*Native Sample*	*MS Added*	*MS Found*	*MS %Recovery*	*Qual*	*MSD Found*	*MSD %Recovery*	*Qual*	*Recovery Limits*	*RPD*	*Qual*	*RPD Limits*
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-12 QC Batch ID: WG1023759-4 WG1023759-5 QC Sample: L1724590-01 Client ID: TP-14												

Surrogate	*MS % Recovery*	*MS Qualifier*	*MSD % Recovery*	*MSD Qualifier*	*Acceptance Criteria*
2,4,6-Tribromophenol	88		85		10-136
2-Fluorobiphenyl	69		71		30-120
2-Fluorophenol	80		85		25-120
4-Terphenyl-d14	80		73		18-120
Nitrobenzene-d5	75		82		23-120
Phenol-d6	85		90		10-120

PCBS

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/22/17 05:31
Analyst: HT
Percent Solids: 87%

Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.8	4.29	1	A
Aroclor 1221	ND		ug/kg	37.8	5.76	1	A
Aroclor 1232	ND		ug/kg	37.8	3.72	1	A
Aroclor 1242	ND		ug/kg	37.8	4.63	1	A
Aroclor 1248	ND		ug/kg	37.8	4.24	1	A
Aroclor 1254	ND		ug/kg	37.8	3.09	1	A
Aroclor 1260	ND		ug/kg	37.8	3.95	1	A
Aroclor 1262	ND		ug/kg	37.8	3.11	1	A
Aroclor 1268	ND		ug/kg	37.8	2.68	1	A
PCBs, Total	ND		ug/kg	37.8	2.68	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	37		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	38		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/22/17 06:25
Analyst: HT
Percent Solids: 85%

Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.8	4.29	1	A
Aroclor 1221	ND		ug/kg	37.8	5.76	1	A
Aroclor 1232	ND		ug/kg	37.8	3.72	1	A
Aroclor 1242	ND		ug/kg	37.8	4.63	1	A
Aroclor 1248	ND		ug/kg	37.8	4.24	1	A
Aroclor 1254	ND		ug/kg	37.8	3.08	1	A
Aroclor 1260	ND		ug/kg	37.8	3.95	1	A
Aroclor 1262	ND		ug/kg	37.8	3.11	1	A
Aroclor 1268	ND		ug/kg	37.8	2.68	1	A
PCBs, Total	ND		ug/kg	37.8	2.68	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	59		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	63		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-05
Client ID: TP-16
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/23/17 14:32
Analyst: HT
Percent Solids: 89%

Date Collected: 07/18/17 11:50
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	36.4	4.13	1	A
Aroclor 1221	ND		ug/kg	36.4	5.55	1	A
Aroclor 1232	ND		ug/kg	36.4	3.59	1	A
Aroclor 1242	ND		ug/kg	36.4	4.46	1	A
Aroclor 1248	ND		ug/kg	36.4	4.09	1	A
Aroclor 1254	8.09	J	ug/kg	36.4	2.97	1	B
Aroclor 1260	10.6	J	ug/kg	36.4	3.81	1	B
Aroclor 1262	ND		ug/kg	36.4	3.00	1	A
Aroclor 1268	ND		ug/kg	36.4	2.58	1	A
PCBs, Total	18.7	J	ug/kg	36.4	2.97	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	67		30-150	B
Decachlorobiphenyl	78		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/22/17 06:38
Analyst: HT
Percent Solids: 87%

Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.0	4.31	1	A
Aroclor 1221	ND		ug/kg	38.0	5.79	1	A
Aroclor 1232	ND		ug/kg	38.0	3.74	1	A
Aroclor 1242	ND		ug/kg	38.0	4.66	1	A
Aroclor 1248	ND		ug/kg	38.0	4.27	1	A
Aroclor 1254	ND		ug/kg	38.0	3.10	1	A
Aroclor 1260	ND		ug/kg	38.0	3.97	1	A
Aroclor 1262	ND		ug/kg	38.0	3.13	1	A
Aroclor 1268	ND		ug/kg	38.0	2.69	1	A
PCBs, Total	ND		ug/kg	38.0	2.69	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	61		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-09
Client ID: TP-12
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/23/17 14:44
Analyst: HT
Percent Solids: 74%

Date Collected: 07/18/17 13:50
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	42.8	4.86	1	A
Aroclor 1221	ND		ug/kg	42.8	6.52	1	A
Aroclor 1232	ND		ug/kg	42.8	4.22	1	A
Aroclor 1242	ND		ug/kg	42.8	5.24	1	A
Aroclor 1248	ND		ug/kg	42.8	4.81	1	A
Aroclor 1254	14.3	J	ug/kg	42.8	3.50	1	A
Aroclor 1260	12.4	J	ug/kg	42.8	4.47	1	B
Aroclor 1262	ND		ug/kg	42.8	3.52	1	A
Aroclor 1268	ND		ug/kg	42.8	3.03	1	A
PCBs, Total	26.7	J	ug/kg	42.8	4.47	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	81		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/22/17 05:44
Analyst: HT
Percent Solids: 88%

Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.1	4.20	1	A
Aroclor 1221	ND		ug/kg	37.1	5.64	1	A
Aroclor 1232	ND		ug/kg	37.1	3.65	1	A
Aroclor 1242	ND		ug/kg	37.1	4.54	1	A
Aroclor 1248	ND		ug/kg	37.1	4.16	1	A
Aroclor 1254	ND		ug/kg	37.1	3.03	1	A
Aroclor 1260	ND		ug/kg	37.1	3.87	1	A
Aroclor 1262	ND		ug/kg	37.1	3.05	1	A
Aroclor 1268	ND		ug/kg	37.1	2.62	1	A
PCBs, Total	ND		ug/kg	37.1	2.62	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	67		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-12
Client ID: NS-4
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 07/23/17 14:57
Analyst: HT
Percent Solids: 88%

Date Collected: 07/18/17 15:00
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.0	4.20	1	A
Aroclor 1221	ND		ug/kg	37.0	5.63	1	A
Aroclor 1232	ND		ug/kg	37.0	3.64	1	A
Aroclor 1242	142		ug/kg	37.0	4.53	1	B
Aroclor 1248	ND		ug/kg	37.0	4.15	1	A
Aroclor 1254	215		ug/kg	37.0	3.02	1	B
Aroclor 1260	75.5		ug/kg	37.0	3.86	1	B
Aroclor 1262	ND		ug/kg	37.0	3.04	1	A
Aroclor 1268	24.0	J	ug/kg	37.0	2.62	1	B
PCBs, Total	457	J	ug/kg	37.0	2.62	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	58		30-150	B
Decachlorobiphenyl	85		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 07/20/17 14:00
Analyst: JA

Extraction Method: EPA 3546
Extraction Date: 07/19/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 07/19/17
Cleanup Method: EPA 3660B
Cleanup Date: 07/19/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01,04-05,08-09,11-12 Batch: WG1023773-1						
Aroclor 1016	ND		ug/kg	31.9	3.62	A
Aroclor 1221	ND		ug/kg	31.9	4.86	A
Aroclor 1232	ND		ug/kg	31.9	3.14	A
Aroclor 1242	ND		ug/kg	31.9	3.90	A
Aroclor 1248	ND		ug/kg	31.9	3.58	A
Aroclor 1254	ND		ug/kg	31.9	2.60	A
Aroclor 1260	ND		ug/kg	31.9	3.33	A
Aroclor 1262	ND		ug/kg	31.9	2.62	A
Aroclor 1268	ND		ug/kg	31.9	2.26	A
PCBs, Total	ND		ug/kg	31.9	2.26	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		30-150	A
Decachlorobiphenyl	78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		30-150	B
Decachlorobiphenyl	82		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01,04-05,08-09,11-12 Batch: WG1023773-2 WG1023773-3									
Aroclor 1016	74		85		40-140	14		50	A
Aroclor 1260	67		75		40-140	11		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		96		30-150	A
Decachlorobiphenyl	77		85		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		99		30-150	B
Decachlorobiphenyl	81		89		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01,04-05,08-09,11-12 QC Batch ID: WG1023773-4 WG1023773-5 QC Sample: L1724590-01 Client ID: TP-14													
Aroclor 1016	ND	231	175	76		137	60		40-140	24		50	A
Aroclor 1260	ND	231	142	62		135	59		40-140	5		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		58		30-150	A
Decachlorobiphenyl	62		58		30-150	A
2,4,5,6-Tetrachloro-m-xylene	89		60		30-150	B
Decachlorobiphenyl	65		62		30-150	B

PESTICIDES

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 07/22/17 14:21
Analyst: JW
Percent Solids: 87%

Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 10:01
Cleanup Method: EPA 3620B
Cleanup Date: 07/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.349	1	A
Lindane	ND		ug/kg	0.742	0.332	1	A
Alpha-BHC	ND		ug/kg	0.742	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.676	1	A
Heptachlor	ND		ug/kg	0.891	0.399	1	A
Aldrin	ND		ug/kg	1.78	0.627	1	A
Heptachlor epoxide	ND		ug/kg	3.34	1.00	1	A
Endrin	ND		ug/kg	0.742	0.304	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.780	1	A
Endrin ketone	ND		ug/kg	1.78	0.459	1	A
Dieldrin	ND		ug/kg	1.11	0.557	1	A
4,4'-DDE	ND		ug/kg	1.78	0.412	1	A
4,4'-DDD	ND		ug/kg	1.78	0.636	1	A
4,4'-DDT	ND		ug/kg	3.34	1.43	1	A
Endosulfan I	ND		ug/kg	1.78	0.421	1	A
Endosulfan II	ND		ug/kg	1.78	0.595	1	A
Endosulfan sulfate	ND		ug/kg	0.742	0.353	1	A
Methoxychlor	ND		ug/kg	3.34	1.04	1	A
Toxaphene	ND		ug/kg	33.4	9.36	1	A
cis-Chlordane	ND		ug/kg	2.23	0.621	1	A
trans-Chlordane	ND		ug/kg	2.23	0.588	1	A
Chlordane	ND		ug/kg	14.5	5.90	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	55		30-150	B
Decachlorobiphenyl	51		30-150	B
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	48		30-150	A

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/20/17 20:34
Analyst: TQ
Percent Solids: 87%
Methylation Date: 07/20/17 08:55

Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 07/19/17 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
MCPP	ND		ug/kg	3780	1190	1	A
MCPA	ND		ug/kg	3780	1070	1	A
Dalapon	ND		ug/kg	37.8	12.4	1	A
Dicamba	ND		ug/kg	37.8	6.35	1	A
Dichloroprop	ND		ug/kg	37.8	10.8	1	A
2,4-D	ND		ug/kg	189	11.9	1	A
2,4-DB	ND		ug/kg	189	9.71	1	A
2,4,5-T	ND		ug/kg	189	5.86	1	A
2,4,5-TP (Silvex)	ND		ug/kg	189	5.02	1	A
Dinoseb	ND		ug/kg	37.8	4.65	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	97		30-150	A
DCAA	94		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 07/22/17 14:52
Analyst: JW
Percent Solids: 85%

Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 10:01
Cleanup Method: EPA 3620B
Cleanup Date: 07/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.86	0.363	1	A
Lindane	ND		ug/kg	0.773	0.346	1	A
Alpha-BHC	ND		ug/kg	0.773	0.220	1	A
Beta-BHC	ND		ug/kg	1.86	0.704	1	A
Heptachlor	ND		ug/kg	0.928	0.416	1	A
Aldrin	ND		ug/kg	1.86	0.653	1	A
Heptachlor epoxide	ND		ug/kg	3.48	1.04	1	A
Endrin	ND		ug/kg	0.773	0.317	1	A
Endrin aldehyde	ND		ug/kg	2.32	0.812	1	A
Endrin ketone	ND		ug/kg	1.86	0.478	1	A
Dieldrin	ND		ug/kg	1.16	0.580	1	A
4,4'-DDE	ND		ug/kg	1.86	0.429	1	A
4,4'-DDD	ND		ug/kg	1.86	0.662	1	A
4,4'-DDT	ND		ug/kg	3.48	1.49	1	A
Endosulfan I	ND		ug/kg	1.86	0.438	1	A
Endosulfan II	ND		ug/kg	1.86	0.620	1	A
Endosulfan sulfate	ND		ug/kg	0.773	0.368	1	A
Methoxychlor	ND		ug/kg	3.48	1.08	1	A
Toxaphene	ND		ug/kg	34.8	9.74	1	A
cis-Chlordane	ND		ug/kg	2.32	0.646	1	A
trans-Chlordane	ND		ug/kg	2.32	0.612	1	A
Chlordane	ND		ug/kg	15.1	6.15	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	57		30-150	B
Decachlorobiphenyl	54		30-150	B
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	53		30-150	A

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/20/17 20:54
Analyst: TQ
Percent Solids: 85%
Methylation Date: 07/20/17 08:55

Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 07/19/17 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
MCPP	ND		ug/kg	3910	1230	1	A
MCPA	ND		ug/kg	3910	1100	1	A
Dalapon	ND		ug/kg	39.1	12.8	1	A
Dicamba	ND		ug/kg	39.1	6.56	1	A
Dichloroprop	ND		ug/kg	39.1	11.2	1	A
2,4-D	ND		ug/kg	195	12.3	1	A
2,4-DB	ND		ug/kg	195	10.0	1	A
2,4,5-T	ND		ug/kg	195	6.06	1	A
2,4,5-TP (Silvex)	ND		ug/kg	195	5.20	1	A
Dinoseb	ND		ug/kg	39.1	4.80	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	93		30-150	A
DCAA	119		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 07/22/17 15:07
Analyst: JW
Percent Solids: 87%

Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 10:01
Cleanup Method: EPA 3620B
Cleanup Date: 07/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.77	0.347	1	A
Lindane	ND		ug/kg	0.739	0.330	1	A
Alpha-BHC	ND		ug/kg	0.739	0.210	1	A
Beta-BHC	ND		ug/kg	1.77	0.672	1	A
Heptachlor	ND		ug/kg	0.887	0.398	1	A
Aldrin	ND		ug/kg	1.77	0.624	1	A
Heptachlor epoxide	ND		ug/kg	3.32	0.998	1	A
Endrin	ND		ug/kg	0.739	0.303	1	A
Endrin aldehyde	ND		ug/kg	2.22	0.776	1	A
Endrin ketone	ND		ug/kg	1.77	0.457	1	A
Dieldrin	ND		ug/kg	1.11	0.554	1	A
4,4'-DDE	ND		ug/kg	1.77	0.410	1	A
4,4'-DDD	ND		ug/kg	1.77	0.632	1	A
4,4'-DDT	ND		ug/kg	3.32	1.43	1	A
Endosulfan I	ND		ug/kg	1.77	0.419	1	A
Endosulfan II	ND		ug/kg	1.77	0.593	1	A
Endosulfan sulfate	ND		ug/kg	0.739	0.352	1	A
Methoxychlor	ND		ug/kg	3.32	1.03	1	A
Toxaphene	ND		ug/kg	33.2	9.31	1	A
cis-Chlordane	ND		ug/kg	2.22	0.618	1	A
trans-Chlordane	ND		ug/kg	2.22	0.585	1	A
Chlordane	ND		ug/kg	14.4	5.87	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	55		30-150	B
2,4,5,6-Tetrachloro-m-xylene	60		30-150	A
Decachlorobiphenyl	46		30-150	A

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/20/17 21:14
Analyst: TQ
Percent Solids: 87%
Methylation Date: 07/20/17 08:55

Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 07/19/17 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
MCPP	ND		ug/kg	3730	1180	1	A
MCPA	ND		ug/kg	3730	1060	1	A
Dalapon	ND		ug/kg	37.3	12.2	1	A
Dicamba	ND		ug/kg	37.3	6.27	1	A
Dichloroprop	ND		ug/kg	37.3	10.7	1	A
2,4-D	ND		ug/kg	186	11.8	1	A
2,4-DB	ND		ug/kg	186	9.59	1	A
2,4,5-T	ND		ug/kg	186	5.78	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.96	1	A
Dinoseb	ND		ug/kg	37.3	4.59	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	100		30-150	A
DCAA	122		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 07/22/17 16:56
Analyst: JW
Percent Solids: 88%

Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 07/19/17 10:01
Cleanup Method: EPA 3620B
Cleanup Date: 07/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.351	1	A
Lindane	ND		ug/kg	0.746	0.334	1	A
Alpha-BHC	ND		ug/kg	0.746	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.679	1	A
Heptachlor	ND		ug/kg	0.895	0.401	1	A
Aldrin	ND		ug/kg	1.79	0.630	1	A
Heptachlor epoxide	ND		ug/kg	3.36	1.01	1	A
Endrin	ND		ug/kg	0.746	0.306	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.783	1	A
Endrin ketone	ND		ug/kg	1.79	0.461	1	A
Dieldrin	ND		ug/kg	1.12	0.560	1	A
4,4'-DDE	ND		ug/kg	1.79	0.414	1	A
4,4'-DDD	ND		ug/kg	1.79	0.639	1	A
4,4'-DDT	ND		ug/kg	3.36	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.423	1	A
Endosulfan II	ND		ug/kg	1.79	0.598	1	A
Endosulfan sulfate	ND		ug/kg	0.746	0.355	1	A
Methoxychlor	ND		ug/kg	3.36	1.04	1	A
Toxaphene	ND		ug/kg	33.6	9.40	1	A
cis-Chlordane	ND		ug/kg	2.24	0.624	1	A
trans-Chlordane	ND		ug/kg	2.24	0.591	1	A
Chlordane	ND		ug/kg	14.5	5.93	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	88		30-150	B
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	83		30-150	A

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 07/20/17 21:33
Analyst: TQ
Percent Solids: 88%
Methylation Date: 07/20/17 08:55

Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 07/19/17 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
MCPP	ND		ug/kg	3750	1180	1	A
MCPA	ND		ug/kg	3750	1060	1	A
Dalapon	ND		ug/kg	37.5	12.3	1	A
Dicamba	ND		ug/kg	37.5	6.30	1	A
Dichloroprop	ND		ug/kg	37.5	10.8	1	A
2,4-D	ND		ug/kg	188	11.8	1	B
2,4-DB	ND		ug/kg	188	9.64	1	A
2,4,5-T	ND		ug/kg	188	5.81	1	A
2,4,5-TP (Silvex)	ND		ug/kg	188	4.99	1	A
Dinoseb	ND		ug/kg	37.5	4.61	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	100		30-150	A
DCAA	124		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/22/17 13:05
Analyst: JW

Extraction Method: EPA 3546
Extraction Date: 07/19/17 10:01
Cleanup Method: EPA 3620B
Cleanup Date: 07/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,04,08,11 Batch: WG1023817-1						
Delta-BHC	ND		ug/kg	1.53	0.300	A
Lindane	ND		ug/kg	0.638	0.285	A
Alpha-BHC	ND		ug/kg	0.638	0.181	A
Beta-BHC	ND		ug/kg	1.53	0.581	A
Heptachlor	ND		ug/kg	0.766	0.343	A
Aldrin	ND		ug/kg	1.53	0.539	A
Heptachlor epoxide	ND		ug/kg	2.87	0.862	A
Endrin	ND		ug/kg	0.638	0.262	A
Endrin aldehyde	ND		ug/kg	1.91	0.670	A
Endrin ketone	ND		ug/kg	1.53	0.394	A
Dieldrin	ND		ug/kg	0.957	0.479	A
4,4'-DDE	ND		ug/kg	1.53	0.354	A
4,4'-DDD	ND		ug/kg	1.53	0.546	A
4,4'-DDT	ND		ug/kg	2.87	1.23	A
Endosulfan I	ND		ug/kg	1.53	0.362	A
Endosulfan II	ND		ug/kg	1.53	0.512	A
Endosulfan sulfate	ND		ug/kg	0.638	0.304	A
Methoxychlor	ND		ug/kg	2.87	0.893	A
Toxaphene	ND		ug/kg	28.7	8.04	A
cis-Chlordane	ND		ug/kg	1.91	0.534	A
trans-Chlordane	ND		ug/kg	1.91	0.505	A
Chlordane	ND		ug/kg	12.4	5.07	A

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 07/22/17 13:05
Analyst: JW

Extraction Method: EPA 3546
Extraction Date: 07/19/17 10:01
Cleanup Method: EPA 3620B
Cleanup Date: 07/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01,04,08,11 Batch: WG1023817-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	59		30-150	B
Decachlorobiphenyl	60		30-150	B
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	50		30-150	A

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 07/20/17 12:04
Analyst: CD

Extraction Method: EPA 8151A
Extraction Date: 07/19/17 16:00

Methylation Date: 07/20/17 08:55

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01,04,08,11 Batch: WG1023826-1						
MCPP	ND		ug/kg	3240	1020	A
MCPA	ND		ug/kg	3240	918.	A
Dalapon	ND		ug/kg	32.4	10.6	A
Dicamba	ND		ug/kg	32.4	5.45	A
Dichloroprop	ND		ug/kg	32.4	9.31	A
2,4-D	ND		ug/kg	162	10.2	A
2,4-DB	ND		ug/kg	162	8.34	A
2,4,5-T	ND		ug/kg	162	5.03	A
2,4,5-TP (Silvex)	ND		ug/kg	162	4.31	A
Dinoseb	ND		ug/kg	32.4	3.99	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	88		30-150	A
DCAA	107		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,04,08,11 Batch: WG1023817-2 WG1023817-3									
Delta-BHC	74		75		30-150	1		30	A
Lindane	69		70		30-150	1		30	A
Alpha-BHC	74		73		30-150	1		30	A
Beta-BHC	64		64		30-150	0		30	A
Heptachlor	68		66		30-150	3		30	A
Aldrin	69		70		30-150	1		30	A
Heptachlor epoxide	69		70		30-150	1		30	A
Endrin	80		81		30-150	1		30	A
Endrin aldehyde	43		45		30-150	5		30	A
Endrin ketone	57		60		30-150	5		30	A
Dieldrin	71		72		30-150	1		30	A
4,4'-DDE	70		71		30-150	1		30	A
4,4'-DDD	69		70		30-150	1		30	A
4,4'-DDT	68		69		30-150	1		30	A
Endosulfan I	66		66		30-150	0		30	A
Endosulfan II	65		66		30-150	2		30	A
Endosulfan sulfate	53		54		30-150	2		30	A
Methoxychlor	84		85		30-150	1		30	A
cis-Chlordane	66		68		30-150	3		30	A
trans-Chlordane	68		69		30-150	1		30	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,04,08,11 Batch: WG1023817-2 WG1023817-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	61		59		30-150	B
Decachlorobiphenyl	59		58		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		64		30-150	A
Decachlorobiphenyl	47		52		30-150	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01,04,08,11 Batch: WG1023826-2 WG1023826-3									
MCPP	145		138		30-150	5		30	A
MCPA	112		110		30-150	2		30	A
Dalapon	69		72		30-150	4		30	A
Dicamba	92		95		30-150	3		30	A
Dichloroprop	98		95		30-150	3		30	A
2,4-D	101		112		30-150	10		30	A
2,4-DB	89		96		30-150	8		30	A
2,4,5-T	93		96		30-150	3		30	A
2,4,5-TP (Silvex)	90		95		30-150	5		30	A
Dinoseb	**7**	Q	**11**	Q	30-150	**46**	Q	30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	88		90		30-150	A
DCAA	120		123		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,04,08,11 QC Batch ID: WG1023817-4 WG1023817-5 QC Sample: L1724590-01 Client ID: TP-14													
Delta-BHC	ND	36.4	26.1	72		25.8	70		30-150	1		50	A
Lindane	ND	36.4	24.1	66		24.4	66		30-150	1		50	A
Alpha-BHC	ND	36.4	24.9	68		25.1	68		30-150	1		50	A
Beta-BHC	ND	36.4	22.7	62		22.6	61		30-150	0		50	A
Heptachlor	ND	36.4	23.1	64		23.6	64		30-150	2		50	A
Aldrin	ND	36.4	23.8	65		23.8	64		30-150	0		50	A
Heptachlor epoxide	ND	36.4	24.0	66		23.9	65		30-150	0		50	A
Endrin	ND	36.4	27.6	76		27.6	75		30-150	0		50	A
Endrin aldehyde	ND	36.4	15.2	42		15.1	41		30-150	1		50	A
Endrin ketone	ND	36.4	21.0	58		20.7	56		30-150	1		50	A
Dieldrin	ND	36.4	24.6	68		24.6	66		30-150	0		50	A
4,4'-DDE	ND	36.4	24.1	66		23.9	65		30-150	1		50	A
4,4'-DDD	ND	36.4	24.4	67		24.1	65		30-150	1		50	A
4,4'-DDT	ND	36.4	23.9	66		23.6	64		30-150	1		50	A
Endosulfan I	ND	36.4	22.8	63		22.7	61		30-150	0		50	A
Endosulfan II	ND	36.4	22.8	63		22.7	61		30-150	0		50	A
Endosulfan sulfate	ND	36.4	18.9	52		19.0	51		30-150	1		50	A
Methoxychlor	ND	36.4	29.4	81		29.2	79		30-150	1		50	A
cis-Chlordane	ND	36.4	23.6	65		23.4	63		30-150	1		50	A
trans-Chlordane	ND	36.4	23.7	65		23.5	63		30-150	1		50	A

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01,04,08,11 QC Batch ID: WG1023817-4 WG1023817-5 QC Sample: L1724590-01 Client ID: TP-14												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	56		56		30-150	B
Decachlorobiphenyl	54		53		30-150	B
2,4,5,6-Tetrachloro-m-xylene	64		62		30-150	A
Decachlorobiphenyl	49		46		30-150	A

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01,04,08,11 QC Batch ID: WG1023826-4 WG1023826-5 QC Sample: L1724590-01 Client ID: TP-14													
MCPP	ND	38100	56200	147		50400	134		30-150	11		30	A
MCPA	ND	38100	46200	121		40700	108		30-150	13		30	A
Dalapon	ND	381	316	83		286	76		30-150	10		30	A
Dicamba	ND	381	400	105		331	88		30-150	19		30	A
Dichloroprop	ND	381	423	111		344	91		30-150	21		30	A
2,4-D	ND	381	408	107		341	91		30-150	18		30	A
2,4-DB	ND	381	413	108		368	98		30-150	12		30	A
2,4,5-T	ND	381	393	103		316	84		30-150	22		30	A
2,4,5-TP (Silvex)	ND	381	386	101		312	83		30-150	21		30	A
Dinoseb	ND	381	23.6J	**6**	Q	6.78J	**2**	Q	30-150	**111**	Q	30	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
DCAA	96		83		30-150	A
DCAA	126		106		30-150	B

METALS

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 87%

Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4860		mg/kg	9.09	2.45	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Antimony, Total	ND		mg/kg	4.54	0.345	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Arsenic, Total	1.02		mg/kg	0.909	0.189	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Barium, Total	54.7		mg/kg	0.909	0.158	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Beryllium, Total	0.145	J	mg/kg	0.454	0.030	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Cadmium, Total	0.545	J	mg/kg	0.909	0.089	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Calcium, Total	54000		mg/kg	9.09	3.18	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Chromium, Total	8.71		mg/kg	0.909	0.087	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Cobalt, Total	4.27		mg/kg	1.82	0.151	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Copper, Total	10.0		mg/kg	0.909	0.234	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Iron, Total	10200		mg/kg	4.54	0.821	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Lead, Total	9.85		mg/kg	4.54	0.244	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Magnesium, Total	20900		mg/kg	9.09	1.40	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Manganese, Total	315		mg/kg	0.909	0.144	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Mercury, Total	ND		mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:19	EPA 7471B	1,7471B	MG
Nickel, Total	8.85		mg/kg	2.27	0.220	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Potassium, Total	1010		mg/kg	227	13.1	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	1.82	0.234	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.909	0.257	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Sodium, Total	375		mg/kg	182	2.86	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Thallium, Total	ND		mg/kg	1.82	0.286	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Vanadium, Total	12.8		mg/kg	0.909	0.184	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC
Zinc, Total	47.6		mg/kg	4.54	0.266	2	07/19/17 20:00	07/21/17 20:56	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-02
Client ID: NS-1
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 87%

Date Collected: 07/18/17 10:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7850		mg/kg	9.20	2.48	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Antimony, Total	0.368	J	mg/kg	4.60	0.350	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Arsenic, Total	5.49		mg/kg	0.920	0.191	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Barium, Total	119		mg/kg	0.920	0.160	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Beryllium, Total	0.304	J	mg/kg	0.460	0.030	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Cadmium, Total	1.08		mg/kg	0.920	0.090	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Calcium, Total	71400		mg/kg	9.20	3.22	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Chromium, Total	18.1		mg/kg	0.920	0.088	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Cobalt, Total	5.76		mg/kg	1.84	0.153	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Copper, Total	17.4		mg/kg	0.920	0.237	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Iron, Total	14900		mg/kg	4.60	0.831	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Lead, Total	87.0		mg/kg	4.60	0.247	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Magnesium, Total	9810		mg/kg	9.20	1.42	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Manganese, Total	1180		mg/kg	0.920	0.146	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Mercury, Total	0.15		mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:32	EPA 7471B	1,7471B	MG
Nickel, Total	9.78		mg/kg	2.30	0.223	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Potassium, Total	834		mg/kg	230	13.2	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Selenium, Total	0.267	J	mg/kg	1.84	0.237	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.920	0.260	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Sodium, Total	296		mg/kg	184	2.90	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Thallium, Total	0.883	J	mg/kg	1.84	0.290	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Vanadium, Total	22.3		mg/kg	0.920	0.187	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC
Zinc, Total	97.3		mg/kg	4.60	0.270	2	07/19/17 20:00	07/21/17 21:16	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-03
Client ID: TP-15
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 83%

Date Collected: 07/18/17 10:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	14400		mg/kg	9.51	2.57	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Antimony, Total	ND		mg/kg	4.75	0.361	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Arsenic, Total	3.93		mg/kg	0.951	0.198	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Barium, Total	108		mg/kg	0.951	0.165	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Beryllium, Total	0.799		mg/kg	0.475	0.031	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Cadmium, Total	0.628	J	mg/kg	0.951	0.093	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Calcium, Total	52900		mg/kg	9.51	3.33	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Chromium, Total	12.3		mg/kg	0.951	0.091	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Cobalt, Total	4.49		mg/kg	1.90	0.158	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Copper, Total	26.7		mg/kg	0.951	0.245	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Iron, Total	11700		mg/kg	4.75	0.859	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Lead, Total	111		mg/kg	4.75	0.255	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Magnesium, Total	14600		mg/kg	9.51	1.46	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Manganese, Total	717		mg/kg	0.951	0.151	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Mercury, Total	0.08		mg/kg	0.08	0.02	1	07/20/17 06:50	07/20/17 14:34	EPA 7471B	1,7471B	MG
Nickel, Total	10.1		mg/kg	2.38	0.230	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Potassium, Total	2200		mg/kg	238	13.7	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	1.90	0.245	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.951	0.269	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Sodium, Total	1190		mg/kg	190	3.00	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Thallium, Total	0.675	J	mg/kg	1.90	0.300	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Vanadium, Total	21.9		mg/kg	0.951	0.193	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC
Zinc, Total	76.8		mg/kg	4.75	0.279	2	07/19/17 20:00	07/21/17 21:32	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 85%

Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	10700		mg/kg	9.24	2.50	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Antimony, Total	0.398	J	mg/kg	4.62	0.351	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Arsenic, Total	4.94		mg/kg	0.924	0.192	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Barium, Total	95.1		mg/kg	0.924	0.161	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Beryllium, Total	0.416	J	mg/kg	0.462	0.031	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Cadmium, Total	0.934		mg/kg	0.924	0.091	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Calcium, Total	53000		mg/kg	9.24	3.24	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Chromium, Total	15.0		mg/kg	0.924	0.089	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Cobalt, Total	8.14		mg/kg	1.85	0.153	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Copper, Total	20.1		mg/kg	0.924	0.238	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Iron, Total	17800		mg/kg	4.62	0.835	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Lead, Total	16.5		mg/kg	4.62	0.248	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Magnesium, Total	19100		mg/kg	9.24	1.42	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Manganese, Total	388		mg/kg	0.924	0.147	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Mercury, Total	0.05	J	mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:36	EPA 7471B	1,7471B	MG
Nickel, Total	19.2		mg/kg	2.31	0.224	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Potassium, Total	1600		mg/kg	231	13.3	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	1.85	0.238	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.924	0.262	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Sodium, Total	165	J	mg/kg	185	2.91	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Thallium, Total	ND		mg/kg	1.85	0.291	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Vanadium, Total	21.4		mg/kg	0.924	0.188	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC
Zinc, Total	79.9		mg/kg	4.62	0.271	2	07/19/17 20:00	07/21/17 21:36	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-05
Client ID: TP-16
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 89%

Date Collected: 07/18/17 11:50
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	14600		mg/kg	8.67	2.34	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Antimony, Total	ND		mg/kg	4.33	0.329	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Arsenic, Total	2.21		mg/kg	0.867	0.180	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Barium, Total	103		mg/kg	0.867	0.151	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Beryllium, Total	2.02		mg/kg	0.433	0.029	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Cadmium, Total	0.538	J	mg/kg	0.867	0.085	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Calcium, Total	62400		mg/kg	8.67	3.03	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Chromium, Total	6.97		mg/kg	0.867	0.083	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Cobalt, Total	2.20		mg/kg	1.73	0.144	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Copper, Total	11.7		mg/kg	0.867	0.224	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Iron, Total	10000		mg/kg	4.33	0.783	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Lead, Total	68.6		mg/kg	4.33	0.232	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Magnesium, Total	12600		mg/kg	8.67	1.34	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Manganese, Total	876		mg/kg	0.867	0.138	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Mercury, Total	0.12		mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:38	EPA 7471B	1,7471B	MG
Nickel, Total	5.80		mg/kg	2.17	0.210	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Potassium, Total	1100		mg/kg	217	12.5	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Selenium, Total	2.06		mg/kg	1.73	0.224	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.867	0.245	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Sodium, Total	615		mg/kg	173	2.73	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Thallium, Total	0.815	J	mg/kg	1.73	0.273	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Vanadium, Total	8.12		mg/kg	0.867	0.176	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC
Zinc, Total	60.3		mg/kg	4.33	0.254	2	07/19/17 20:00	07/21/17 21:40	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-06
Client ID: NS-2
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 73%

Date Collected: 07/18/17 12:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12300		mg/kg	10.6	2.86	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Antimony, Total	ND		mg/kg	5.30	0.403	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Arsenic, Total	5.47		mg/kg	1.06	0.220	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Barium, Total	96.8		mg/kg	1.06	0.184	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Beryllium, Total	1.19		mg/kg	0.530	0.035	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Cadmium, Total	0.848	J	mg/kg	1.06	0.104	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Calcium, Total	60000		mg/kg	10.6	3.71	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Chromium, Total	19.8		mg/kg	1.06	0.102	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Cobalt, Total	4.73		mg/kg	2.12	0.176	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Copper, Total	20.2		mg/kg	1.06	0.273	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Iron, Total	14900		mg/kg	5.30	0.957	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Lead, Total	64.6		mg/kg	5.30	0.284	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Magnesium, Total	13700		mg/kg	10.6	1.63	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Manganese, Total	1060		mg/kg	1.06	0.168	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Mercury, Total	0.25		mg/kg	0.09	0.02	1	07/20/17 06:50	07/20/17 14:40	EPA 7471B	1,7471B	MG
Nickel, Total	11.5		mg/kg	2.65	0.256	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Potassium, Total	921		mg/kg	265	15.3	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Selenium, Total	0.604	J	mg/kg	2.12	0.273	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	1.06	0.300	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Sodium, Total	798		mg/kg	212	3.34	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Thallium, Total	1.01	J	mg/kg	2.12	0.334	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Vanadium, Total	20.9		mg/kg	1.06	0.215	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC
Zinc, Total	90.8		mg/kg	5.30	0.310	2	07/19/17 20:00	07/21/17 21:44	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-07
Client ID: TP-13
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 86%

Date Collected: 07/18/17 13:15
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5900		mg/kg	8.97	2.42	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Antimony, Total	ND		mg/kg	4.48	0.341	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Arsenic, Total	3.25		mg/kg	0.897	0.186	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Barium, Total	39.8		mg/kg	0.897	0.156	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Beryllium, Total	0.260	J	mg/kg	0.448	0.030	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Cadmium, Total	0.655	J	mg/kg	0.897	0.088	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Calcium, Total	29000		mg/kg	8.97	3.14	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Chromium, Total	8.74		mg/kg	0.897	0.086	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Cobalt, Total	4.54		mg/kg	1.79	0.149	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Copper, Total	15.0		mg/kg	0.897	0.231	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Iron, Total	12400		mg/kg	4.48	0.810	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Lead, Total	16.1		mg/kg	4.48	0.240	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Magnesium, Total	8950		mg/kg	8.97	1.38	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Manganese, Total	536		mg/kg	0.897	0.143	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Mercury, Total	0.08		mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:41	EPA 7471B	1,7471B	MG
Nickel, Total	12.0		mg/kg	2.24	0.217	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Potassium, Total	758		mg/kg	224	12.9	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	1.79	0.231	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.897	0.254	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Sodium, Total	201		mg/kg	179	2.82	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Thallium, Total	0.529	J	mg/kg	1.79	0.282	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Vanadium, Total	12.7		mg/kg	0.897	0.182	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC
Zinc, Total	52.5		mg/kg	4.48	0.263	2	07/19/17 20:00	07/21/17 21:48	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 87%

Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	10800		mg/kg	9.08	2.45	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Antimony, Total	0.381	J	mg/kg	4.54	0.345	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Arsenic, Total	4.73		mg/kg	0.908	0.189	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Barium, Total	73.7		mg/kg	0.908	0.158	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Beryllium, Total	0.418	J	mg/kg	0.454	0.030	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Cadmium, Total	1.30		mg/kg	0.908	0.089	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Calcium, Total	55100		mg/kg	9.08	3.18	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Chromium, Total	15.7		mg/kg	0.908	0.087	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Cobalt, Total	9.95		mg/kg	1.82	0.151	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Copper, Total	28.0		mg/kg	0.908	0.234	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Iron, Total	18400		mg/kg	4.54	0.820	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Lead, Total	28.1		mg/kg	4.54	0.243	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Magnesium, Total	12200		mg/kg	9.08	1.40	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Manganese, Total	470		mg/kg	0.908	0.144	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Mercury, Total	0.10		mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:43	EPA 7471B	1,7471B	MG
Nickel, Total	21.5		mg/kg	2.27	0.220	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Potassium, Total	1540		mg/kg	227	13.1	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	1.82	0.234	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.908	0.257	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Sodium, Total	141	J	mg/kg	182	2.86	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Thallium, Total	0.672	J	mg/kg	1.82	0.286	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Vanadium, Total	20.0		mg/kg	0.908	0.184	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC
Zinc, Total	150		mg/kg	4.54	0.266	2	07/19/17 20:00	07/21/17 21:52	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-09
Client ID: TP-12
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 74%

Date Collected: 07/18/17 13:50
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7540		mg/kg	10.4	2.81	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Antimony, Total	1.32	J	mg/kg	5.21	0.396	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Arsenic, Total	8.15		mg/kg	1.04	0.217	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Barium, Total	64.7		mg/kg	1.04	0.181	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Beryllium, Total	0.563		mg/kg	0.521	0.034	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Cadmium, Total	1.78		mg/kg	1.04	0.102	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Calcium, Total	90300		mg/kg	10.4	3.65	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Chromium, Total	31.5		mg/kg	1.04	0.100	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Cobalt, Total	4.57		mg/kg	2.08	0.173	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Copper, Total	44.7		mg/kg	1.04	0.269	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Iron, Total	25900		mg/kg	5.21	0.941	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Lead, Total	54.2		mg/kg	5.21	0.279	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Magnesium, Total	34000		mg/kg	10.4	1.60	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Manganese, Total	1020		mg/kg	1.04	0.166	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Mercury, Total	0.25		mg/kg	0.09	0.02	1	07/20/17 06:50	07/20/17 14:45	EPA 7471B	1,7471B	MG
Nickel, Total	24.4		mg/kg	2.60	0.252	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Potassium, Total	745		mg/kg	260	15.0	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	2.08	0.269	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	1.04	0.295	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Sodium, Total	520		mg/kg	208	3.28	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Thallium, Total	1.02	J	mg/kg	2.08	0.328	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Vanadium, Total	20.0		mg/kg	1.04	0.212	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC
Zinc, Total	148		mg/kg	5.21	0.305	2	07/19/17 20:00	07/21/17 21:56	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-10
Client ID: TP-11
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 84%

Date Collected: 07/18/17 14:45
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	17800		mg/kg	9.50	2.56	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Antimony, Total	0.446	J	mg/kg	4.75	0.361	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Arsenic, Total	4.92		mg/kg	0.950	0.198	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Barium, Total	132		mg/kg	0.950	0.165	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Beryllium, Total	0.902		mg/kg	0.475	0.031	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Cadmium, Total	1.28		mg/kg	0.950	0.093	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Calcium, Total	4500		mg/kg	9.50	3.32	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Chromium, Total	22.2		mg/kg	0.950	0.091	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Cobalt, Total	18.8		mg/kg	1.90	0.158	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Copper, Total	14.8		mg/kg	0.950	0.245	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Iron, Total	29200		mg/kg	4.75	0.858	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Lead, Total	12.8		mg/kg	4.75	0.255	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Magnesium, Total	5410		mg/kg	9.50	1.46	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Manganese, Total	946		mg/kg	0.950	0.151	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Mercury, Total	0.04	J	mg/kg	0.08	0.02	1	07/20/17 06:50	07/20/17 14:47	EPA 7471B	1,7471B	MG
Nickel, Total	23.9		mg/kg	2.38	0.230	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Potassium, Total	1690		mg/kg	238	13.7	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	1.90	0.245	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.950	0.269	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Sodium, Total	378		mg/kg	190	2.99	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Thallium, Total	1.04	J	mg/kg	1.90	0.299	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Vanadium, Total	30.3		mg/kg	0.950	0.193	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC
Zinc, Total	58.3		mg/kg	4.75	0.278	2	07/19/17 20:00	07/21/17 22:00	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 88%

Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	10100		mg/kg	8.95	2.42	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Antimony, Total	0.340	J	mg/kg	4.48	0.340	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Arsenic, Total	2.72		mg/kg	0.895	0.186	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Barium, Total	86.0		mg/kg	0.895	0.156	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Beryllium, Total	0.367	J	mg/kg	0.448	0.030	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Cadmium, Total	0.779	J	mg/kg	0.895	0.088	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Calcium, Total	53200		mg/kg	8.95	3.13	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Chromium, Total	13.3		mg/kg	0.895	0.086	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Cobalt, Total	5.66		mg/kg	1.79	0.149	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Copper, Total	15.1		mg/kg	0.895	0.231	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Iron, Total	15400		mg/kg	4.48	0.808	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Lead, Total	20.7		mg/kg	4.48	0.240	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Magnesium, Total	12200		mg/kg	8.95	1.38	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Manganese, Total	303		mg/kg	0.895	0.142	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Mercury, Total	0.09		mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:49	EPA 7471B	1,7471B	MG
Nickel, Total	14.3		mg/kg	2.24	0.217	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Potassium, Total	1160		mg/kg	224	12.9	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Selenium, Total	ND		mg/kg	1.79	0.231	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Silver, Total	ND		mg/kg	0.895	0.253	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Sodium, Total	360		mg/kg	179	2.82	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Thallium, Total	ND		mg/kg	1.79	0.282	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Vanadium, Total	18.6		mg/kg	0.895	0.182	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC
Zinc, Total	61.3		mg/kg	4.48	0.262	2	07/19/17 20:00	07/21/17 22:04	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-12
Client ID: NS-4
Sample Location: Not Specified
Matrix: Soil
Percent Solids: 88%

Date Collected: 07/18/17 15:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	8010		mg/kg	8.95	2.42	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Antimony, Total	0.832	J	mg/kg	4.47	0.340	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Arsenic, Total	9.92		mg/kg	0.895	0.186	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Barium, Total	92.3		mg/kg	0.895	0.156	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Beryllium, Total	0.394	J	mg/kg	0.447	0.030	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Cadmium, Total	1.12		mg/kg	0.895	0.088	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Calcium, Total	65400		mg/kg	8.95	3.13	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Chromium, Total	39.3		mg/kg	0.895	0.086	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Cobalt, Total	5.34		mg/kg	1.79	0.148	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Copper, Total	33.9		mg/kg	0.895	0.231	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Iron, Total	18700		mg/kg	4.47	0.808	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Lead, Total	148		mg/kg	4.47	0.240	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Magnesium, Total	8770		mg/kg	8.95	1.38	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Manganese, Total	1320		mg/kg	0.895	0.142	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Mercury, Total	0.48		mg/kg	0.07	0.02	1	07/20/17 06:50	07/20/17 14:54	EPA 7471B	1,7471B	MG
Nickel, Total	14.9		mg/kg	2.24	0.216	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Potassium, Total	994		mg/kg	224	12.9	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Selenium, Total	0.626	J	mg/kg	1.79	0.231	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Silver, Total	0.447	J	mg/kg	0.895	0.253	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Sodium, Total	372		mg/kg	179	2.82	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Thallium, Total	1.40	J	mg/kg	1.79	0.282	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Vanadium, Total	31.7		mg/kg	0.895	0.182	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC
Zinc, Total	151		mg/kg	4.47	0.262	2	07/19/17 20:00	07/21/17 22:51	EPA 3050B	1,6010C	MC

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-12 Batch: WG1023996-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Antimony, Total	ND		mg/kg	2.00	0.152	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Barium, Total	ND		mg/kg	0.400	0.070	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Beryllium, Total	0.016	J	mg/kg	0.200	0.013	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Calcium, Total	ND		mg/kg	4.00	1.40	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Chromium, Total	ND		mg/kg	0.400	0.038	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Copper, Total	ND		mg/kg	0.400	0.103	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Iron, Total	0.476	J	mg/kg	2.00	0.361	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Lead, Total	ND		mg/kg	2.00	0.107	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Manganese, Total	ND		mg/kg	0.400	0.064	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Nickel, Total	ND		mg/kg	1.00	0.097	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Potassium, Total	24.7	J	mg/kg	100	5.76	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Selenium, Total	ND		mg/kg	0.800	0.103	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Silver, Total	ND		mg/kg	0.400	0.113	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Sodium, Total	32.3	J	mg/kg	80.0	1.26	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Thallium, Total	ND		mg/kg	0.800	0.126	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC
Zinc, Total	ND		mg/kg	2.00	0.117	1	07/19/17 20:00	07/21/17 20:44	1,6010C	MC

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-12 Batch: WG1024082-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	07/20/17 06:50	07/20/17 14:15	1,7471B	MG

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001
Lab Number: L1724590
Report Date: 07/25/17

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12 Batch: WG1023996-2 SRM Lot Number: D093-540								
Aluminum, Total	76		-		55-146	-		
Antimony, Total	165		-		2-204	-		
Arsenic, Total	83		-		70-130	-		
Barium, Total	95		-		83-117	-		
Beryllium, Total	92		-		83-117	-		
Cadmium, Total	95		-		83-117	-		
Calcium, Total	88		-		83-117	-		
Chromium, Total	94		-		80-120	-		
Cobalt, Total	94		-		84-116	-		
Copper, Total	98		-		82-118	-		
Iron, Total	98		-		47-153	-		
Lead, Total	96		-		82-117	-		
Magnesium, Total	89		-		77-124	-		
Manganese, Total	90		-		81-119	-		
Nickel, Total	94		-		83-117	-		
Potassium, Total	98		-		71-129	-		
Selenium, Total	87		-		78-122	-		
Silver, Total	94		-		76-124	-		
Sodium, Total	126		-		72-128	-		
Thallium, Total	94		-		79-121	-		
Vanadium, Total	98		-		78-122	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: 0239-016-001

Lab Number: L1724590

Report Date: 07/25/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12 Batch: WG1023996-2 SRM Lot Number: D093-540					
Zinc, Total	91	-	83-117	-	
Total Metals - Mansfield Lab Associated sample(s): 01-12 Batch: WG1024082-2 SRM Lot Number: D093-540					
Mercury, Total	96	-	72-128	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG1023996-3 WG1023996-4 QC Sample: L1724590-01 Client ID: TP-14												
Aluminum, Total	4860	177	5940	**610**	Q	6210	**744**	Q	75-125	4		20
Antimony, Total	ND	44.3	31.5	**71**	Q	34.6	76		75-125	9		20
Arsenic, Total	1.02	10.6	11.0	94		11.6	97		75-125	5		20
Barium, Total	54.7	177	194	79		216	89		75-125	11		20
Beryllium, Total	0.145J	4.43	3.55	80		3.92	86		75-125	10		20
Cadmium, Total	0.545J	4.52	3.98	88		4.33	94		75-125	8		20
Calcium, Total	54000	886	55400	**158**	Q	59600	**617**	Q	75-125	7		20
Chromium, Total	8.71	17.7	22.7	79		24.5	87		75-125	8		20
Cobalt, Total	4.27	44.3	36.1	**72**	Q	39.2	77		75-125	8		20
Copper, Total	10.0	22.1	30.0	90		33.1	102		75-125	10		20
Iron, Total	10200	88.6	11000	**903**	Q	11600	**1540**	Q	75-125	5		20
Lead, Total	9.85	45.2	43.1	**74**	Q	46.0	78		75-125	7		20
Magnesium, Total	20900	886	21400	**56**	Q	23100	**242**	Q	75-125	8		20
Manganese, Total	315.	44.3	358	97		382	**148**	Q	75-125	6		20
Nickel, Total	8.85	44.3	41.0	**73**	Q	44.2	78		75-125	8		20
Potassium, Total	1010	886	1990	111		2150	**126**	Q	75-125	8		20
Selenium, Total	ND	10.6	8.56	80		9.70	89		75-125	12		20
Silver, Total	ND	26.6	23.2	87		26.1	96		75-125	12		20
Sodium, Total	375.	886	1120	84		1210	92		75-125	8		20
Thallium, Total	ND	10.6	6.16	**58**	Q	7.10	**65**	Q	75-125	14		20
Vanadium, Total	12.8	44.3	48.9	82		53.8	90		75-125	10		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG1023996-3 WG1023996-4 QC Sample: L1724590-01 Client ID: TP-14											
Zinc, Total	47.6	44.3	82.2	78		91.6	97		75-125	11	20
Total Metals - Mansfield Lab Associated sample(s): 01-12 QC Batch ID: WG1024082-3 WG1024082-4 QC Sample: L1724590-01 Client ID: TP-14											
Mercury, Total	ND	0.143	0.18	**126**	Q	0.18	**126**	Q	80-120	0	20

INORGANICS
&
MISCELLANEOUS

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-01
Client ID: TP-14
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 09:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.4		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-02
Client ID: NS-1
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 10:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.8		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-03
Client ID: TP-15
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 10:40
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.2		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-04
Client ID: TP-18
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 11:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.7		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-05
Client ID: TP-16
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 11:50
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-06
Client ID: NS-2
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 12:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	73.2		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-07
Client ID: TP-13
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 13:15
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.7		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-08
Client ID: BLINDDUP
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 12:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.2		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-09
Client ID: TP-12
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 13:50
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	74.0		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-10
Client ID: TP-11
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 14:45
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.6		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-11
Client ID: NS-3
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 14:30
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.6		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

SAMPLE RESULTS

Lab ID: L1724590-12
Client ID: NS-4
Sample Location: Not Specified
Matrix: Soil

Date Collected: 07/18/17 15:00
Date Received: 07/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.2		%	0.100	NA	1	-	07/19/17 13:57	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-12 QC Batch ID: WG1023892-1 QC Sample: L1724590-01 Client ID: TP-14						
Solids, Total	87.4	87.7	%	0		20

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1724590-01A	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01A1	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01A2	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01B	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01B1	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01B2	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01C	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01C1	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01C2	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-01D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1724590-01D1	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1724590-01D2	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1724590-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-01E1	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-01E2	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1724590-01F	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01F1	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01F2	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01G	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01G1	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01G2	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01H	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		ARCHIVE()
L1724590-01I	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		ARCHIVE()
L1724590-01J	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		ARCHIVE()
L1724590-01K	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		ARCHIVE()
L1724590-01L	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01L1	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01L2	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-01X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(14)
L1724590-01X1	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(14)
L1724590-01X2	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(14)
L1724590-01Y	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-01Y1	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-01Y2	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-01Z	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-01Z1	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-01Z2	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-02A	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1724590-02B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-02C	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14)
L1724590-03A	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-03B	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-03C	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-03D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1724590-03E	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14)
L1724590-03F	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-03X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(14)
L1724590-03Y	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-03Z	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-04A	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-04B	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-04C	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-04D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1724590-04E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-04F	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-04G	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-04H	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-04X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1724590-04Y	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-04Z	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-05A	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		TS(7)
L1724590-05B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-05C	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1724590-06A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-06B	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TS(7)
L1724590-07A	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-07B	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-07C	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-07D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1724590-07E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-07F	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14)
L1724590-07X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(14)
L1724590-07Y	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-07Z	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-08A	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-08B	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-08C	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(2)
L1724590-08D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)

*Values in parentheses indicate holding time in days

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1724590-08E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-08F	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-08G	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-08H	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-08X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW-R2(14)
L1724590-08Y	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-08Z	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:07	NYTCL-8260HLW-R2(14)
L1724590-09A	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		TS(7)
L1724590-09B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-09C	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1724590-10A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-10B	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),TS(7)
L1724590-11A	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		TS(7)
L1724590-11B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-11C	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),HERB-8151(14),NYTCL-8082(14)
L1724590-11D	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8260(14)
L1724590-11X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: MAIN & E. BALCOM
Project Number: 0239-016-001

Lab Number: L1724590
Report Date: 07/25/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1724590-11Y	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:36	NYTCL-8260(14)
L1724590-11Z	Vial Water preserved split	A	NA		5.5	Y	Absent	19-JUL-17 09:36	NYTCL-8260(14)
L1724590-12A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1724590-12B	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)

*Values in parentheses indicate holding time in days

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1724590
Project Number:	0239-016-001	**Report Date:**	07/25/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1724590
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Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1724590
Project Number:	0239-016-001	**Report Date:**	07/25/17

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

ALPHA ANALYTICAL

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

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 7/19/17

ALPHA Job #: L1724590

Client Information
Client: Benchmark Env.
Address: 2558 Hamburg Turnpike
Buffalo NY. 14218
Phone: 716-856-0599
Fax:
Email: Nminkler@turnkeyllc.com

Project Information
Project Name: Main + E Branch
Project Location:
Project #
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☐ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
CAT B

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOCs 8260 + Fullist	TCL SVOCs 8270	TAL Metals 6010C	PCBs 8082-A	Pesticides 8081	Herbicides 8151	Total Bottle	Sample Specific Comments
24590 -01	TP-14	7-18-17	9:40	Soil	CCB	X	X	X	X	X	X		
01	TP-14 MS	7-18-17	9:40	Soil	CCB	X	X	X	X	X	X		
01	TP-14 MSD	7-18-17	9:40	Soil	CCB	X	X	X	X	X	X		
02	NS-1	7-18-17	10:00	Soil	CCB		X	X					
03	TP-15	7-18-17	10:40	Soil	CCB	X	X	X					
04	TP-18	7-18-17	11:20	Soil	CCB	X	X	X	X	X	X		
05	TP-16	7-18-17	11:50	Soil	CCB		X	X	X				
06	NS-2	7-18-17	12:30	Soil	CCB		X	X					
07	TP-13	7-18-17	13:15	Soil	CCB	X	X	X					
08	Blind Dup	7-18-17	12:00	Soil	CCB	X	X	X	X	X	X		

Container Type: I A A A A A
Preservative: A A A A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	7/18/17 1600	Jm AL AAL	7/18/17 16:00
Jm AL AAL	7/18/17 16:00		7/19/17 01:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ALPHA ANALYTICAL

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

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page of

Date Rec'd in Lab: 7/19/17

ALPHA Job #: L1724590

Client Information
Client: Benchmark Env.
Address: 2558 Hamburg Turnpike Buffalo NY 14218
Phone: 716-856-0599
Fax:
Email: bmunger@benchmarkenv.com

Project Information
Project Name: Main & E Balcom.
Project Location:
Project #
(Use Project name as Project #) ☐
Project Manager:
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
CAT B.

Please specify Metals or TAL.

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8260C Fulllist	TCL SVOCs 8270	TAL Metals Comb.	PCBs 8082	Pest 8081	Herb 8151			Sample Specific Comments	Total Bottle
24590-09	TP-12	7-18-17	1:50	Soil	CCB		X	X	X						
10	TP-11	7-18-17		Soil	CCB		X	X							
11	NS-3	7-18-17	2:30	Soil	CCB	X	X	X	X	X	X				
12	NS-4	7-18-17		Soil	CCB		X	X	X						

Container Type: E A A A A A
Preservative: A A A A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	7/18/17 1600	AAC	7/18/17 16:00
AAC	7/18/17 16:00		7/19/17 10:30

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1733060
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & EAST BALCOM STREET SITE
Project Number:	B0239-016-001-004
Report Date:	09/26/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733060
Report Date: 09/26/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1733060-01	MW-1 (16-18')	SOIL	BUFFALO, NY	09/18/17 10:30	09/18/17
L1733060-02	MW-2 (18-20')	SOIL	BUFFALO, NY	09/18/17 13:40	09/18/17

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733060
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733060
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

Case Narrative (continued)

Report Submission

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

Total Metals

L1733060-01 and -02: The samples have elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

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

Authorized Signature: Kara Lindquist

Title: Technical Director/Representative Date: 09/26/17

ORGANICS

VOLATILES

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01
Client ID: MW-1 (16-18')
Sample Location: BUFFALO, NY

Date Collected: 09/18/17 10:30
Date Received: 09/18/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/23/17 19:18
Analyst: JC
Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	8.8	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.3	0.24	1
Chloroform	ND		ug/kg	1.3	0.32	1
Carbon tetrachloride	ND		ug/kg	0.88	0.30	1
1,2-Dichloropropane	ND		ug/kg	3.1	0.20	1
Dibromochloromethane	ND		ug/kg	0.88	0.15	1
1,1,2-Trichloroethane	ND		ug/kg	1.3	0.27	1
Tetrachloroethene	ND		ug/kg	0.88	0.26	1
Chlorobenzene	ND		ug/kg	0.88	0.30	1
Trichlorofluoromethane	ND		ug/kg	4.4	0.36	1
1,2-Dichloroethane	ND		ug/kg	0.88	0.22	1
1,1,1-Trichloroethane	ND		ug/kg	0.88	0.31	1
Bromodichloromethane	ND		ug/kg	0.88	0.27	1
trans-1,3-Dichloropropene	ND		ug/kg	0.88	0.18	1
cis-1,3-Dichloropropene	ND		ug/kg	0.88	0.20	1
Bromoform	ND		ug/kg	3.5	0.21	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.88	0.26	1
Benzene	ND		ug/kg	0.88	0.17	1
Toluene	ND		ug/kg	1.3	0.17	1
Ethylbenzene	ND		ug/kg	0.88	0.15	1
Chloromethane	ND		ug/kg	4.4	0.38	1
Bromomethane	ND		ug/kg	1.8	0.30	1
Vinyl chloride	ND		ug/kg	1.8	0.28	1
Chloroethane	ND		ug/kg	1.8	0.28	1
1,1-Dichloroethene	ND		ug/kg	0.88	0.33	1
trans-1,2-Dichloroethene	ND		ug/kg	1.3	0.21	1
Trichloroethene	ND		ug/kg	0.88	0.26	1
1,2-Dichlorobenzene	ND		ug/kg	4.4	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	4.4	0.19	1
1,4-Dichlorobenzene	ND		ug/kg	4.4	0.16	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01 Date Collected: 09/18/17 10:30

Client ID: MW-1 (16-18') Date Received: 09/18/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.8	0.13	1
p/m-Xylene	ND		ug/kg	1.8	0.31	1
o-Xylene	ND		ug/kg	1.8	0.30	1
cis-1,2-Dichloroethene	ND		ug/kg	0.88	0.30	1
Styrene	ND		ug/kg	1.8	0.35	1
Dichlorodifluoromethane	ND		ug/kg	8.8	0.44	1
Acetone	3.8	J	ug/kg	8.8	2.0	1
Carbon disulfide	ND		ug/kg	8.8	0.96	1
2-Butanone	ND		ug/kg	8.8	0.60	1
4-Methyl-2-pentanone	ND		ug/kg	8.8	0.21	1
2-Hexanone	ND		ug/kg	8.8	0.58	1
Bromochloromethane	ND		ug/kg	4.4	0.31	1
1,2-Dibromoethane	ND		ug/kg	3.5	0.17	1
n-Butylbenzene	ND		ug/kg	0.88	0.20	1
sec-Butylbenzene	0.28	J	ug/kg	0.88	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.4	0.35	1
Isopropylbenzene	1.1		ug/kg	0.88	0.17	1
p-Isopropyltoluene	ND		ug/kg	0.88	0.18	1
n-Propylbenzene	ND		ug/kg	0.88	0.19	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.4	0.22	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.4	0.19	1
1,3,5-Trimethylbenzene	0.88	J	ug/kg	4.4	0.14	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.4	0.16	1
Methyl Acetate	ND		ug/kg	18	0.40	1
Cyclohexane	ND		ug/kg	18	0.38	1
1,4-Dioxane	ND		ug/kg	35	13.	1
Freon-113	ND		ug/kg	18	0.45	1
Methyl cyclohexane	1.4	J	ug/kg	3.5	0.21	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	119		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	113		70-130

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/23/17 11:06
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01 Batch: WG1044984-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/23/17 11:06
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01 Batch: WG1044984-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/23/17 11:06
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01 Batch: WG1044984-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	117		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	108		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01 Batch: WG1044984-3 WG1044984-4								
Methylene chloride	98		98		70-130	0		30
1,1-Dichloroethane	96		95		70-130	1		30
Chloroform	97		97		70-130	0		30
Carbon tetrachloride	94		93		70-130	1		30
1,2-Dichloropropane	92		92		70-130	0		30
Dibromochloromethane	95		94		70-130	1		30
1,1,2-Trichloroethane	110		111		70-130	1		30
Tetrachloroethene	109		105		70-130	4		30
Chlorobenzene	109		108		70-130	1		30
Trichlorofluoromethane	126		120		70-139	5		30
1,2-Dichloroethane	91		89		70-130	2		30
1,1,1-Trichloroethane	103		100		70-130	3		30
Bromodichloromethane	95		94		70-130	1		30
trans-1,3-Dichloropropene	111		113		70-130	2		30
cis-1,3-Dichloropropene	98		96		70-130	2		30
Bromoform	101		100		70-130	1		30
1,1,2,2-Tetrachloroethane	108		107		70-130	1		30
Benzene	97		95		70-130	2		30
Toluene	117		115		70-130	2		30
Ethylbenzene	122		120		70-130	2		30
Chloromethane	94		90		52-130	4		30
Bromomethane	119		113		57-147	5		30
Vinyl chloride	106		100		67-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01 Batch: WG1044984-3 WG1044984-4								
Chloroethane	118		107		50-151	10		30
1,1-Dichloroethene	110		109		65-135	1		30
trans-1,2-Dichloroethene	102		100		70-130	2		30
Trichloroethene	100		96		70-130	4		30
1,2-Dichlorobenzene	98		95		70-130	3		30
1,3-Dichlorobenzene	99		96		70-130	3		30
1,4-Dichlorobenzene	97		93		70-130	4		30
Methyl tert butyl ether	91		90		66-130	1		30
p/m-Xylene	110		109		70-130	1		30
o-Xylene	109		106		70-130	3		30
cis-1,2-Dichloroethene	99		97		70-130	2		30
Styrene	105		104		70-130	1		30
Dichlorodifluoromethane	96		90		30-146	6		30
Acetone	74		80		54-140	8		30
Carbon disulfide	98		95		59-130	3		30
2-Butanone	77		75		70-130	3		30
4-Methyl-2-pentanone	96		94		70-130	2		30
2-Hexanone	88		86		70-130	2		30
Bromochloromethane	86		83		70-130	4		30
1,2-Dibromoethane	106		104		70-130	2		30
n-Butylbenzene	122		118		70-130	3		30
sec-Butylbenzene	111		109		70-130	2		30
1,2-Dibromo-3-chloropropane	92		89		68-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01 Batch: WG1044984-3 WG1044984-4								
Isopropylbenzene	114		109		70-130	4		30
p-Isopropyltoluene	110		106		70-130	4		30
n-Propylbenzene	122		118		70-130	3		30
1,2,3-Trichlorobenzene	102		102		70-130	0		30
1,2,4-Trichlorobenzene	106		104		70-130	2		30
1,3,5-Trimethylbenzene	114		111		70-130	3		30
1,2,4-Trimethylbenzene	114		110		70-130	4		30
Methyl Acetate	83		82		51-146	1		30
Cyclohexane	106		101		59-142	5		30
1,4-Dioxane	77		75		65-136	3		30
Freon-113	114		110		50-139	4		30
Methyl cyclohexane	110		106		70-130	4		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	106		106		70-130
Toluene-d8	120		120		70-130
4-Bromofluorobenzene	107		104		70-130
Dibromofluoromethane	101		103		70-130

SEMIVOLATILES

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01
Client ID: MW-1 (16-18')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/22/17 16:33
Analyst: CB
Percent Solids: 84%

Date Collected: 09/18/17 10:30
Date Received: 09/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/20/17 18:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	52.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	ND		ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01 Date Collected: 09/18/17 10:30

Client ID: MW-1 (16-18') Date Received: 09/18/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	37.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	ND		ug/kg	190	19.	1
Atrazine	ND		ug/kg	160	68.	1
Benzaldehyde	ND		ug/kg	260	52.	1
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01 Date Collected: 09/18/17 10:30

Client ID: MW-1 (16-18') Date Received: 09/18/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	112		25-120
Phenol-d6	112		10-120
Nitrobenzene-d5	**123**	Q	23-120
2-Fluorobiphenyl	105		30-120
2,4,6-Tribromophenol	119		10-136
4-Terphenyl-d14	**122**	Q	18-120

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733060
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-02
Client ID: MW-2 (18-20')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/22/17 17:53
Analyst: CB
Percent Solids: 83%

Date Collected: 09/18/17 13:40
Date Received: 09/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/20/17 18:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	27.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	ND		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	34.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	20.	1
Hexachlorobutadiene	ND		ug/kg	200	29.	1
Hexachlorocyclopentadiene	ND		ug/kg	560	180	1
Hexachloroethane	ND		ug/kg	160	32.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	24.	1
Nitrobenzene	ND		ug/kg	180	29.	1
NDPA/DPA	ND		ug/kg	160	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	68.	1
Butyl benzyl phthalate	ND		ug/kg	200	50.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	67.	1
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	31.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-02 Date Collected: 09/18/17 13:40

Client ID: MW-2 (18-20') Date Received: 09/18/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	ND		ug/kg	120	38.	1
Benzo(ghi)perylene	ND		ug/kg	160	23.	1
Fluorene	ND		ug/kg	200	19.	1
Phenanthrene	ND		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	27.	1
Pyrene	ND		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	450	46.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	ND		ug/kg	200	18.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	32.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	280	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	92.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Carbazole	ND		ug/kg	200	19.	1
Atrazine	ND		ug/kg	160	69.	1
Benzaldehyde	ND		ug/kg	260	53.	1
Caprolactam	ND		ug/kg	200	60.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	40.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-02 Date Collected: 09/18/17 13:40

Client ID: MW-2 (18-20') Date Received: 09/18/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	98		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	94		18-120

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/21/17 15:54
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 09/20/17 07:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1043551-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/21/17 15:54
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 09/20/17 07:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1043551-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/21/17 15:54
Analyst: SZ

Extraction Method: EPA 3546
Extraction Date: 09/20/17 07:25

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1043551-1					
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	210	44.
Caprolactam	ND		ug/kg	160	49.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	74		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	71		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	69		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1043551-2 WG1043551-3								
Acenaphthene	76		78		31-137	3		50
Hexachlorobenzene	79		81		40-140	3		50
Bis(2-chloroethyl)ether	78		92		40-140	16		50
2-Chloronaphthalene	80		88		40-140	10		50
3,3'-Dichlorobenzidine	65		70		40-140	7		50
2,4-Dinitrotoluene	89		92		40-132	3		50
2,6-Dinitrotoluene	88		98		40-140	11		50
Fluoranthene	76		79		40-140	4		50
4-Chlorophenyl phenyl ether	76		79		40-140	4		50
4-Bromophenyl phenyl ether	80		82		40-140	2		50
Bis(2-chloroisopropyl)ether	76		90		40-140	17		50
Bis(2-chloroethoxy)methane	81		96		40-117	17		50
Hexachlorobutadiene	76		84		40-140	10		50
Hexachlorocyclopentadiene	61		71		40-140	15		50
Hexachloroethane	75		88		40-140	16		50
Isophorone	80		97		40-140	19		50
Naphthalene	75		81		40-140	8		50
Nitrobenzene	89		108		40-140	19		50
NDPA/DPA	80		82		36-157	2		50
n-Nitrosodi-n-propylamine	80		95		32-121	17		50
Bis(2-ethylhexyl)phthalate	92		96		40-140	4		50
Butyl benzyl phthalate	89		92		40-140	3		50
Di-n-butylphthalate	83		86		40-140	4		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733060
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1043551-2 WG1043551-3								
Di-n-octylphthalate	88		91		40-140	3		50
Diethyl phthalate	81		83		40-140	2		50
Dimethyl phthalate	84		91		40-140	8		50
Benzo(a)anthracene	79		81		40-140	3		50
Benzo(a)pyrene	82		85		40-140	4		50
Benzo(b)fluoranthene	82		84		40-140	2		50
Benzo(k)fluoranthene	78		81		40-140	4		50
Chrysene	76		78		40-140	3		50
Acenaphthylene	82		91		40-140	10		50
Anthracene	75		79		40-140	5		50
Benzo(ghi)perylene	77		78		40-140	1		50
Fluorene	78		80		40-140	3		50
Phenanthrene	73		76		40-140	4		50
Dibenzo(a,h)anthracene	75		77		40-140	3		50
Indeno(1,2,3-cd)pyrene	79		80		40-140	1		50
Pyrene	74		77		35-142	4		50
Biphenyl	81		89		54-104	9		50
4-Chloroaniline	72		84		40-140	15		50
2-Nitroaniline	104		115		47-134	10		50
3-Nitroaniline	81		86		26-129	6		50
4-Nitroaniline	91		95		41-125	4		50
Dibenzofuran	77		79		40-140	3		50
2-Methylnaphthalene	78		86		40-140	10		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733060
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1043551-2 WG1043551-3								
1,2,4,5-Tetrachlorobenzene	79		87		40-117	10		50
Acetophenone	80		96		14-144	18		50
2,4,6-Trichlorophenol	90		99		30-130	10		50
p-Chloro-m-cresol	89		98		26-103	10		50
2-Chlorophenol	82		97		25-102	17		50
2,4-Dichlorophenol	86		104		30-130	19		50
2,4-Dimethylphenol	93		112		30-130	19		50
2-Nitrophenol	101		120		30-130	17		50
4-Nitrophenol	109		109		11-114	0		50
2,4-Dinitrophenol	63		64		4-130	2		50
4,6-Dinitro-o-cresol	97		98		10-130	1		50
Pentachlorophenol	70		72		17-109	3		50
Phenol	76		90		26-90	17		50
2-Methylphenol	84		100		30-130.	17		50
3-Methylphenol/4-Methylphenol	84		102		30-130	19		50
2,4,5-Trichlorophenol	92		102		30-130	10		50
Carbazole	76		79		54-128	4		50
Atrazine	95		98		40-140	3		50
Benzaldehyde	68		83		40-140	20		50
Caprolactam	97		106		15-130	9		50
2,3,4,6-Tetrachlorophenol	87		89		40-140	2		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1043551-2 WG1043551-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	82		97		25-120
Phenol-d6	83		100		10-120
Nitrobenzene-d5	93		113		23-120
2-Fluorobiphenyl	79		87		30-120
2,4,6-Tribromophenol	82		86		10-136
4-Terphenyl-d14	73		77		18-120

PCBS

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733060
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01
Client ID: MW-1 (16-18')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/21/17 13:47
Analyst: AF
Percent Solids: 84%

Date Collected: 09/18/17 10:30
Date Received: 09/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/20/17 17:11
Cleanup Method: EPA 3665A
Cleanup Date: 09/21/17
Cleanup Method: EPA 3660B
Cleanup Date: 09/21/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.4	4.36	1	A
Aroclor 1221	ND		ug/kg	38.4	5.85	1	A
Aroclor 1232	ND		ug/kg	38.4	3.78	1	A
Aroclor 1242	ND		ug/kg	38.4	4.70	1	A
Aroclor 1248	ND		ug/kg	38.4	4.31	1	A
Aroclor 1254	ND		ug/kg	38.4	3.14	1	A
Aroclor 1260	ND		ug/kg	38.4	4.01	1	A
Aroclor 1262	ND		ug/kg	38.4	3.16	1	A
Aroclor 1268	ND		ug/kg	38.4	2.72	1	A
PCBs, Total	ND		ug/kg	38.4	2.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	34		30-150	A
2,4,5,6-Tetrachloro-m-xylene	56		30-150	B
Decachlorobiphenyl	44		30-150	B

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733060
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-02
Client ID: MW-2 (18-20')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/21/17 15:10
Analyst: AF
Percent Solids: 83%

Date Collected: 09/18/17 13:40
Date Received: 09/18/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/20/17 17:11
Cleanup Method: EPA 3665A
Cleanup Date: 09/21/17
Cleanup Method: EPA 3660B
Cleanup Date: 09/21/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.5	4.36	1	A
Aroclor 1221	ND		ug/kg	38.5	5.85	1	A
Aroclor 1232	ND		ug/kg	38.5	3.78	1	A
Aroclor 1242	ND		ug/kg	38.5	4.71	1	A
Aroclor 1248	ND		ug/kg	38.5	4.32	1	A
Aroclor 1254	ND		ug/kg	38.5	3.14	1	A
Aroclor 1260	ND		ug/kg	38.5	4.02	1	A
Aroclor 1262	ND		ug/kg	38.5	3.16	1	A
Aroclor 1268	ND		ug/kg	38.5	2.72	1	A
PCBs, Total	ND		ug/kg	38.5	2.72	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/20/17 23:30
Analyst: HT

Extraction Method: EPA 3546
Extraction Date: 09/20/17 08:04
Cleanup Method: EPA 3665A
Cleanup Date: 09/20/17
Cleanup Method: EPA 3660B
Cleanup Date: 09/20/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1043574-1						
Aroclor 1016	ND		ug/kg	32.8	3.72	A
Aroclor 1221	ND		ug/kg	32.8	4.99	A
Aroclor 1232	ND		ug/kg	32.8	3.23	A
Aroclor 1242	ND		ug/kg	32.8	4.02	A
Aroclor 1248	ND		ug/kg	32.8	3.68	A
Aroclor 1254	ND		ug/kg	32.8	2.68	A
Aroclor 1260	ND		ug/kg	32.8	3.42	A
Aroclor 1262	ND		ug/kg	32.8	2.70	A
Aroclor 1268	ND		ug/kg	32.8	2.32	A
PCBs, Total	ND		ug/kg	32.8	2.32	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	49		30-150	A
Decachlorobiphenyl	74		30-150	A
2,4,5,6-Tetrachloro-m-xylene	46		30-150	B
Decachlorobiphenyl	79		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1043574-2 WG1043574-3									
Aroclor 1016	87		86		40-140	1		50	A
Aroclor 1260	98		101		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		75		30-150	A
Decachlorobiphenyl	77		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		75		30-150	B
Decachlorobiphenyl	82		85		30-150	B

METALS

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733060
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01
Client ID: MW-1 (16-18')
Sample Location: BUFFALO, NY
Matrix: Soil
Percent Solids: 84%

Date Collected: 09/18/17 10:30
Date Received: 09/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	3520		mg/kg	9.47	2.56	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.73	0.360	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Arsenic, Total	1.43		mg/kg	0.947	0.197	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Barium, Total	37.0		mg/kg	0.947	0.165	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Beryllium, Total	0.066	J	mg/kg	0.473	0.031	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Cadmium, Total	0.596	J	mg/kg	0.947	0.093	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Calcium, Total	54700		mg/kg	9.47	3.31	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Chromium, Total	6.13		mg/kg	0.947	0.091	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Cobalt, Total	3.30		mg/kg	1.89	0.157	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Copper, Total	9.68		mg/kg	0.947	0.244	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Iron, Total	8480		mg/kg	4.73	0.855	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Lead, Total	9.63		mg/kg	4.73	0.254	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Magnesium, Total	24200		mg/kg	9.47	1.46	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Manganese, Total	282		mg/kg	0.947	0.150	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Mercury, Total	0.02	J	mg/kg	0.08	0.02	1	09/20/17 08:00	09/20/17 18:24	EPA 7471B	1,7471B	EA
Nickel, Total	6.67		mg/kg	2.37	0.229	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Potassium, Total	662		mg/kg	237	13.6	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.89	0.244	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.947	0.268	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Sodium, Total	231		mg/kg	189	2.98	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.89	0.298	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Vanadium, Total	10.5		mg/kg	0.947	0.192	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB
Zinc, Total	75.7		mg/kg	4.73	0.277	2	09/20/17 18:50	09/25/17 21:51	EPA 3050B	1,6010C	AB

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733060
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-02
Client ID: MW-2 (18-20')
Sample Location: BUFFALO, NY
Matrix: Soil
Percent Solids: 83%

Date Collected: 09/18/17 13:40
Date Received: 09/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1540		mg/kg	9.30	2.51	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.65	0.354	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Arsenic, Total	1.36		mg/kg	0.930	0.194	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Barium, Total	21.4		mg/kg	0.930	0.162	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.465	0.031	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Cadmium, Total	0.409	J	mg/kg	0.930	0.091	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Calcium, Total	47300		mg/kg	9.30	3.26	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Chromium, Total	3.21		mg/kg	0.930	0.089	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Cobalt, Total	1.80	J	mg/kg	1.86	0.154	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Copper, Total	5.24		mg/kg	0.930	0.240	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Iron, Total	5180		mg/kg	4.65	0.840	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Lead, Total	7.62		mg/kg	4.65	0.249	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Magnesium, Total	21800		mg/kg	9.30	1.43	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Manganese, Total	185		mg/kg	0.930	0.148	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.08	0.02	1	09/20/17 08:00	09/20/17 18:29	EPA 7471B	1,7471B	EA
Nickel, Total	3.23		mg/kg	2.33	0.225	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Potassium, Total	314		mg/kg	233	13.4	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.86	0.240	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.930	0.263	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Sodium, Total	168	J	mg/kg	186	2.93	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.86	0.293	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Vanadium, Total	7.59		mg/kg	0.930	0.189	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB
Zinc, Total	62.7		mg/kg	4.65	0.273	2	09/20/17 18:50	09/25/17 21:56	EPA 3050B	1,6010C	AB

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733060

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1043512-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	09/20/17 08:00	09/20/17 18:13	1,7471B	EA

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1043816-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Iron, Total	ND		mg/kg	2.00	0.361	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Potassium, Total	ND		mg/kg	100	5.76	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Sodium, Total	1.48	J	mg/kg	80.0	1.26	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	09/20/17 18:50	09/25/17 18:47	1,6010C	AB

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1043512-2 SRM Lot Number: D093-540								
Mercury, Total	94		-		72-128	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1043816-2 SRM Lot Number: D093-540					
Aluminum, Total	86	-	55-146	-	
Antimony, Total	143	-	2-204	-	
Arsenic, Total	97	-	70-130	-	
Barium, Total	93	-	83-117	-	
Beryllium, Total	91	-	83-117	-	
Cadmium, Total	90	-	83-117	-	
Calcium, Total	90	-	83-117	-	
Chromium, Total	97	-	80-120	-	
Cobalt, Total	92	-	84-116	-	
Copper, Total	95	-	82-118	-	
Iron, Total	97	-	47-153	-	
Lead, Total	104	-	82-117	-	
Magnesium, Total	88	-	77-124	-	
Manganese, Total	88	-	81-119	-	
Nickel, Total	91	-	83-117	-	
Potassium, Total	92	-	71-129	-	
Selenium, Total	94	-	78-122	-	
Silver, Total	97	-	76-124	-	
Sodium, Total	98	-	72-128	-	
Thallium, Total	90	-	79-121	-	
Vanadium, Total	93	-	78-122	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733060

Report Date: 09/26/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1043816-2 SRM Lot Number: D093-540					
Zinc, Total	90	-	83-117	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733060
Report Date: 09/26/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043512-3 QC Sample: L1733107-01 Client ID: MS Sample												
Mercury, Total	0.05J	0.164	0.20	**122**	Q	-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733060
Report Date: 09/26/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043816-3 QC Sample: L1733203-01 Client ID: MS Sample										
Aluminum, Total	7520	992	9650	**215**	Q	-	-	75-125	-	20
Antimony, Total	ND	248	136	**55**	Q	-	-	75-125	-	20
Arsenic, Total	367.	59.5	467	**168**	Q	-	-	75-125	-	20
Barium, Total	295.	992	1170	88		-	-	75-125	-	20
Beryllium, Total	4.35	24.8	25.3	84		-	-	75-125	-	20
Cadmium, Total	18.1	25.3	41.0	90		-	-	75-125	-	20
Calcium, Total	5370	4960	10100	95		-	-	75-125	-	20
Chromium, Total	18.8	99.2	102	84		-	-	75-125	-	20
Cobalt, Total	17.2	248	210	78		-	-	75-125	-	20
Copper, Total	657.	124	841	**148**	Q	-	-	75-125	-	20
Iron, Total	146000	496	160000	**2820**	Q	-	-	75-125	-	20
Lead, Total	15.8	253	217	80		-	-	75-125	-	20
Magnesium, Total	266.	4960	4070	77		-	-	75-125	-	20
Manganese, Total	6460	248	7260	**322**	Q	-	-	75-125	-	20
Nickel, Total	71.8	248	267	79		-	-	75-125	-	20
Potassium, Total	131.J	4960	4640	94		-	-	75-125	-	20
Selenium, Total	ND	59.5	41.4	**70**	Q	-	-	75-125	-	20
Silver, Total	3.43	149	135	88		-	-	75-125	-	20
Sodium, Total	862.	4960	5510	94		-	-	75-125	-	20
Thallium, Total	4.87J	59.5	9.52	**16**	Q	-	-	75-125	-	20
Vanadium, Total	21.3	248	233	85		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733060
Report Date: 09/26/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043816-3 QC Sample: L1733203-01 Client ID: MS Sample									
Zinc, Total	210.	248	428	88	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1733060
Report Date: 09/26/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043512-4 QC Sample: L1733107-01 Client ID: DUP Sample						
Mercury, Total	0.05J	0.05J	mg/kg	NC		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043816-4 QC Sample: L1733203-01 Client ID: DUP Sample						
Arsenic, Total	367.	412	mg/kg	12		20
Barium, Total	295.	339	mg/kg	14		20
Cadmium, Total	18.1	20.5	mg/kg	12		20
Chromium, Total	18.8	21.2	mg/kg	12		20
Lead, Total	15.8	18.4	mg/kg	15		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	3.43	3.87	mg/kg	12		20

INORGANICS
&
MISCELLANEOUS

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-01
Client ID: MW-1 (16-18')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 09/18/17 10:30
Date Received: 09/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.9		%	0.100	NA	1	-	09/19/17 10:12	121,2540G	RI

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733060
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733060-02
Client ID: MW-2 (18-20')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 09/18/17 13:40
Date Received: 09/18/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	82.8		%	0.100	NA	1	-	09/19/17 10:12	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1733060
Report Date: 09/26/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1043162-1 QC Sample: L1732935-07 Client ID: DUP Sample						
Solids, Total	88.3	87.5	%	1		20

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733060
Report Date: 09/26/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1733060-01A	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1733060-01B	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1733060-01C	5 gram Encore Sampler	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1733060-01D	Plastic 2oz unpreserved for TS	A	NA		3.2	Y	Absent		TS(7)
L1733060-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1733060-01F	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1733060-01G	Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),NYTCL-8082(14)
L1733060-01X	Vial MeOH preserved split	A	NA		3.2	Y	Absent		NYTCL-8260HLW(14)
L1733060-01Y	Vial Water preserved split	A	NA		3.2	Y	Absent	19-SEP-17 07:36	NYTCL-8260HLW(14)
L1733060-01Z	Vial Water preserved split	A	NA		3.2	Y	Absent	19-SEP-17 07:36	NYTCL-8260HLW(14)
L1733060-02A	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1733060-02B	Glass 60mL/2oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TS(7),NYTCL-8082(14)
L1733060-02D	Glass 120ml/4oz unpreserved	A	NA		3.2	Y	Absent		NYTCL-8270(14),TS(7),NYTCL-8082(14)

*Values in parentheses indicate holding time in days

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733060
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733060
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733060
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581 — 8 Walkup Dr. — TEL: 508-898-9220 — FAX: 508-898-9193

Mansfield, MA 02048 — 320 Forbes Blvd — TEL: 508-822-9300 — FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/19/17

ALPHA Job #: L1733060

Client Information

Client: Tonkers Env. Restoration
Address: 2558 Hamburg Tpke Buffalo NY, 14202
Phone: 716-713-3437
Fax:
Email: NMunley@Tonkersllc.com

Project Information

Project Name: Main & East Ballom Street Site
Project Location: Buffalo, NY
Project # B0239-016-001-004-002
(Use Project name as Project #)
Project Manager: Nate Munley
ALPHAQuote #:

Turn-Around Time

Standard [X] Due Date:
Rush (only if pre approved) [ ] # of Days:

Deliverables

[ ] ASP-A [X] ASP-B
[ ] EQuIS (1 File) [ ] EQuIS (4 File)
[ ] Other

Regulatory Requirement

[ ] NY TOGS [ ] NY Part 375
[ ] AWQ Standards [ ] NY CP-51
[ ] NY Restricted Use [ ] Other
[ ] NY Unrestricted Use
[ ] NYC Sewer Discharge

Billing Information

[ ] Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
[ ] NJ [ ] NY
[ ] Other:

These samples have been previously analyzed by Alpha [ ]

Other project specific requirements/comments:

Category B, [redacted]

Please specify Metals or TAL.

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOC's	TCL SVOC's	TAL Metals	PCB's	Herb	Pest			Sample Specific Comments	Total Bottle
33060-01	MW-1 (16-18')	9/18/17	10:30	Soil	NAS	X	X	X	X					Encore's	7
02	MW-2 (19-20)	9/18/17	13:40	Soil	NAS		X	X	X						5

Sample Filtration
[ ] Done
[ ] Lab to do
Preservation
[ ] Lab to do
(Please Specify below)

Container Type	E	A	A	A	A	A		
Preservative	O	O	O	O	O	O		

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other - ice

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature] AAL	9/18/17 14:00	[signature] AAL	9/18/17 15:50
[signature] AAL	9/18/17 15:50	[signature]	9/19/17 0055

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1733355
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & EAST BALCOM STREET SITE
Project Number:	B0239-016-001-004
Report Date:	09/26/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1733355-01	MW-3 (18-20')	SOIL	BUFFALO, NY	09/19/17 09:30	09/19/17
L1733355-02	BD	SOIL	BUFFALO, NY	09/19/17 10:00	09/19/17

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733355
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733355
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

Case Narrative (continued)

Report Submission

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

Total Metals

L1733355-01 and -02: The samples have elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

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

Authorized Signature: Kara Lindquist

Title: Technical Director/Representative Date: 09/26/17

ORGANICS

VOLATILES

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01
Client ID: MW-3 (18-20')
Sample Location: BUFFALO, NY

Date Collected: 09/19/17 09:30
Date Received: 09/19/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/25/17 14:32
Analyst: JC
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	2.2	J	ug/kg	10	1.7	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.28	1
Chloroform	ND		ug/kg	1.6	0.39	1
Carbon tetrachloride	ND		ug/kg	1.0	0.36	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.0	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.0	0.32	1
Chlorobenzene	ND		ug/kg	1.0	0.36	1
Trichlorofluoromethane	ND		ug/kg	5.2	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.0	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.37	1
Bromodichloromethane	ND		ug/kg	1.0	0.32	1
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.24	1
Bromoform	ND		ug/kg	4.2	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.31	1
Benzene	ND		ug/kg	1.0	0.20	1
Toluene	ND		ug/kg	1.6	0.20	1
Ethylbenzene	ND		ug/kg	1.0	0.18	1
Chloromethane	ND		ug/kg	5.2	0.46	1
Bromomethane	ND		ug/kg	2.1	0.35	1
Vinyl chloride	ND		ug/kg	2.1	0.33	1
Chloroethane	ND		ug/kg	2.1	0.33	1
1,1-Dichloroethene	ND		ug/kg	1.0	0.39	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.25	1
Trichloroethene	1.7		ug/kg	1.0	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	5.2	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.2	0.23	1
1,4-Dichlorobenzene	ND		ug/kg	5.2	0.19	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01 Date Collected: 09/19/17 09:30

Client ID: MW-3 (18-20') Date Received: 09/19/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	ND		ug/kg	2.1	0.37	1
o-Xylene	ND		ug/kg	2.1	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.36	1
Styrene	ND		ug/kg	2.1	0.42	1
Dichlorodifluoromethane	ND		ug/kg	10	0.52	1
Acetone	8.0	J	ug/kg	10	2.4	1
Carbon disulfide	ND		ug/kg	10	1.2	1
2-Butanone	ND		ug/kg	10	0.72	1
4-Methyl-2-pentanone	ND		ug/kg	10	0.26	1
2-Hexanone	ND		ug/kg	10	0.70	1
Bromochloromethane	ND		ug/kg	5.2	0.37	1
1,2-Dibromoethane	ND		ug/kg	4.2	0.21	1
n-Butylbenzene	ND		ug/kg	1.0	0.24	1
sec-Butylbenzene	ND		ug/kg	1.0	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.2	0.42	1
Isopropylbenzene	ND		ug/kg	1.0	0.20	1
p-Isopropyltoluene	ND		ug/kg	1.0	0.21	1
n-Propylbenzene	ND		ug/kg	1.0	0.22	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.2	0.26	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.2	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.2	0.17	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.2	0.20	1
Methyl Acetate	ND		ug/kg	21	0.48	1
Cyclohexane	ND		ug/kg	21	0.45	1
1,4-Dioxane	ND		ug/kg	42	15.	1
Freon-113	ND		ug/kg	21	0.54	1
Methyl cyclohexane	ND		ug/kg	4.2	0.25	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	120		70-130
Dibromofluoromethane	106		70-130

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02
Client ID: BD
Sample Location: BUFFALO, NY

Date Collected: 09/19/17 10:00
Date Received: 09/19/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 09/25/17 14:58
Analyst: JC
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methylene chloride	ND		ug/kg	9.9	1.6	1
1,1-Dichloroethane	ND		ug/kg	1.5	0.27	1
Chloroform	ND		ug/kg	1.5	0.36	1
Carbon tetrachloride	ND		ug/kg	0.99	0.34	1
1,2-Dichloropropane	ND		ug/kg	3.4	0.22	1
Dibromochloromethane	ND		ug/kg	0.99	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31	1
Tetrachloroethene	ND		ug/kg	0.99	0.30	1
Chlorobenzene	ND		ug/kg	0.99	0.34	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.41	1
1,2-Dichloroethane	ND		ug/kg	0.99	0.24	1
1,1,1-Trichloroethane	ND		ug/kg	0.99	0.34	1
Bromodichloromethane	ND		ug/kg	0.99	0.30	1
trans-1,3-Dichloropropene	ND		ug/kg	0.99	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.99	0.23	1
Bromoform	ND		ug/kg	3.9	0.23	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.99	0.29	1
Benzene	ND		ug/kg	0.99	0.19	1
Toluene	ND		ug/kg	1.5	0.19	1
Ethylbenzene	ND		ug/kg	0.99	0.17	1
Chloromethane	ND		ug/kg	4.9	0.43	1
Bromomethane	ND		ug/kg	2.0	0.33	1
Vinyl chloride	ND		ug/kg	2.0	0.31	1
Chloroethane	ND		ug/kg	2.0	0.31	1
1,1-Dichloroethene	ND		ug/kg	0.99	0.37	1
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24	1
Trichloroethene	1.7		ug/kg	0.99	0.30	1
1,2-Dichlorobenzene	ND		ug/kg	4.9	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	4.9	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	4.9	0.18	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02 Date Collected: 09/19/17 10:00

Client ID: BD Date Received: 09/19/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by 8260/5035 - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.0	0.15	1
p/m-Xylene	ND		ug/kg	2.0	0.35	1
o-Xylene	ND		ug/kg	2.0	0.33	1
cis-1,2-Dichloroethene	ND		ug/kg	0.99	0.34	1
Styrene	ND		ug/kg	2.0	0.40	1
Dichlorodifluoromethane	ND		ug/kg	9.9	0.49	1
Acetone	5.1	J	ug/kg	9.9	2.3	1
Carbon disulfide	ND		ug/kg	9.9	1.1	1
2-Butanone	ND		ug/kg	9.9	0.68	1
4-Methyl-2-pentanone	ND		ug/kg	9.9	0.24	1
2-Hexanone	ND		ug/kg	9.9	0.66	1
Bromochloromethane	ND		ug/kg	4.9	0.35	1
1,2-Dibromoethane	ND		ug/kg	3.9	0.20	1
n-Butylbenzene	ND		ug/kg	0.99	0.22	1
sec-Butylbenzene	ND		ug/kg	0.99	0.21	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	0.39	1
Isopropylbenzene	ND		ug/kg	0.99	0.19	1
p-Isopropyltoluene	ND		ug/kg	0.99	0.20	1
n-Propylbenzene	ND		ug/kg	0.99	0.21	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.9	0.25	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.9	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	4.9	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	4.9	0.18	1
Methyl Acetate	ND		ug/kg	20	0.46	1
Cyclohexane	ND		ug/kg	20	0.43	1
1,4-Dioxane	ND		ug/kg	39	14.	1
Freon-113	ND		ug/kg	20	0.51	1
Methyl cyclohexane	ND		ug/kg	3.9	0.24	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	101		70-130
4-Bromofluorobenzene	124		70-130
Dibromofluoromethane	109		70-130

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/17 09:16
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02 Batch: WG1045593-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	0.84	J	ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/17 09:16
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02 Batch: WG1045593-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 09/25/17 09:16
Analyst: CBN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by 8260/5035 - Westborough Lab for sample(s): 01-02 Batch: WG1045593-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	99		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG1045593-3 WG1045593-4								
Methylene chloride	109		104		70-130	5		30
1,1-Dichloroethane	123		121		70-130	2		30
Chloroform	110		107		70-130	3		30
Carbon tetrachloride	119		115		70-130	3		30
1,2-Dichloropropane	118		116		70-130	2		30
Dibromochloromethane	101		101		70-130	0		30
1,1,2-Trichloroethane	105		103		70-130	2		30
Tetrachloroethene	108		103		70-130	5		30
Chlorobenzene	101		99		70-130	2		30
Trichlorofluoromethane	75		71		70-139	5		30
1,2-Dichloroethane	119		115		70-130	3		30
1,1,1-Trichloroethane	116		113		70-130	3		30
Bromodichloromethane	110		106		70-130	4		30
trans-1,3-Dichloropropene	110		110		70-130	0		30
cis-1,3-Dichloropropene	109		105		70-130	4		30
Bromoform	85		86		70-130	1		30
1,1,2,2-Tetrachloroethane	103		102		70-130	1		30
Benzene	108		105		70-130	3		30
Toluene	104		103		70-130	1		30
Ethylbenzene	100		100		70-130	0		30
Chloromethane	**146**	Q	**136**	Q	52-130	7		30
Bromomethane	69		64		57-147	8		30
Vinyl chloride	98		93		67-130	5		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG1045593-3 WG1045593-4								
Chloroethane	75		71		50-151	5		30
1,1-Dichloroethene	112		109		65-135	3		30
trans-1,2-Dichloroethene	111		106		70-130	5		30
Trichloroethene	108		104		70-130	4		30
1,2-Dichlorobenzene	94		92		70-130	2		30
1,3-Dichlorobenzene	95		94		70-130	1		30
1,4-Dichlorobenzene	94		93		70-130	1		30
Methyl tert butyl ether	105		101		66-130	4		30
p/m-Xylene	94		92		70-130	2		30
o-Xylene	96		95		70-130	1		30
cis-1,2-Dichloroethene	102		102		70-130	0		30
Styrene	97		95		70-130	2		30
Dichlorodifluoromethane	121		112		30-146	8		30
Acetone	**145**	Q	**142**	Q	54-140	2		30
Carbon disulfide	112		108		59-130	4		30
2-Butanone	130		128		70-130	2		30
4-Methyl-2-pentanone	111		105		70-130	6		30
2-Hexanone	116		124		70-130	7		30
Bromochloromethane	101		97		70-130	4		30
1,2-Dibromoethane	102		101		70-130	1		30
n-Butylbenzene	100		98		70-130	2		30
sec-Butylbenzene	95		96		70-130	1		30
1,2-Dibromo-3-chloropropane	92		89		68-130	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by 8260/5035 - Westborough Lab Associated sample(s): 01-02 Batch: WG1045593-3 WG1045593-4								
Isopropylbenzene	92		91		70-130	1		30
p-Isopropyltoluene	91		90		70-130	1		30
n-Propylbenzene	95		94		70-130	1		30
1,2,3-Trichlorobenzene	91		90		70-130	1		30
1,2,4-Trichlorobenzene	92		88		70-130	4		30
1,3,5-Trimethylbenzene	94		93		70-130	1		30
1,2,4-Trimethylbenzene	94		92		70-130	2		30
Methyl Acetate	145		138		51-146	5		30
Cyclohexane	131		125		59-142	5		30
1,4-Dioxane	97		96		65-136	1		30
Freon-113	127		119		50-139	7		30
Methyl cyclohexane	111		109		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	109		108		70-130
Toluene-d8	102		105		70-130
4-Bromofluorobenzene	107		107		70-130
Dibromofluoromethane	100		102		70-130

SEMIVOLATILES

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733355
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01
Client ID: MW-3 (18-20')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/24/17 21:05
Analyst: RC
Percent Solids: 87%

Date Collected: 09/19/17 09:30
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/22/17 22:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	ND		ug/kg	110	32.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01 Date Collected: 09/19/17 09:30

Client ID: MW-3 (18-20') Date Received: 09/19/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	110	20.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	19.	1
Biphenyl	ND		ug/kg	430	44.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	78.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	ND		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	51.	1
Caprolactam	ND		ug/kg	190	57.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01 Date Collected: 09/19/17 09:30

Client ID: MW-3 (18-20') Date Received: 09/19/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	88		25-120
Phenol-d6	90		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	92		30-120
2,4,6-Tribromophenol	86		10-136
4-Terphenyl-d14	76		18-120

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 09/24/17 20:10
Analyst: RC
Percent Solids: 87%

Date Collected: 09/19/17 10:00
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/22/17 22:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	49.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	64.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	63.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02 Date Collected: 09/19/17 10:00

Client ID: BD Date Received: 09/19/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	19.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	ND		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	190	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02 Date Collected: 09/19/17 10:00

Client ID: BD Date Received: 09/19/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	84		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	89		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	83		18-120

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/23/17 16:33
Analyst: HL

Extraction Method: EPA 3546
Extraction Date: 09/22/17 22:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1044801-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	43.
2,4-Dinitrotoluene	ND		ug/kg	160	32.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	17.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	460	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	18.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	56.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	55.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	27.

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/23/17 16:33
Analyst: HL

Extraction Method: EPA 3546
Extraction Date: 09/22/17 22:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1044801-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	31.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	67.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	61.
4-Nitrophenol	ND		ug/kg	230	66.
2,4-Dinitrophenol	ND		ug/kg	780	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	78.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 09/23/17 16:33
Analyst: HL

Extraction Method: EPA 3546
Extraction Date: 09/22/17 22:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1044801-1					
Phenol	ND		ug/kg	160	24.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	230	25.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	210	44.
Caprolactam	ND		ug/kg	160	49.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	81		10-120
Nitrobenzene-d5	72		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	74		10-136
4-Terphenyl-d14	81		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1044801-2 WG1044801-3								
Acenaphthene	84		83		31-137	1		50
Hexachlorobenzene	87		86		40-140	1		50
Bis(2-chloroethyl)ether	78		77		40-140	1		50
2-Chloronaphthalene	84		83		40-140	1		50
3,3'-Dichlorobenzidine	58		57		40-140	2		50
2,4-Dinitrotoluene	91		90		40-132	1		50
2,6-Dinitrotoluene	91		91		40-140	0		50
Fluoranthene	90		88		40-140	2		50
4-Chlorophenyl phenyl ether	86		85		40-140	1		50
4-Bromophenyl phenyl ether	88		86		40-140	2		50
Bis(2-chloroisopropyl)ether	69		68		40-140	1		50
Bis(2-chloroethoxy)methane	84		82		40-117	2		50
Hexachlorobutadiene	83		83		40-140	0		50
Hexachlorocyclopentadiene	85		84		40-140	1		50
Hexachloroethane	76		74		40-140	3		50
Isophorone	83		81		40-140	2		50
Naphthalene	82		81		40-140	1		50
Nitrobenzene	81		79		40-140	3		50
NDPA/DPA	89		88		36-157	1		50
n-Nitrosodi-n-propylamine	81		80		32-121	1		50
Bis(2-ethylhexyl)phthalate	87		87		40-140	0		50
Butyl benzyl phthalate	90		90		40-140	0		50
Di-n-butylphthalate	92		91		40-140	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1044801-2 WG1044801-3								
Di-n-octylphthalate	84		84		40-140	0		50
Diethyl phthalate	89		87		40-140	2		50
Dimethyl phthalate	84		82		40-140	2		50
Benzo(a)anthracene	87		85		40-140	2		50
Benzo(a)pyrene	93		94		40-140	1		50
Benzo(b)fluoranthene	91		86		40-140	6		50
Benzo(k)fluoranthene	93		94		40-140	1		50
Chrysene	84		83		40-140	1		50
Acenaphthylene	90		89		40-140	1		50
Anthracene	91		88		40-140	3		50
Benzo(ghi)perylene	99		98		40-140	1		50
Fluorene	88		86		40-140	2		50
Phenanthrene	87		84		40-140	4		50
Dibenzo(a,h)anthracene	101		100		40-140	1		50
Indeno(1,2,3-cd)pyrene	94		95		40-140	1		50
Pyrene	89		86		35-142	3		50
Biphenyl	88		88		54-104	0		50
4-Chloroaniline	67		67		40-140	0		50
2-Nitroaniline	88		86		47-134	2		50
3-Nitroaniline	71		72		26-129	1		50
4-Nitroaniline	81		80		41-125	1		50
Dibenzofuran	85		84		40-140	1		50
2-Methylnaphthalene	86		85		40-140	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1044801-2 WG1044801-3								
1,2,4,5-Tetrachlorobenzene	86		85		40-117	1		50
Acetophenone	90		88		14-144	2		50
2,4,6-Trichlorophenol	91		90		30-130	1		50
p-Chloro-m-cresol	90		88		26-103	2		50
2-Chlorophenol	83		82		25-102	1		50
2,4-Dichlorophenol	90		88		30-130	2		50
2,4-Dimethylphenol	94		92		30-130	2		50
2-Nitrophenol	80		80		30-130	0		50
4-Nitrophenol	81		81		11-114	0		50
2,4-Dinitrophenol	50		55		4-130	10		50
4,6-Dinitro-o-cresol	76		78		10-130	3		50
Pentachlorophenol	88		88		17-109	0		50
Phenol	82		81		26-90	1		50
2-Methylphenol	86		85		30-130.	1		50
3-Methylphenol/4-Methylphenol	88		86		30-130	2		50
2,4,5-Trichlorophenol	91		90		30-130	1		50
Carbazole	88		86		54-128	2		50
Atrazine	101		100		40-140	1		50
Benzaldehyde	79		76		40-140	4		50
Caprolactam	81		81		15-130	0		50
2,3,4,6-Tetrachlorophenol	89		88		40-140	1		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1044801-2 WG1044801-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	78		77		25-120
Phenol-d6	81		79		10-120
Nitrobenzene-d5	75		74		23-120
2-Fluorobiphenyl	86		85		30-120
2,4,6-Tribromophenol	85		83		10-136
4-Terphenyl-d14	79		77		18-120

PCBS

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733355
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01
Client ID: MW-3 (18-20')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/25/17 18:13
Analyst: WR
Percent Solids: 87%

Date Collected: 09/19/17 09:30
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/22/17 12:01
Cleanup Method: EPA 3665A
Cleanup Date: 09/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 09/23/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.5	4.25	1	A
Aroclor 1221	ND		ug/kg	37.5	5.71	1	A
Aroclor 1232	ND		ug/kg	37.5	3.69	1	A
Aroclor 1242	ND		ug/kg	37.5	4.59	1	A
Aroclor 1248	ND		ug/kg	37.5	4.21	1	A
Aroclor 1254	ND		ug/kg	37.5	3.06	1	A
Aroclor 1260	ND		ug/kg	37.5	3.91	1	A
Aroclor 1262	ND		ug/kg	37.5	3.08	1	A
Aroclor 1268	ND		ug/kg	37.5	2.65	1	A
PCBs, Total	ND		ug/kg	37.5	2.65	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	62		30-150	A
Decachlorobiphenyl	38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	45		30-150	B

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 09/25/17 18:25
Analyst: WR
Percent Solids: 87%

Date Collected: 09/19/17 10:00
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/22/17 12:01
Cleanup Method: EPA 3665A
Cleanup Date: 09/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 09/23/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.6	4.27	1	A
Aroclor 1221	ND		ug/kg	37.6	5.73	1	A
Aroclor 1232	ND		ug/kg	37.6	3.70	1	A
Aroclor 1242	ND		ug/kg	37.6	4.61	1	A
Aroclor 1248	ND		ug/kg	37.6	4.22	1	A
Aroclor 1254	ND		ug/kg	37.6	3.07	1	A
Aroclor 1260	ND		ug/kg	37.6	3.93	1	A
Aroclor 1262	ND		ug/kg	37.6	3.10	1	A
Aroclor 1268	ND		ug/kg	37.6	2.66	1	A
PCBs, Total	ND		ug/kg	37.6	2.66	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	59		30-150	B

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 09/22/17 09:38
Analyst: WR

Extraction Method: EPA 3546
Extraction Date: 09/21/17 13:44
Cleanup Method: EPA 3665A
Cleanup Date: 09/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 09/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1044171-1						
Aroclor 1016	ND		ug/kg	32.3	3.67	A
Aroclor 1221	ND		ug/kg	32.3	4.92	A
Aroclor 1232	ND		ug/kg	32.3	3.18	A
Aroclor 1242	ND		ug/kg	32.3	3.96	A
Aroclor 1248	ND		ug/kg	32.3	3.63	A
Aroclor 1254	ND		ug/kg	32.3	2.64	A
Aroclor 1260	ND		ug/kg	32.3	3.38	A
Aroclor 1262	ND		ug/kg	32.3	2.66	A
Aroclor 1268	ND		ug/kg	32.3	2.29	A
PCBs, Total	ND		ug/kg	32.3	2.29	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	91		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	78		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1044171-2 WG1044171-3									
Aroclor 1016	93		99		40-140	6		50	A
Aroclor 1260	91		98		40-140	7		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	88		93		30-150	A
Decachlorobiphenyl	74		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		82		30-150	B
Decachlorobiphenyl	75		78		30-150	B

PESTICIDES

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01
Client ID: MW-3 (18-20')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 09/23/17 12:41
Analyst: KEG
Percent Solids: 87%

Date Collected: 09/19/17 09:30
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/22/17 09:42
Cleanup Method: EPA 3620B
Cleanup Date: 09/23/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.79	0.351	1	A
Lindane	ND		ug/kg	0.747	0.334	1	A
Alpha-BHC	ND		ug/kg	0.747	0.212	1	A
Beta-BHC	ND		ug/kg	1.79	0.680	1	A
Heptachlor	ND		ug/kg	0.896	0.402	1	A
Aldrin	ND		ug/kg	1.79	0.631	1	A
Heptachlor epoxide	ND		ug/kg	3.36	1.01	1	A
Endrin	ND		ug/kg	0.747	0.306	1	A
Endrin aldehyde	ND		ug/kg	2.24	0.784	1	A
Endrin ketone	ND		ug/kg	1.79	0.462	1	A
Dieldrin	ND		ug/kg	1.12	0.560	1	A
4,4'-DDE	ND		ug/kg	1.79	0.414	1	A
4,4'-DDD	ND		ug/kg	1.79	0.639	1	A
4,4'-DDT	ND		ug/kg	3.36	1.44	1	A
Endosulfan I	ND		ug/kg	1.79	0.424	1	A
Endosulfan II	ND		ug/kg	1.79	0.599	1	A
Endosulfan sulfate	ND		ug/kg	0.747	0.356	1	A
Methoxychlor	ND		ug/kg	3.36	1.04	1	A
Toxaphene	ND		ug/kg	33.6	9.41	1	A
cis-Chlordane	ND		ug/kg	2.24	0.624	1	A
trans-Chlordane	ND		ug/kg	2.24	0.592	1	A
Chlordane	ND		ug/kg	14.6	5.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		30-150	B
Decachlorobiphenyl	78		30-150	B
2,4,5,6-Tetrachloro-m-xylene	80		30-150	A
Decachlorobiphenyl	97		30-150	A

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733355
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01
Client ID: MW-3 (18-20')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 09/24/17 02:33
Analyst: SL
Percent Solids: 87%
Methylation Date: 09/23/17 11:57

Date Collected: 09/19/17 09:30
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 09/22/17 13:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	187	11.8	1	A
2,4,5-T	ND		ug/kg	187	5.81	1	A
2,4,5-TP (Silvex)	ND		ug/kg	187	4.98	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	92		30-150	A
DCAA	82		30-150	B

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8081B
Analytical Date: 09/23/17 12:54
Analyst: KEG
Percent Solids: 87%

Date Collected: 09/19/17 10:00
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 09/22/17 09:42
Cleanup Method: EPA 3620B
Cleanup Date: 09/23/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.78	0.350	1	A
Lindane	ND		ug/kg	0.744	0.332	1	A
Alpha-BHC	ND		ug/kg	0.744	0.211	1	A
Beta-BHC	ND		ug/kg	1.78	0.677	1	A
Heptachlor	ND		ug/kg	0.892	0.400	1	A
Aldrin	ND		ug/kg	1.78	0.628	1	A
Heptachlor epoxide	ND		ug/kg	3.35	1.00	1	A
Endrin	ND		ug/kg	0.744	0.305	1	A
Endrin aldehyde	ND		ug/kg	2.23	0.781	1	A
Endrin ketone	ND		ug/kg	1.78	0.460	1	A
Dieldrin	ND		ug/kg	1.12	0.558	1	A
4,4'-DDE	ND		ug/kg	1.78	0.413	1	A
4,4'-DDD	ND		ug/kg	1.78	0.637	1	A
4,4'-DDT	ND		ug/kg	3.35	1.44	1	A
Endosulfan I	ND		ug/kg	1.78	0.422	1	A
Endosulfan II	ND		ug/kg	1.78	0.596	1	A
Endosulfan sulfate	ND		ug/kg	0.744	0.354	1	A
Methoxychlor	ND		ug/kg	3.35	1.04	1	A
Toxaphene	ND		ug/kg	33.5	9.37	1	A
cis-Chlordane	ND		ug/kg	2.23	0.622	1	A
trans-Chlordane	ND		ug/kg	2.23	0.589	1	A
Chlordane	ND		ug/kg	14.5	5.91	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	87		30-150	B
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	113		30-150	A

Project Name: MAIN & EAST BALCOM STREET SITE
Lab Number: L1733355
Project Number: B0239-016-001-004
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8151A
Analytical Date: 09/24/17 02:53
Analyst: SL
Percent Solids: 87%
Methylation Date: 09/23/17 11:57

Date Collected: 09/19/17 10:00
Date Received: 09/19/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 09/22/17 13:06

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/kg	186	11.7	1	A
2,4,5-T	ND		ug/kg	186	5.78	1	A
2,4,5-TP (Silvex)	ND		ug/kg	186	4.96	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	104		30-150	A
DCAA	90		30-150	B

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 09/23/17 12:03
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 09/22/17 00:39
Cleanup Method: EPA 3620B
Cleanup Date: 09/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1044382-1						
Delta-BHC	ND		ug/kg	1.52	0.298	A
Lindane	ND		ug/kg	0.634	0.283	A
Alpha-BHC	ND		ug/kg	0.634	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.577	A
Heptachlor	ND		ug/kg	0.760	0.341	A
Aldrin	ND		ug/kg	1.52	0.535	A
Heptachlor epoxide	ND		ug/kg	2.85	0.856	A
Endrin	ND		ug/kg	0.634	0.260	A
Endrin aldehyde	ND		ug/kg	1.90	0.665	A
Endrin ketone	ND		ug/kg	1.52	0.392	A
Dieldrin	ND		ug/kg	0.950	0.475	A
4,4'-DDE	ND		ug/kg	1.52	0.352	A
4,4'-DDD	ND		ug/kg	1.52	0.542	A
4,4'-DDT	ND		ug/kg	2.85	1.22	A
Endosulfan I	ND		ug/kg	1.52	0.359	A
Endosulfan II	ND		ug/kg	1.52	0.508	A
Endosulfan sulfate	ND		ug/kg	0.634	0.302	A
Methoxychlor	ND		ug/kg	2.85	0.887	A
Toxaphene	ND		ug/kg	28.5	7.98	A
cis-Chlordane	ND		ug/kg	1.90	0.530	A
trans-Chlordane	ND		ug/kg	1.90	0.502	A
Chlordane	ND		ug/kg	12.4	5.04	A

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 09/23/17 12:03
Analyst: KEG

Extraction Method: EPA 3546
Extraction Date: 09/22/17 00:39
Cleanup Method: EPA 3620B
Cleanup Date: 09/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1044382-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	96		30-150	B
Decachlorobiphenyl	86		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	87		30-150	A

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 09/24/17 00:17
Analyst: SL

Extraction Method: EPA 8151A
Extraction Date: 09/22/17 13:06

Methylation Date: 09/23/17 11:57

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1044654-1						
2,4-D	ND		ug/kg	166	10.4	A
2,4,5-T	ND		ug/kg	166	5.14	A
2,4,5-TP (Silvex)	ND		ug/kg	166	4.41	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	59		30-150	A
DCAA	52		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1044382-2 WG1044382-3									
Delta-BHC	100		106		30-150	6		30	A
Lindane	97		103		30-150	6		30	A
Alpha-BHC	101		108		30-150	7		30	A
Beta-BHC	91		96		30-150	5		30	A
Heptachlor	87		91		30-150	4		30	A
Aldrin	93		98		30-150	5		30	A
Heptachlor epoxide	93		96		30-150	3		30	A
Endrin	105		111		30-150	6		30	A
Endrin aldehyde	77		78		30-150	1		30	A
Endrin ketone	94		98		30-150	4		30	A
Dieldrin	103		110		30-150	7		30	A
4,4'-DDE	95		101		30-150	6		30	A
4,4'-DDD	99		105		30-150	6		30	A
4,4'-DDT	103		109		30-150	6		30	A
Endosulfan I	92		97		30-150	5		30	A
Endosulfan II	96		102		30-150	6		30	A
Endosulfan sulfate	80		81		30-150	1		30	A
Methoxychlor	92		95		30-150	3		30	A
cis-Chlordane	90		92		30-150	2		30	A
trans-Chlordane	99		103		30-150	4		30	A

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1044382-2 WG1044382-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	89		94		30-150	B
Decachlorobiphenyl	77		81		30-150	B
2,4,5,6-Tetrachloro-m-xylene	91		95		30-150	A
Decachlorobiphenyl	74		78		30-150	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1044654-2 WG1044654-3									
2,4-D	61		64		30-150	5		30	A
2,4,5-T	61		65		30-150	6		30	A
2,4,5-TP (Silvex)	57		60		30-150	5		30	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	79		82		30-150	A
DCAA	77		80		30-150	B

METALS

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01
Client ID: MW-3 (18-20')
Sample Location: BUFFALO, NY
Matrix: Soil
Percent Solids: 87%

Date Collected: 09/19/17 09:30
Date Received: 09/19/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1700		mg/kg	8.88	2.40	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.44	0.337	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Arsenic, Total	0.622	J	mg/kg	0.888	0.185	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Barium, Total	14.9		mg/kg	0.888	0.154	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Beryllium, Total	0.036	J	mg/kg	0.444	0.029	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Cadmium, Total	0.400	J	mg/kg	0.888	0.087	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Calcium, Total	47500		mg/kg	8.88	3.11	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Chromium, Total	4.01		mg/kg	0.888	0.085	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Cobalt, Total	1.86		mg/kg	1.78	0.147	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Copper, Total	5.29		mg/kg	0.888	0.229	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Iron, Total	5440		mg/kg	4.44	0.802	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Lead, Total	6.94		mg/kg	4.44	0.238	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Magnesium, Total	21800		mg/kg	8.88	1.37	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Manganese, Total	222		mg/kg	0.888	0.141	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.07	0.02	1	09/21/17 08:00	09/21/17 17:56	EPA 7471B	1,7471B	EA
Nickel, Total	3.50		mg/kg	2.22	0.215	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Potassium, Total	305		mg/kg	222	12.8	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Selenium, Total	0.373	J	mg/kg	1.78	0.229	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.888	0.251	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Sodium, Total	108	J	mg/kg	178	2.80	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Vanadium, Total	7.39		mg/kg	0.888	0.180	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB
Zinc, Total	56.4		mg/kg	4.44	0.260	2	09/20/17 19:37	09/26/17 01:01	EPA 3050B	1,6010C	AB

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02
Client ID: BD
Sample Location: BUFFALO, NY
Matrix: Soil
Percent Solids: 87%

Date Collected: 09/19/17 10:00
Date Received: 09/19/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2260		mg/kg	8.89	2.40	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.45	0.338	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Arsenic, Total	0.969		mg/kg	0.889	0.185	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Barium, Total	21.9		mg/kg	0.889	0.155	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Beryllium, Total	0.053	J	mg/kg	0.445	0.029	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Cadmium, Total	0.427	J	mg/kg	0.889	0.087	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Calcium, Total	47300		mg/kg	8.89	3.11	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Chromium, Total	4.10		mg/kg	0.889	0.085	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Cobalt, Total	2.36		mg/kg	1.78	0.148	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Copper, Total	7.12		mg/kg	0.889	0.229	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Iron, Total	6300		mg/kg	4.45	0.803	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Lead, Total	6.66		mg/kg	4.45	0.238	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Magnesium, Total	20900		mg/kg	8.89	1.37	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Manganese, Total	229		mg/kg	0.889	0.141	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.07	0.02	1	09/21/17 08:00	09/21/17 17:58	EPA 7471B	1,7471B	EA
Nickel, Total	4.76		mg/kg	2.22	0.215	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Potassium, Total	402		mg/kg	222	12.8	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.78	0.229	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.889	0.252	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Sodium, Total	108	J	mg/kg	178	2.80	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.78	0.280	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Vanadium, Total	7.97		mg/kg	0.889	0.180	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB
Zinc, Total	50.0		mg/kg	4.45	0.260	2	09/20/17 19:37	09/26/17 01:05	EPA 3050B	1,6010C	AB

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1733355

Project Number: B0239-016-001-004 **Report Date:** 09/26/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1043819-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Iron, Total	ND		mg/kg	2.00	0.361	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Potassium, Total	ND		mg/kg	100	5.76	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Sodium, Total	ND		mg/kg	80.0	1.26	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	09/20/17 19:37	09/25/17 19:50	1,6010C	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1043939-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	09/21/17 08:00	09/21/17 17:27	1,7471B	EA

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1043819-2 SRM Lot Number: D093-540								
Aluminum, Total	63		-		55-146	-		
Antimony, Total	126		-		2-204	-		
Arsenic, Total	89		-		70-130	-		
Barium, Total	87		-		83-117	-		
Beryllium, Total	92		-		83-117	-		
Cadmium, Total	93		-		83-117	-		
Calcium, Total	84		-		83-117	-		
Chromium, Total	85		-		80-120	-		
Cobalt, Total	88		-		84-116	-		
Copper, Total	89		-		82-118	-		
Iron, Total	77		-		47-153	-		
Lead, Total	84		-		82-117	-		
Magnesium, Total	77		-		77-124	-		
Manganese, Total	81		-		81-119	-		
Nickel, Total	88		-		83-117	-		
Potassium, Total	77		-		71-129	-		
Selenium, Total	90		-		78-122	-		
Silver, Total	90		-		76-124	-		
Sodium, Total	95		-		72-128	-		
Thallium, Total	93		-		79-121	-		
Vanadium, Total	84		-		78-122	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1733355

Report Date: 09/26/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1043819-2 SRM Lot Number: D093-540					
Zinc, Total	85	-	83-117	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1043939-2 SRM Lot Number: D093-540					
Mercury, Total	94	-	72-128	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043819-3 QC Sample: L1733304-01 Client ID: MS Sample												
Aluminum, Total	6900	189	8750	**980**	Q	-	-		75-125	-		20
Antimony, Total	ND	47.2	32.1	**68**	Q	-	-		75-125	-		20
Arsenic, Total	3.91	11.3	14.8	96		-	-		75-125	-		20
Barium, Total	12.5	189	182	90		-	-		75-125	-		20
Beryllium, Total	0.197J	4.72	4.46	94		-	-		75-125	-		20
Cadmium, Total	0.487J	4.81	4.80	100		-	-		75-125	-		20
Calcium, Total	177.	944	1030	90		-	-		75-125	-		20
Chromium, Total	10.3	18.9	27.6	92		-	-		75-125	-		20
Cobalt, Total	3.60	47.2	42.3	82		-	-		75-125	-		20
Copper, Total	6.63	23.6	28.3	92		-	-		75-125	-		20
Iron, Total	12400	94.4	14500	**2220**	Q	-	-		75-125	-		20
Lead, Total	6.77	48.1	48.3	86		-	-		75-125	-		20
Magnesium, Total	1460	944	2500	110		-	-		75-125	-		20
Manganese, Total	56.0	47.2	104	102		-	-		75-125	-		20
Nickel, Total	7.84	47.2	47.1	83		-	-		75-125	-		20
Potassium, Total	235.	944	1160	98		-	-		75-125	-		20
Selenium, Total	ND	11.3	7.95	**70**	Q	-	-		75-125	-		20
Silver, Total	ND	28.3	26.5	94		-	-		75-125	-		20
Sodium, Total	94.1J	944	974	103		-	-		75-125	-		20
Thallium, Total	ND	11.3	9.53	84		-	-		75-125	-		20
Vanadium, Total	12.8	47.2	58.7	97		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043819-3 QC Sample: L1733304-01 Client ID: MS Sample									
Zinc, Total	22.1	47.2	65.5	92	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043939-3 QC Sample: L1733239-01 Client ID: MS Sample									
Mercury, Total	0.02J	0.161	0.18	112	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1733355
Report Date: 09/26/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043819-4 QC Sample: L1733304-01 Client ID: DUP Sample						
Aluminum, Total	6900	6750	mg/kg	2		20
Antimony, Total	ND	ND	mg/kg	NC		20
Arsenic, Total	3.91	4.32	mg/kg	10		20
Barium, Total	12.5	13.8	mg/kg	10		20
Beryllium, Total	0.197J	0.223J	mg/kg	NC		20
Cadmium, Total	0.487J	0.538J	mg/kg	NC		20
Calcium, Total	177.	173	mg/kg	2		20
Chromium, Total	10.3	12.4	mg/kg	19		20
Cobalt, Total	3.60	3.79	mg/kg	5		20
Copper, Total	6.63	7.38	mg/kg	11		20
Iron, Total	12400	13100	mg/kg	5		20
Lead, Total	6.77	6.88	mg/kg	2		20
Magnesium, Total	1460	1410	mg/kg	3		20
Manganese, Total	56.0	53.8	mg/kg	4		20
Nickel, Total	7.84	8.51	mg/kg	8		20
Potassium, Total	235.	241	mg/kg	3		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	94.1J	85.3J	mg/kg	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1733355
Report Date: 09/26/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043819-4 QC Sample: L1733304-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	12.8	14.9	mg/kg	15	20
Zinc, Total	22.1	22.7	mg/kg	3	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1043939-4 QC Sample: L1733239-01 Client ID: DUP Sample					
Mercury, Total	0.02J	0.02J	mg/kg	NC	20

INORGANICS
&
MISCELLANEOUS

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-01
Client ID: MW-3 (18-20')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 09/19/17 09:30
Date Received: 09/19/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.7		%	0.100	NA	1	-	09/20/17 18:03	121,2540G	RI

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1733355
Report Date: 09/26/17

SAMPLE RESULTS

Lab ID: L1733355-02
Client ID: BD
Sample Location: BUFFALO, NY
Matrix: Soil
Date Collected: 09/19/17 10:00
Date Received: 09/19/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.3		%	0.100	NA	1	-	09/20/17 18:03	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1733355
Report Date: 09/26/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1043762-1 QC Sample: L1733306-02 Client ID: DUP Sample						
Solids, Total	78.4	77.3	%	1		20

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1733355-01A	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-01B	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-01C	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-01D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1733355-01E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1733355-01F	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1733355-01G	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1733355-01H	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1733355-01X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-01Y	Vial Water preserved split	A	NA		5.5	Y	Absent	20-SEP-17 10:25	NYTCL-8260HLW(14)
L1733355-01Z	Vial Water preserved split	A	NA		5.5	Y	Absent	20-SEP-17 10:25	NYTCL-8260HLW(14)
L1733355-02A	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-02B	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-02C	5 gram Encore Sampler	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-02D	Plastic 2oz unpreserved for TS	A	NA		5.5	Y	Absent		TS(7)
L1733355-02E	Metals Only-Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1733355-02F	Glass 60mL/2oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)

*Values in parentheses indicate holding time in days

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1733355
Report Date: 09/26/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1733355-02G	Glass 120ml/4oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1733355-02H	Glass 250ml/8oz unpreserved	A	NA		5.5	Y	Absent		NYTCL-8270(14),HERB-APA(14),NYTCL-8081(14),NYTCL-8082(14)
L1733355-02X	Vial MeOH preserved split	A	NA		5.5	Y	Absent		NYTCL-8260HLW(14)
L1733355-02Y	Vial Water preserved split	A	NA		5.5	Y	Absent	20-SEP-17 10:25	NYTCL-8260HLW(14)
L1733355-02Z	Vial Water preserved split	A	NA		5.5	Y	Absent	20-SEP-17 10:25	NYTCL-8260HLW(14)

*Values in parentheses indicate holding time in days

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733355
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733355
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1733355
Project Number:	B0239-016-001-004	**Report Date:**	09/26/17

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

ALPHA ANALYTICAL

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FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 9/20/17

ALPHA Job #: L1733355

Client Information
Client: Turnkey Env Restoration
Address: 2558 Hamburg Tpke
Buffalo, NY, 14218
Phone: 716-713-3937
Fax:
Email: NMunley@Turnkeyllc.com

Project Information
Project Name: Main ; East Ballcom Streets Site
Project Location: Buffalo, NY
Project # B0339-016-001-004-002
(Use Project name as Project #) ☐
Project Manager: Nate Munley
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Category B

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4-Dioxane VOC's	TCL SVOC's	TAL Metals	PCB's	Herb	Pest	Total Bottle	Sample Specific Comments
33355-01	MW-3 (16-20')	9/19/17	9:30	Soil	NAS	X	X	X	X	X	X	9	
02	BD	9/19/17	10:00	Soil	NAS	X	X	X	X	X	X	9	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	E	A	A	A	A	A		
Preservative	O	O	O	O	O	O		

Relinquished By:	Date/Time	Received By:	Date/Time
	9/19/17 10:30	Jack Storey on behalf of	9/19/17 16:50
Jack Storey on behalf of	9/19/17 16:50		9/20/17 01:05

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1738416
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & E. BALCOM
Project Number:	T0234-016-001
Report Date:	10/30/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1738416-01	MW-1	WATER	BUFFALO, NY	10/23/17 12:30	10/23/17
L1738416-02	MW-2	WATER	BUFFALO, NY	10/23/17 13:30	10/23/17

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1738416
Project Number:	T0234-016-001	**Report Date:**	10/30/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1738416
Project Number:	T0234-016-001	**Report Date:**	10/30/17

Case Narrative (continued)

Report Submission

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

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

Authorized Signature: Kara Soroko

Title: Technical Director/Representative Date: 10/30/17

ORGANICS

VOLATILES

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/26/17 11:34
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1738416

Project Number: T0234-016-001 **Report Date:** 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01 Date Collected: 10/23/17 12:30

Client ID: MW-1 Date Received: 10/23/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	5.2		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
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
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	115		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	101		70-130

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 10/26/17 12:03
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.14	J	ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.53		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: MAIN & E. BALCOM
Lab Number: L1738416
Project Number: T0234-016-001
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	0.88	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	2.0	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
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
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	113		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	100		70-130

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/26/17 08:16
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1056605-5					
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: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/26/17 08:16
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1056605-5					
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
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
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: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 10/26/17 08:16
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1056605-5					

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

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1056605-3 WG1056605-4								
Methylene chloride	95		86		70-130	10		20
1,1-Dichloroethane	100		92		70-130	8		20
Chloroform	100		93		70-130	7		20
Carbon tetrachloride	94		87		63-132	8		20
1,2-Dichloropropane	110		97		70-130	13		20
Dibromochloromethane	98		88		63-130	11		20
1,1,2-Trichloroethane	100		95		70-130	5		20
Tetrachloroethene	97		88		70-130	10		20
Chlorobenzene	100		92		75-130	8		20
Trichlorofluoromethane	89		84		62-150	6		20
1,2-Dichloroethane	120		100		70-130	18		20
1,1,1-Trichloroethane	98		90		67-130	9		20
Bromodichloromethane	100		95		67-130	5		20
trans-1,3-Dichloropropene	100		88		70-130	13		20
cis-1,3-Dichloropropene	100		94		70-130	6		20
Bromoform	97		89		54-136	9		20
1,1,2,2-Tetrachloroethane	100		94		67-130	6		20
Benzene	98		90		70-130	9		20
Toluene	99		88		70-130	12		20
Ethylbenzene	100		93		70-130	7		20
Chloromethane	78		72		64-130	8		20
Bromomethane	75		70		39-139	7		20
Vinyl chloride	80		74		55-140	8		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1056605-3 WG1056605-4								
Chloroethane	97		90		55-138	7		20
1,1-Dichloroethene	88		83		61-145	6		20
trans-1,2-Dichloroethene	93		86		70-130	8		20
Trichloroethene	100		91		70-130	9		20
1,2-Dichlorobenzene	100		92		70-130	8		20
1,3-Dichlorobenzene	100		93		70-130	7		20
1,4-Dichlorobenzene	100		92		70-130	8		20
Methyl tert butyl ether	100		92		63-130	8		20
p/m-Xylene	105		95		70-130	10		20
o-Xylene	110		95		70-130	15		20
cis-1,2-Dichloroethene	96		88		70-130	9		20
Styrene	105		95		70-130	10		20
Dichlorodifluoromethane	67		62		36-147	8		20
Acetone	100		89		58-148	12		20
Carbon disulfide	80		74		51-130	8		20
2-Butanone	95		94		63-138	1		20
4-Methyl-2-pentanone	110		96		59-130	14		20
2-Hexanone	110		98		57-130	12		20
Bromochloromethane	100		94		70-130	6		20
1,2-Dibromoethane	100		91		70-130	9		20
n-Butylbenzene	110		97		53-136	13		20
sec-Butylbenzene	100		94		70-130	6		20
1,2-Dibromo-3-chloropropane	94		84		41-144	11		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1056605-3 WG1056605-4								
Isopropylbenzene	100		92		70-130	8		20
p-Isopropyltoluene	100		95		70-130	5		20
n-Propylbenzene	110		96		69-130	14		20
1,2,3-Trichlorobenzene	110		100		70-130	10		20
1,2,4-Trichlorobenzene	100		94		70-130	6		20
1,3,5-Trimethylbenzene	100		92		64-130	8		20
1,2,4-Trimethylbenzene	100		93		70-130	7		20
Methyl Acetate	110		99		70-130	11		20
Cyclohexane	100		95		70-130	5		20
1,4-Dioxane	92		100		56-162	8		20
Freon-113	92		85		70-130	8		20
Methyl cyclohexane	100		93		70-130	7		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		116		70-130
Toluene-d8	99		99		70-130
4-Bromofluorobenzene	97		98		70-130
Dibromofluoromethane	100		102		70-130

SEMIVOLATILES

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/28/17 22:45
Analyst: RC

Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/17 00:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

Project Name: MAIN & E. BALCOM
Lab Number: L1738416
Project Number: T0234-016-001
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	2.9	J	ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	83		10-120
4-Terphenyl-d14	80		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/30/17 12:15
Analyst: KL

Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/29/17 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.07	J	ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	0.05	J	ug/l	0.10	0.04	1
Phenanthrene	0.12		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: MAIN & E. BALCOM
Lab Number: L1738416
Project Number: T0234-016-001
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	42		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	68		15-120
2,4,6-Tribromophenol	107		10-120
4-Terphenyl-d14	82		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 10/28/17 23:11
Analyst: RC

Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/17 03:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

Project Name: MAIN & E. BALCOM
Lab Number: L1738416
Project Number: T0234-016-001
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	100		10-120
4-Terphenyl-d14	90		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 10/30/17 12:42
Analyst: KL

Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/29/17 16:56

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.06	J	ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	0.06	J	ug/l	0.10	0.04	1
Phenanthrene	0.37		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: MAIN & E. BALCOM
Lab Number: L1738416
Project Number: T0234-016-001
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	67		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	71		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/28/17 21:00
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/25/17 22:54

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1056361-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Isophorone	ND		ug/l	5.0	0.60
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63
Dimethyl phthalate	ND		ug/l	5.0	0.65
Biphenyl	ND		ug/l	2.0	0.76
4-Chloroaniline	ND		ug/l	5.0	0.63
2-Nitroaniline	ND		ug/l	5.0	1.1
3-Nitroaniline	ND		ug/l	5.0	1.2
4-Nitroaniline	ND		ug/l	5.0	1.3
Dibenzofuran	ND		ug/l	2.0	0.66
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67
Acetophenone	ND		ug/l	5.0	0.85
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/28/17 21:00
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/25/17 22:54

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1056361-1					
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Phenol	ND		ug/l	5.0	1.9
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72
Carbazole	ND		ug/l	2.0	0.63
Atrazine	ND		ug/l	10	1.8
Benzaldehyde	ND		ug/l	5.0	1.1
Caprolactam	ND		ug/l	10	3.6
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93

Tentatively Identified Compounds

Total TIC Compounds	4.76	J	ug/l
Unknown	4.76	J	ug/l

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 10/28/17 21:00
Analyst: EK

Extraction Method: EPA 3510C
Extraction Date: 10/25/17 22:54

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1056361-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	36		21-120
Phenol-d6	26		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	83		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/30/17 08:17
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 10/29/17 16:56

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1057504-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	0.02	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	0.06	J	ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04
2-Methylnaphthalene	0.05	J	ug/l	0.10	0.05
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 10/30/17 08:17
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 10/29/17 16:56

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1057504-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	55		21-120
Phenol-d6	39		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	113		10-120
4-Terphenyl-d14	100		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1056361-2 WG1056361-3								
Bis(2-chloroethyl)ether	92		83		40-140	10		30
3,3'-Dichlorobenzidine	75		72		40-140	4		30
2,4-Dinitrotoluene	114		107		48-143	6		30
2,6-Dinitrotoluene	113		107		40-140	5		30
4-Chlorophenyl phenyl ether	101		94		40-140	7		30
4-Bromophenyl phenyl ether	98		93		40-140	5		30
Bis(2-chloroisopropyl)ether	99		91		40-140	8		30
Bis(2-chloroethoxy)methane	104		96		40-140	8		30
Hexachlorocyclopentadiene	68		58		40-140	16		30
Isophorone	106		98		40-140	8		30
Nitrobenzene	97		91		40-140	6		30
NDPA/DPA	105		97		40-140	8		30
n-Nitrosodi-n-propylamine	107		100		29-132	7		30
Bis(2-ethylhexyl)phthalate	123		117		40-140	5		30
Butyl benzyl phthalate	122		116		40-140	5		30
Di-n-butylphthalate	118		111		40-140	6		30
Di-n-octylphthalate	124		115		40-140	8		30
Diethyl phthalate	108		100		40-140	8		30
Dimethyl phthalate	107		100		40-140	7		30
Biphenyl	83		75		40-140	10		30
4-Chloroaniline	82		80		40-140	2		30
2-Nitroaniline	117		113		52-143	3		30
3-Nitroaniline	91		93		25-145	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1056361-2 WG1056361-3								
4-Nitroaniline	100		94		51-143	6		30
Dibenzofuran	101		93		40-140	8		30
1,2,4,5-Tetrachlorobenzene	78		71		2-134	9		30
Acetophenone	82		77		39-129	6		30
2,4,6-Trichlorophenol	107		98		30-130	9		30
p-Chloro-m-cresol	**108**	Q	**101**	Q	23-97	7		30
2-Chlorophenol	93		86		27-123	8		30
2,4-Dichlorophenol	104		98		30-130	6		30
2,4-Dimethylphenol	89		91		30-130	2		30
2-Nitrophenol	102		96		30-130	6		30
4-Nitrophenol	63		59		10-80	7		30
2,4-Dinitrophenol	103		92		20-130	11		30
4,6-Dinitro-o-cresol	108		102		20-164	6		30
Phenol	52		50		12-110	4		30
3-Methylphenol/4-Methylphenol	82		78		30-130	5		30
2,4,5-Trichlorophenol	106		100		30-130	6		30
Carbazole	107		101		55-144	6		30
Atrazine	97		92		40-140	5		30
Benzaldehyde	104		98		40-140	6		30
Caprolactam	34		32		10-130	6		30
2,3,4,6-Tetrachlorophenol	105		98		40-140	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1056361-2 WG1056361-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	49		45		21-120
Phenol-d6	36		34		10-120
Nitrobenzene-d5	79		72		23-120
2-Fluorobiphenyl	74		68		15-120
2,4,6-Tribromophenol	84		75		10-120
4-Terphenyl-d14	76		73		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1057504-2 WG1057504-3								
Acenaphthene	98		106		37-111	8		40
2-Chloronaphthalene	102		112		40-140	9		40
Fluoranthene	120		131		40-140	9		40
Hexachlorobutadiene	89		95		40-140	7		40
Naphthalene	98		105		40-140	7		40
Benzo(a)anthracene	120		129		40-140	7		40
Benzo(a)pyrene	106		114		40-140	7		40
Benzo(b)fluoranthene	114		123		40-140	8		40
Benzo(k)fluoranthene	112		119		40-140	6		40
Chrysene	104		111		40-140	7		40
Acenaphthylene	115		127		40-140	10		40
Anthracene	117		126		40-140	7		40
Benzo(ghi)perylene	117		121		40-140	3		40
Fluorene	107		116		40-140	8		40
Phenanthrene	101		108		40-140	7		40
Dibenzo(a,h)anthracene	112		117		40-140	4		40
Indeno(1,2,3-cd)pyrene	111		117		40-140	5		40
Pyrene	117		127		26-127	8		40
2-Methylnaphthalene	102		111		40-140	8		40
Pentachlorophenol	**118**	Q	**130**	Q	9-103	10		40
Hexachlorobenzene	103		111		40-140	7		40
Hexachloroethane	96		102		40-140	6		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

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

Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1057504-2 WG1057504-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	52		54		21-120
Phenol-d6	38		40		10-120
Nitrobenzene-d5	87		93		23-120
2-Fluorobiphenyl	70		76		15-120
2,4,6-Tribromophenol	99		108		10-120
4-Terphenyl-d14	85		92		41-149

PCBS

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 10/29/17 22:56
Analyst: HT

Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/17 02:17
Cleanup Method: EPA 3665A
Cleanup Date: 10/28/17
Cleanup Method: EPA 3660B
Cleanup Date: 10/28/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	41		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	58		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 10/29/17 23:11
Analyst: HT

Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/17 02:17
Cleanup Method: EPA 3665A
Cleanup Date: 10/28/17
Cleanup Method: EPA 3660B
Cleanup Date: 10/28/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	85		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		30-150	B
Decachlorobiphenyl	66		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 10/27/17 09:39
Analyst: WR

Extraction Method: EPA 3510C
Extraction Date: 10/26/17 02:17
Cleanup Method: EPA 3665A
Cleanup Date: 10/26/17
Cleanup Method: EPA 3660B
Cleanup Date: 10/27/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-02 Batch: WG1056405-1						
Aroclor 1016	ND		ug/l	0.083	0.020	A
Aroclor 1221	ND		ug/l	0.083	0.032	A
Aroclor 1232	ND		ug/l	0.083	0.027	A
Aroclor 1242	ND		ug/l	0.083	0.030	A
Aroclor 1248	ND		ug/l	0.083	0.023	A
Aroclor 1254	ND		ug/l	0.083	0.035	A
Aroclor 1260	ND		ug/l	0.083	0.020	A
Aroclor 1262	ND		ug/l	0.083	0.017	A
Aroclor 1268	ND		ug/l	0.083	0.027	A
PCBs, Total	ND		ug/l	0.083	0.017	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	81		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1056405-2 WG1056405-3									
Aroclor 1016	87		86		40-140	1		50	A
Aroclor 1260	96		95		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		64		30-150	A
Decachlorobiphenyl	69		66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		70		30-150	B
Decachlorobiphenyl	74		69		30-150	B

PESTICIDES

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 10/29/17 01:13
Analyst: KEG

Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/17 07:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	0.047		ug/l	0.020	0.003	1	B
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	0.024	PI	ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	0.015	JPI	ug/l	0.020	0.007	1	B
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	81		30-150	B
Decachlorobiphenyl	48		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 10/27/17 20:36
Analyst: SL

Methylation Date: 10/26/17 16:00

Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 10/25/17 17:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	83		30-150	A
DCAA	85		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 10/29/17 01:26
Analyst: KEG

Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 10/26/17 07:44

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	0.039		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	0.013	JPI	ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	0.014	JPI	ug/l	0.020	0.007	1	B
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	68		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	61		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 10/27/17 20:55
Analyst: SL

Methylation Date: 10/26/17 16:00

Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 10/25/17 17:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	83		30-150	A
DCAA	81		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 10/27/17 18:20
Analyst: SL

Extraction Method: EPA 8151A
Extraction Date: 10/25/17 17:09

Methylation Date: 10/26/17 16:00

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1056285-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	73		30-150	A
DCAA	78		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/29/17 00:22
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 10/26/17 07:44

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1056475-1						
Delta-BHC	ND		ug/l	0.020	0.005	A
Lindane	ND		ug/l	0.020	0.004	A
Alpha-BHC	ND		ug/l	0.020	0.004	A
Beta-BHC	ND		ug/l	0.020	0.006	A
Heptachlor	ND		ug/l	0.020	0.003	A
Aldrin	ND		ug/l	0.020	0.002	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	A
Endrin	ND		ug/l	0.040	0.004	A
Endrin aldehyde	ND		ug/l	0.040	0.008	A
Endrin ketone	ND		ug/l	0.040	0.005	A
Dieldrin	ND		ug/l	0.040	0.004	A
4,4'-DDE	ND		ug/l	0.040	0.004	A
4,4'-DDD	ND		ug/l	0.040	0.005	A
4,4'-DDT	ND		ug/l	0.040	0.004	A
Endosulfan I	ND		ug/l	0.020	0.003	A
Endosulfan II	ND		ug/l	0.040	0.005	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	A
Methoxychlor	ND		ug/l	0.200	0.007	A
Toxaphene	ND		ug/l	0.200	0.063	A
cis-Chlordane	ND		ug/l	0.020	0.007	A
trans-Chlordane	ND		ug/l	0.020	0.006	A
Chlordane	ND		ug/l	0.200	0.046	A

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 10/29/17 00:22
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 10/26/17 07:44

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-02 Batch: WG1056475-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	87		30-150	A
2,4,5,6-Tetrachloro-m-xylene	54		30-150	B
Decachlorobiphenyl	73		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1056285-2 WG1056285-3									
2,4-D	77		78		30-150	1		25	A
2,4,5-T	81		80		30-150	1		25	A
2,4,5-TP (Silvex)	76		76		30-150	0		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	81		81		30-150	A
DCAA	91		90		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1056475-2 WG1056475-3									
Delta-BHC	102		107		30-150	5		20	A
Lindane	97		107		30-150	9		20	A
Alpha-BHC	110		124		30-150	12		20	A
Beta-BHC	91		101		30-150	10		20	A
Heptachlor	75		76		30-150	1		20	A
Aldrin	75		74		30-150	2		20	A
Heptachlor epoxide	95		103		30-150	8		20	A
Endrin	96		104		30-150	8		20	A
Endrin aldehyde	83		87		30-150	4		20	A
Endrin ketone	94		102		30-150	8		20	A
Dieldrin	108		116		30-150	7		20	A
4,4'-DDE	101		108		30-150	7		20	A
4,4'-DDD	98		106		30-150	8		20	A
4,4'-DDT	100		105		30-150	5		20	A
Endosulfan I	101		108		30-150	7		20	A
Endosulfan II	96		104		30-150	8		20	A
Endosulfan sulfate	98		104		30-150	6		20	A
Methoxychlor	93		99		30-150	6		20	A
cis-Chlordane	92		96		30-150	4		20	A
trans-Chlordane	92		94		30-150	2		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-02 Batch: WG1056475-2 WG1056475-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		73		30-150	A
Decachlorobiphenyl	93		97		30-150	A
2,4,5,6-Tetrachloro-m-xylene	55		63		30-150	B
Decachlorobiphenyl	78		84		30-150	B

METALS

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-01
Client ID: MW-1
Sample Location: BUFFALO, NY
Matrix: Water
Date Collected: 10/23/17 12:30
Date Received: 10/23/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.26		mg/l	0.0100	0.00327	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00649		mg/l	0.00050	0.00016	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Barium, Total	0.05918		mg/l	0.00050	0.00017	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Beryllium, Total	0.00012	J	mg/l	0.00050	0.00010	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00011	J	mg/l	0.00020	0.00005	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Calcium, Total	237.		mg/l	0.100	0.0394	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Chromium, Total	0.00324		mg/l	0.00100	0.00017	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00267		mg/l	0.00050	0.00016	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Copper, Total	0.00561		mg/l	0.00100	0.00038	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Iron, Total	4.62		mg/l	0.0500	0.0191	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Lead, Total	0.00462		mg/l	0.00100	0.00034	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Magnesium, Total	126.		mg/l	0.0700	0.0242	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Manganese, Total	0.1588		mg/l	0.00100	0.00044	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/17 11:43	10/28/17 17:06	EPA 7470A	1,7470A	MG
Nickel, Total	0.00622		mg/l	0.00200	0.00055	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Potassium, Total	6.31		mg/l	0.100	0.0309	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Selenium, Total	0.00231	J	mg/l	0.00500	0.00173	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Sodium, Total	1000		mg/l	2.00	0.586	20	10/25/17 16:30	10/26/17 11:22	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00416	J	mg/l	0.00500	0.00157	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM
Zinc, Total	0.02023		mg/l	0.01000	0.00341	1	10/25/17 16:30	10/26/17 10:36	EPA 3005A	1,6020A	AM

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

SAMPLE RESULTS

Lab ID: L1738416-02
Client ID: MW-2
Sample Location: BUFFALO, NY
Matrix: Water
Date Collected: 10/23/17 13:30
Date Received: 10/23/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.36		mg/l	0.0100	0.00327	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00934		mg/l	0.00050	0.00016	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Barium, Total	0.06270		mg/l	0.00050	0.00017	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Beryllium, Total	0.00013	J	mg/l	0.00050	0.00010	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00006	J	mg/l	0.00020	0.00005	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Calcium, Total	109.		mg/l	0.100	0.0394	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Chromium, Total	0.00381		mg/l	0.00100	0.00017	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00248		mg/l	0.00050	0.00016	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Copper, Total	0.00618		mg/l	0.00100	0.00038	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Iron, Total	4.91		mg/l	0.0500	0.0191	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Lead, Total	0.00779		mg/l	0.00100	0.00034	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Magnesium, Total	51.0		mg/l	0.0700	0.0242	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Manganese, Total	0.1487		mg/l	0.00100	0.00044	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/17 11:43	10/28/17 17:08	EPA 7470A	1,7470A	MG
Nickel, Total	0.00600		mg/l	0.00200	0.00055	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Potassium, Total	6.44		mg/l	0.100	0.0309	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Selenium, Total	0.00245	J	mg/l	0.00500	0.00173	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Sodium, Total	399.		mg/l	0.100	0.0293	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00475	J	mg/l	0.00500	0.00157	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM
Zinc, Total	0.01889		mg/l	0.01000	0.00341	1	10/25/17 16:30	10/26/17 11:18	EPA 3005A	1,6020A	AM

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1056238-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	10/25/17 16:30	10/26/17 10:54	1,6020A	AM

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG1056591-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	10/26/17 11:43	10/28/17 16:46	1,7470A	MG

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001
Lab Number: L1738416
Report Date: 10/30/17

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1056238-2								
Aluminum, Total	109		-		80-120	-		
Antimony, Total	92		-		80-120	-		
Arsenic, Total	98		-		80-120	-		
Barium, Total	98		-		80-120	-		
Beryllium, Total	100		-		80-120	-		
Cadmium, Total	105		-		80-120	-		
Calcium, Total	105		-		80-120	-		
Chromium, Total	97		-		80-120	-		
Cobalt, Total	97		-		80-120	-		
Copper, Total	97		-		80-120	-		
Iron, Total	103		-		80-120	-		
Lead, Total	98		-		80-120	-		
Magnesium, Total	104		-		80-120	-		
Manganese, Total	103		-		80-120	-		
Nickel, Total	98		-		80-120	-		
Potassium, Total	104		-		80-120	-		
Selenium, Total	101		-		80-120	-		
Silver, Total	95		-		80-120	-		
Sodium, Total	100		-		80-120	-		
Thallium, Total	91		-		80-120	-		
Vanadium, Total	98		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0234-016-001

Lab Number: L1738416

Report Date: 10/30/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1056238-2					
Zinc, Total	95	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG1056591-2					
Mercury, Total	100	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1056238-3 QC Sample: L1738407-01 Client ID: MS Sample												
Aluminum, Total	0.0120	2	2.15	107		-	-		75-125	-		20
Antimony, Total	ND	0.5	0.4831	97		-	-		75-125	-		20
Arsenic, Total	0.00080	0.12	0.1180	98		-	-		75-125	-		20
Barium, Total	0.03179	2	1.943	96		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.04591	92		-	-		75-125	-		20
Cadmium, Total	0.00008J	0.051	0.05155	101		-	-		75-125	-		20
Calcium, Total	114.	10	119	**50**	Q	-	-		75-125	-		20
Chromium, Total	0.00026J	0.2	0.1913	96		-	-		75-125	-		20
Cobalt, Total	0.00158	0.5	0.4680	93		-	-		75-125	-		20
Copper, Total	0.00221	0.25	0.2393	95		-	-		75-125	-		20
Iron, Total	0.0260J	1	1.03	103		-	-		75-125	-		20
Lead, Total	ND	0.51	0.4753	93		-	-		75-125	-		20
Magnesium, Total	17.5	10	27.1	96		-	-		75-125	-		20
Manganese, Total	0.8722	0.5	1.320	90		-	-		75-125	-		20
Nickel, Total	0.00406	0.5	0.4809	95		-	-		75-125	-		20
Potassium, Total	1.87	10	12.0	101		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.119	99		-	-		75-125	-		20
Silver, Total	ND	0.05	0.04573	91		-	-		75-125	-		20
Sodium, Total	29.7	10	37.4	77		-	-		75-125	-		20
Thallium, Total	ND	0.12	0.1051	88		-	-		75-125	-		20
Vanadium, Total	ND	0.5	0.4789	96		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1056238-3 QC Sample: L1738407-01 Client ID: MS Sample									
Zinc, Total	ND	0.5	0.4674	93	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1056591-3 WG1056591-4 QC Sample: L1738611-04 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00490	98	0.00491	98	75-125	0	20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1056591-5 WG1056591-6 QC Sample: L1738611-05 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00493	99	0.00506	101	75-125	3	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1056238-4 QC Sample: L1738407-01 Client ID: DUP Sample						
Aluminum, Total	0.0120	0.0128	mg/l	6		20
Antimony, Total	ND	0.00082J	mg/l	NC		20
Arsenic, Total	0.00080	0.00082	mg/l	3		20
Barium, Total	0.03179	0.02993	mg/l	6		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	0.00008J	0.00008J	mg/l	NC		20
Calcium, Total	114.	110	mg/l	4		20
Chromium, Total	0.00026J	0.00024J	mg/l	NC		20
Cobalt, Total	0.00158	0.00145	mg/l	8		20
Copper, Total	0.00221	0.00210	mg/l	5		20
Iron, Total	0.0260J	0.0244J	mg/l	NC		20
Lead, Total	ND	ND	mg/l	NC		20
Magnesium, Total	17.5	17.0	mg/l	3		20
Manganese, Total	0.8722	0.8323	mg/l	5		20
Nickel, Total	0.00406	0.00337	mg/l	19		20
Potassium, Total	1.87	1.81	mg/l	3		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Sodium, Total	29.7	28.5	mg/l	4		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG1056238-4 QC Sample: L1738407-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/l	NC	20
Vanadium, Total	ND	ND	mg/l	NC	20
Zinc, Total	ND	ND	mg/l	NC	20

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1738416-01A	Vial HCl preserved	B	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1738416-01B	Vial HCl preserved	B	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1738416-01C	Vial HCl preserved	B	NA		2.6	Y	Absent		NYTCL-8260-R2(14)
L1738416-01D	Plastic 250ml HNO3 preserved	B	<2	<2	2.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1738416-01E	Amber 500ml unpreserved	B	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1738416-01F	Amber 500ml unpreserved	B	7	7	2.6	Y	Absent		NYTCL-8081(7)
L1738416-01G	Amber 1000ml unpreserved	B	7	7	2.6	Y	Absent		HERB-APA(7)
L1738416-01H	Amber 1000ml unpreserved	B	7	7	2.6	Y	Absent		HERB-APA(7)
L1738416-01I	Amber 1000ml unpreserved	B	7	7	2.6	Y	Absent		NYTCL-8082-1200ML(7)
L1738416-01J	Amber 1000ml unpreserved	B	7	7	2.6	Y	Absent		NYTCL-8082-1200ML(7)
L1738416-01K	Amber 1000ml unpreserved	B	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1738416-01L	Amber 1000ml unpreserved	B	7	7	2.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1738416-02A	Vial HCl preserved	C	NA		2.1	Y	Absent		NYTCL-8260-R2(14)
L1738416-02B	Vial HCl preserved	C	NA		2.1	Y	Absent		NYTCL-8260-R2(14)
L1738416-02C	Vial HCl preserved	C	NA		2.1	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name: MAIN & E. BALCOM
Project Number: T0234-016-001

Lab Number: L1738416
Report Date: 10/30/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1738416-02D	Plastic 250ml HNO3 preserved	C	<2	<2	2.1	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1738416-02E	Amber 500ml unpreserved	C	7	7	2.1	Y	Absent		NYTCL-8081(7)
L1738416-02F	Amber 500ml unpreserved	C	7	7	2.1	Y	Absent		NYTCL-8081(7)
L1738416-02G	Amber 1000ml unpreserved	C	7	7	2.1	Y	Absent		HERB-APA(7)
L1738416-02H	Amber 1000ml unpreserved	C	7	7	2.1	Y	Absent		HERB-APA(7)
L1738416-02I	Amber 1000ml unpreserved	C	7	7	2.1	Y	Absent		NYTCL-8082-1200ML(7)
L1738416-02J	Amber 1000ml unpreserved	C	7	7	2.1	Y	Absent		NYTCL-8082-1200ML(7)
L1738416-02K	Amber 1000ml unpreserved	C	7	7	2.1	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1738416-02L	Amber 1000ml unpreserved	C	7	7	2.1	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1738416
Project Number:	T0234-016-001	**Report Date:**	10/30/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1738416
Project Number:	T0234-016-001	**Report Date:**	10/30/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1738416
Project Number:	T0234-016-001	**Report Date:**	10/30/17

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

ALPHA ANALYTICAL

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

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 10/24/17

ALPHA Job #: L1738416

Project Information
Project Name: Main & E. Balcom
Project Location: Buffalo, NY
Project #: TO 234-016-001
(Use Project name as Project #) ☐
Project Manager: Nate Munley
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

Client Information
Client: TurnKey Env. Restoration
Address: 2558 Hamburg Tpke
Buffalo, NY, 14218
Phone: 716-713-3937
Fax:
Email: NMunley@TurnkeyLLC.com

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Category B

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL+CP51 VOC's	TCL SVOC's	TAL Metals	PCB's	Pesticide	herbicide			Sample Specific Comments	Total Bottles
38416-01	MW-1	10/23/17	12:30	Water	NTS	X	X	X	X	X	X				12
02	MW-2	↓	13:30	Water	NTS	X	X	X	X	X	X				12
Container Type						V	A	A	A	A	A				
Preservative						B	O	O	O	O	O				

Preservative Code	Container Code
A = None	P = Plastic
B = HCl	A = Amber Glass
C = HNO_3	V = Vial
D = H_2SO_4	G = Glass
E = NaOH	B = Bacteria Cup
F = MeOH	C = Cube
G = $NaHSO_4$	O = Other
H = $Na_2S_2O_3$	E = Encore
K/E = Zn Ac/NaOH	D = BOD Bottle
O = Other — Ice	

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	10/23/17 14:00	[signature] AAL	10/23/17 16:10
[signature] AAL	10/23/17 16:15	[signature]	10/24/17 0200

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1741813
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & E. BALCOM
Project Number:	B0234-016-001-0040
Report Date:	11/21/17

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Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1741813-01	MW-4 (8-10')	SOIL	BUFFALO, NY	11/13/17 14:00	11/14/17

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Case Narrative (continued)

Report Submission

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

Sample Receipt

L1741813-01: The sample was received in inappropriate containers for the TCL Volatiles - EPA 8260C analysis.

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

Total Metals

L1741813-01: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

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

Authorized Signature: Kara Soroko

Title: Technical Director/Representative Date: 11/21/17

ORGANICS

VOLATILES

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

SAMPLE RESULTS

Lab ID: L1741813-01
Client ID: MW-4 (8-10')
Sample Location: BUFFALO, NY

Date Collected: 11/13/17 14:00
Date Received: 11/14/17
Field Prep: Not Specified

Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 11/20/17 10:31
Analyst: MV
Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	9.4	1.5	1
1,1-Dichloroethane	ND		ug/kg	1.4	0.25	1
Chloroform	ND		ug/kg	1.4	0.35	1
Carbon tetrachloride	ND		ug/kg	0.94	0.32	1
1,2-Dichloropropane	ND		ug/kg	3.3	0.21	1
Dibromochloromethane	ND		ug/kg	0.94	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.4	0.29	1
Tetrachloroethene	ND		ug/kg	0.94	0.28	1
Chlorobenzene	ND		ug/kg	0.94	0.33	1
Trichlorofluoromethane	ND		ug/kg	4.7	0.39	1
1,2-Dichloroethane	ND		ug/kg	0.94	0.23	1
1,1,1-Trichloroethane	ND		ug/kg	0.94	0.33	1
Bromodichloromethane	ND		ug/kg	0.94	0.29	1
trans-1,3-Dichloropropene	ND		ug/kg	0.94	0.20	1
cis-1,3-Dichloropropene	ND		ug/kg	0.94	0.22	1
Bromoform	ND		ug/kg	3.8	0.22	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.94	0.28	1
Benzene	0.35	J	ug/kg	0.94	0.18	1
Toluene	ND		ug/kg	1.4	0.18	1
Ethylbenzene	ND		ug/kg	0.94	0.16	1
Chloromethane	ND		ug/kg	4.7	0.41	1
Bromomethane	ND		ug/kg	1.9	0.32	1
Vinyl chloride	ND		ug/kg	1.9	0.30	1
Chloroethane	ND		ug/kg	1.9	0.30	1
1,1-Dichloroethene	ND		ug/kg	0.94	0.35	1
trans-1,2-Dichloroethene	0.32	J	ug/kg	1.4	0.23	1
Trichloroethene	2.4		ug/kg	0.94	0.28	1
1,2-Dichlorobenzene	ND		ug/kg	4.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	4.7	0.20	1
1,4-Dichlorobenzene	ND		ug/kg	4.7	0.17	1

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

SAMPLE RESULTS

Lab ID: L1741813-01
Client ID: MW-4 (8-10')
Sample Location: BUFFALO, NY
Date Collected: 11/13/17 14:00
Date Received: 11/14/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	1.9	0.14	1
p/m-Xylene	ND		ug/kg	1.9	0.33	1
o-Xylene	ND		ug/kg	1.9	0.32	1
cis-1,2-Dichloroethene	ND		ug/kg	0.94	0.32	1
Styrene	ND		ug/kg	1.9	0.38	1
Dichlorodifluoromethane	ND		ug/kg	9.4	0.47	1
Acetone	4.8	J	ug/kg	9.4	2.2	1
Carbon disulfide	ND		ug/kg	9.4	1.0	1
2-Butanone	ND		ug/kg	9.4	0.65	1
4-Methyl-2-pentanone	ND		ug/kg	9.4	0.23	1
2-Hexanone	ND		ug/kg	9.4	0.62	1
Bromochloromethane	ND		ug/kg	4.7	0.34	1
1,2-Dibromoethane	ND		ug/kg	3.8	0.19	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.7	0.37	1
Isopropylbenzene	ND		ug/kg	0.94	0.18	1
1,2,3-Trichlorobenzene	ND		ug/kg	4.7	0.24	1
1,2,4-Trichlorobenzene	ND		ug/kg	4.7	0.20	1
Methyl Acetate	ND		ug/kg	19	0.43	1
Cyclohexane	ND		ug/kg	19	0.41	1
1,4-Dioxane	ND		ug/kg	38	14.	1
Freon-113	ND		ug/kg	19	0.48	1
Methyl cyclohexane	ND		ug/kg	3.8	0.22	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/20/17 08:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1064789-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/20/17 08:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1064789-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/20/17 08:42
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1064789-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	110		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1064789-3 WG1064789-4								
Methylene chloride	99		100		70-130	1		30
1,1-Dichloroethane	103		105		70-130	2		30
Chloroform	100		100		70-130	0		30
Carbon tetrachloride	92		93		70-130	1		30
1,2-Dichloropropane	108		108		70-130	0		30
Dibromochloromethane	91		94		70-130	3		30
1,1,2-Trichloroethane	108		110		70-130	2		30
Tetrachloroethene	93		93		70-130	0		30
Chlorobenzene	98		98		70-130	0		30
Trichlorofluoromethane	121		120		70-139	1		30
1,2-Dichloroethane	108		110		70-130	2		30
1,1,1-Trichloroethane	101		102		70-130	1		30
Bromodichloromethane	105		106		70-130	1		30
trans-1,3-Dichloropropene	98		98		70-130	0		30
cis-1,3-Dichloropropene	102		105		70-130	3		30
Bromoform	91		95		70-130	4		30
1,1,2,2-Tetrachloroethane	118		120		70-130	2		30
Benzene	102		102		70-130	0		30
Toluene	100		100		70-130	0		30
Ethylbenzene	102		102		70-130	0		30
Chloromethane	106		105		52-130	1		30
Bromomethane	98		102		57-147	4		30
Vinyl chloride	125		126		67-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1064789-3 WG1064789-4								
Chloroethane	122		118		50-151	3		30
1,1-Dichloroethene	118		117		65-135	1		30
trans-1,2-Dichloroethene	98		98		70-130	0		30
Trichloroethene	100		101		70-130	1		30
1,2-Dichlorobenzene	96		96		70-130	0		30
1,3-Dichlorobenzene	95		94		70-130	1		30
1,4-Dichlorobenzene	97		95		70-130	2		30
Methyl tert butyl ether	104		104		66-130	0		30
p/m-Xylene	96		96		70-130	0		30
o-Xylene	95		96		70-130	1		30
cis-1,2-Dichloroethene	98		100		70-130	2		30
Styrene	96		97		70-130	1		30
Dichlorodifluoromethane	104		104		30-146	0		30
Acetone	132		132		54-140	0		30
Carbon disulfide	119		120		59-130	1		30
2-Butanone	**143**	Q	**137**	Q	70-130	4		30
4-Methyl-2-pentanone	130		**131**	Q	70-130	1		30
2-Hexanone	128		130		70-130	2		30
Bromochloromethane	99		100		70-130	1		30
1,2-Dibromoethane	106		107		70-130	1		30
1,2-Dibromo-3-chloropropane	105		108		68-130	3		30
Isopropylbenzene	100		100		70-130	0		30
1,2,3-Trichlorobenzene	93		93		70-130	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1064789-3 WG1064789-4								
1,2,4-Trichlorobenzene	92		91		70-130	1		30
Methyl Acetate	125		128		51-146	2		30
Cyclohexane	114		114		59-142	0		30
1,4-Dioxane	124		123		65-136	1		30
Freon-113	120		120		50-139	0		30
Methyl cyclohexane	109		108		70-130	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	110		111		70-130
Toluene-d8	98		100		70-130
4-Bromofluorobenzene	102		101		70-130
Dibromofluoromethane	100		102		70-130

SEMIVOLATILES

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

SAMPLE RESULTS

Lab ID: L1741813-01
Client ID: MW-4 (8-10')
Sample Location: BUFFALO, NY

Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 11/20/17 16:42
Analyst: CB
Percent Solids: 87%

Date Collected: 11/13/17 14:00
Date Received: 11/14/17
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 11/18/17 16:05

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	ND		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	64.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	63.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	ND		ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

SAMPLE RESULTS

Lab ID: L1741813-01
Client ID: MW-4 (8-10')
Sample Location: BUFFALO, NY
Date Collected: 11/13/17 14:00
Date Received: 11/14/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	ND		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	29.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	190	18.	1
Phenanthrene	ND		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	ND		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	ND		ug/kg	190	18.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	19.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	ND		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	190	57.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: MAIN & E. BALCOM
Lab Number: L1741813
Project Number: B0234-016-001-0040
Report Date: 11/21/17

SAMPLE RESULTS

Lab ID: L1741813-01
Client ID: MW-4 (8-10')
Sample Location: BUFFALO, NY
Date Collected: 11/13/17 14:00
Date Received: 11/14/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	92		10-120
Nitrobenzene-d5	80		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	62		10-136
4-Terphenyl-d14	54		18-120

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/20/17 15:48
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 11/18/17 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1064564-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/20/17 15:48
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 11/18/17 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1064564-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	79.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/20/17 15:48
Analyst: EK

Extraction Method: EPA 3546
Extraction Date: 11/18/17 16:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1064564-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	87		25-120
Phenol-d6	90		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	81		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1064564-2 WG1064564-3								
Acenaphthene	80		78		31-137	3		50
Hexachlorobenzene	90		86		40-140	5		50
Bis(2-chloroethyl)ether	82		78		40-140	5		50
2-Chloronaphthalene	86		83		40-140	4		50
3,3'-Dichlorobenzidine	100		97		40-140	3		50
2,4-Dinitrotoluene	99		93		40-132	6		50
2,6-Dinitrotoluene	91		88		40-140	3		50
Fluoranthene	94		91		40-140	3		50
4-Chlorophenyl phenyl ether	86		82		40-140	5		50
4-Bromophenyl phenyl ether	87		84		40-140	4		50
Bis(2-chloroisopropyl)ether	89		86		40-140	3		50
Bis(2-chloroethoxy)methane	83		80		40-117	4		50
Hexachlorobutadiene	86		82		40-140	5		50
Hexachlorocyclopentadiene	**26**	Q	**25**	Q	40-140	4		50
Hexachloroethane	83		78		40-140	6		50
Isophorone	85		82		40-140	4		50
Naphthalene	82		79		40-140	4		50
Nitrobenzene	87		84		40-140	4		50
NDPA/DPA	89		85		36-157	5		50
n-Nitrosodi-n-propylamine	90		87		32-121	3		50
Bis(2-ethylhexyl)phthalate	106		105		40-140	1		50
Butyl benzyl phthalate	116		110		40-140	5		50
Di-n-butylphthalate	99		95		40-140	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1064564-2 WG1064564-3								
Di-n-octylphthalate	110		106		40-140	4		50
Diethyl phthalate	89		84		40-140	6		50
Dimethyl phthalate	84		81		40-140	4		50
Benzo(a)anthracene	93		90		40-140	3		50
Benzo(a)pyrene	96		95		40-140	1		50
Benzo(b)fluoranthene	96		95		40-140	1		50
Benzo(k)fluoranthene	89		86		40-140	3		50
Chrysene	88		86		40-140	2		50
Acenaphthylene	90		85		40-140	6		50
Anthracene	91		88		40-140	3		50
Benzo(ghi)perylene	92		89		40-140	3		50
Fluorene	88		82		40-140	7		50
Phenanthrene	87		85		40-140	2		50
Dibenzo(a,h)anthracene	91		90		40-140	1		50
Indeno(1,2,3-cd)pyrene	93		92		40-140	1		50
Pyrene	93		89		35-142	4		50
Biphenyl	86		83		54-104	4		50
4-Chloroaniline	61		56		40-140	9		50
2-Nitroaniline	102		97		47-134	5		50
3-Nitroaniline	87		82		26-129	6		50
4-Nitroaniline	89		84		41-125	6		50
Dibenzofuran	87		82		40-140	6		50
2-Methylnaphthalene	83		80		40-140	4		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1064564-2 WG1064564-3								
1,2,4,5-Tetrachlorobenzene	87		83		40-117	5		50
Acetophenone	91		88		14-144	3		50
2,4,6-Trichlorophenol	96		92		30-130	4		50
p-Chloro-m-cresol	96		91		26-103	5		50
2-Chlorophenol	92		89		25-102	3		50
2,4-Dichlorophenol	94		91		30-130	3		50
2,4-Dimethylphenol	92		88		30-130	4		50
2-Nitrophenol	94		91		30-130	3		50
4-Nitrophenol	106		98		11-114	8		50
2,4-Dinitrophenol	13		13		4-130	0		50
4,6-Dinitro-o-cresol	32		31		10-130	3		50
Pentachlorophenol	87		76		17-109	13		50
Phenol	**93**	Q	90		26-90	3		50
2-Methylphenol	92		88		30-130.	4		50
3-Methylphenol/4-Methylphenol	93		90		30-130	3		50
2,4,5-Trichlorophenol	100		95		30-130	5		50
Carbazole	94		92		54-128	2		50
Atrazine	99		96		40-140	3		50
Benzaldehyde	83		82		40-140	1		50
Caprolactam	112		104		15-130	7		50
2,3,4,6-Tetrachlorophenol	93		89		40-140	4		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

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

Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1064564-2 WG1064564-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	92		88		25-120
Phenol-d6	92		90		10-120
Nitrobenzene-d5	88		84		23-120
2-Fluorobiphenyl	86		81		30-120
2,4,6-Tribromophenol	104		100		10-136
4-Terphenyl-d14	91		87		18-120

METALS

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

SAMPLE RESULTS

Lab ID: L1741813-01
Client ID: MW-4 (8-10')
Sample Location: BUFFALO, NY
Matrix: Soil
Percent Solids: 87%

Date Collected: 11/13/17 14:00
Date Received: 11/14/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2740		mg/kg	8.62	2.33	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Antimony, Total	0.448	J	mg/kg	4.31	0.328	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Arsenic, Total	1.40		mg/kg	0.862	0.179	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Barium, Total	30.1		mg/kg	0.862	0.150	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Beryllium, Total	0.112	J	mg/kg	0.431	0.029	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Cadmium, Total	0.293	J	mg/kg	0.862	0.085	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Calcium, Total	49500		mg/kg	8.62	3.02	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Chromium, Total	7.51		mg/kg	0.862	0.083	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Cobalt, Total	2.70		mg/kg	1.72	0.143	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Copper, Total	7.77		mg/kg	0.862	0.222	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Iron, Total	7220		mg/kg	4.31	0.779	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Lead, Total	7.67		mg/kg	4.31	0.231	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Magnesium, Total	20700		mg/kg	8.62	1.33	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Manganese, Total	260		mg/kg	0.862	0.137	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Mercury, Total	ND		mg/kg	0.07	0.02	1	11/16/17 09:00	11/20/17 13:03	EPA 7471B	1,7471B	MG
Nickel, Total	5.80		mg/kg	2.16	0.209	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Potassium, Total	672		mg/kg	216	12.4	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Selenium, Total	ND		mg/kg	1.72	0.222	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Silver, Total	ND		mg/kg	0.862	0.244	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Sodium, Total	184		mg/kg	172	2.72	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Thallium, Total	ND		mg/kg	1.72	0.272	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Vanadium, Total	9.70		mg/kg	0.862	0.175	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS
Zinc, Total	61.6		mg/kg	4.31	0.253	2	11/16/17 07:35	11/16/17 11:41	EPA 3050B	1,6010C	PS

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1063548-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	11/16/17 09:00	11/20/17 12:43	1,7471B	MG

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1063579-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Antimony, Total	ND		mg/kg	2.00	0.152	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Arsenic, Total	ND		mg/kg	0.400	0.083	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Barium, Total	ND		mg/kg	0.400	0.070	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Beryllium, Total	ND		mg/kg	0.200	0.013	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Calcium, Total	ND		mg/kg	4.00	1.40	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Chromium, Total	ND		mg/kg	0.400	0.038	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Cobalt, Total	ND		mg/kg	0.800	0.066	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Copper, Total	ND		mg/kg	0.400	0.103	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Iron, Total	0.556	J	mg/kg	2.00	0.361	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Lead, Total	ND		mg/kg	2.00	0.107	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Magnesium, Total	ND		mg/kg	4.00	0.616	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Manganese, Total	ND		mg/kg	0.400	0.064	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Nickel, Total	ND		mg/kg	1.00	0.097	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Potassium, Total	9.10	J	mg/kg	100	5.76	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Selenium, Total	ND		mg/kg	0.800	0.103	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Silver, Total	ND		mg/kg	0.400	0.113	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Sodium, Total	9.56	J	mg/kg	80.0	1.26	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Thallium, Total	ND		mg/kg	0.800	0.126	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Vanadium, Total	ND		mg/kg	0.400	0.081	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS
Zinc, Total	ND		mg/kg	2.00	0.117	1	11/16/17 07:35	11/16/17 10:29	1,6010C	PS

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040
Lab Number: L1741813
Report Date: 11/21/17

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1063548-2 SRM Lot Number: D098-540								
Mercury, Total	94		-		50-149	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1063579-2 SRM Lot Number: D098-540					
Aluminum, Total	78	-	47-153	-	
Antimony, Total	145	-	6-194	-	
Arsenic, Total	92	-	83-117	-	
Barium, Total	89	-	82-118	-	
Beryllium, Total	92	-	83-117	-	
Cadmium, Total	90	-	82-117	-	
Calcium, Total	85	-	81-118	-	
Chromium, Total	94	-	83-119	-	
Cobalt, Total	92	-	84-116	-	
Copper, Total	94	-	84-116	-	
Iron, Total	94	-	60-140	-	
Lead, Total	87	-	82-117	-	
Magnesium, Total	82	-	76-124	-	
Manganese, Total	94	-	82-118	-	
Nickel, Total	91	-	82-117	-	
Potassium, Total	87	-	69-131	-	
Selenium, Total	90	-	78-121	-	
Silver, Total	99	-	80-120	-	
Sodium, Total	99	-	74-126	-	
Thallium, Total	90	-	80-119	-	
Vanadium, Total	92	-	79-121	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: B0234-016-001-0040

Lab Number: L1741813

Report Date: 11/21/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1063579-2 SRM Lot Number: D098-540					
Zinc, Total	90	-	81-119	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1063548-3 QC Sample: L1741853-01 Client ID: MS Sample												
Mercury, Total	0.16	0.164	0.28	**73**	Q	-	-		80-120	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1063579-3 QC Sample: L1742014-01 Client ID: MS Sample										
Aluminum, Total	5600	221	5270	**0**	Q	-	-	75-125	-	20
Antimony, Total	0.467J	55.3	53.1	96		-	-	75-125	-	20
Arsenic, Total	9.69	13.3	21.8	91		-	-	75-125	-	20
Barium, Total	15.3	221	236	100		-	-	75-125	-	20
Beryllium, Total	0.228J	5.53	5.48	99		-	-	75-125	-	20
Cadmium, Total	0.167J	5.64	5.87	104		-	-	75-125	-	20
Calcium, Total	299.	1110	1390	98		-	-	75-125	-	20
Chromium, Total	5.77	22.1	26.2	92		-	-	75-125	-	20
Cobalt, Total	2.16	55.3	52.4	91		-	-	75-125	-	20
Copper, Total	5.65	27.7	32.8	98		-	-	75-125	-	20
Iron, Total	9280	111	7910	**0**	Q	-	-	75-125	-	20
Lead, Total	12.8	56.4	72.2	105		-	-	75-125	-	20
Magnesium, Total	1120	1110	1930	**73**	Q	-	-	75-125	-	20
Manganese, Total	66.4	55.3	116	90		-	-	75-125	-	20
Nickel, Total	4.09	55.3	53.9	90		-	-	75-125	-	20
Potassium, Total	1050	1110	2030	88		-	-	75-125	-	20
Selenium, Total	ND	13.3	13.5	102		-	-	75-125	-	20
Silver, Total	ND	33.2	33.0	99		-	-	75-125	-	20
Sodium, Total	334.	1110	2000	**150**	Q	-	-	75-125	-	20
Thallium, Total	ND	13.3	12.0	90		-	-	75-125	-	20
Vanadium, Total	9.41	55.3	62.5	96		-	-	75-125	-	20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1063579-3 QC Sample: L1742014-01 Client ID: MS Sample									
Zinc, Total	18.4	55.3	68.6	91	-	-	75-125	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-00

Lab Number: L1741813
Report Date: 11/21/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1063548-4 QC Sample: L1741853-01 Client ID: DUP Sample						
Mercury, Total	0.16	0.08	mg/kg	**64**	Q	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1063579-4 QC Sample: L1742014-01 Client ID: DUP Sample						
Arsenic, Total	9.69	10.3	mg/kg	6		20
Barium, Total	15.3	17.7	mg/kg	15		20
Cadmium, Total	0.167J	0.194J	mg/kg	NC		20
Chromium, Total	5.77	6.96	mg/kg	19		20
Lead, Total	12.8	10.9	mg/kg	16		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

SAMPLE RESULTS

Lab ID: L1741813-01
Client ID: MW-4 (8-10')
Sample Location: BUFFALO, NY
Matrix: Soil

Date Collected: 11/13/17 14:00
Date Received: 11/14/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.3		%	0.100	NA	1	-	11/16/17 17:07	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-00

Lab Number: L1741813
Report Date: 11/21/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1063785-1 QC Sample: L1741927-01 Client ID: DUP Sample						
Solids, Total	89.7	88.3	%	2		20

Project Name: MAIN & E. BALCOM
Project Number: B0234-016-001-0040

Lab Number: L1741813
Report Date: 11/21/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1741813-01A	Glass 120ml/4oz unpreserved	A	NA		3.6	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1741813-01B	Glass 120ml/4oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8270(14),TS(7)
L1741813-01C	Glass 120ml/4oz unpreserved	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L1741813-01X	Vial MeOH preserved split	A	NA		3.6	Y	Absent		NYTCL-8260(14)
L1741813-01Y	Vial Water preserved split	A	NA		3.6	Y	Absent	**16-NOV-17 00:14**	NYTCL-8260(14)
L1741813-01Z	Vial Water preserved split	A	NA		3.6	Y	Absent	**16-NOV-17 00:14**	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1741813
Project Number:	B0234-016-001-0040	**Report Date:**	11/21/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1741813
Project Number:	B0234-016-001-0040	**Report Date:**	11/21/17

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1741813
Project Number:	B0234-016-001-0040	**Report Date:**	11/21/17

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 11/15/17

ALPHA Job #: L1741813

Project Information

Project Name: Main E Bullcom
Project Location: Buffalo, NY
Project #
(Use Project name as Project #) ☐
Project Manager: Nate Munks
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

Client Information

Client: Turnkey Environmental
Address: 2558 Hamburg Tpke
Buffalo, NY, 14218
Phone: 716-713-3937
Fax:
Email: NMunks@TurnkeyLLC.com

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Category B

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do

(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ANALYSIS: TCL VOCs	TCL SVOCs	TAL Metals						Sample Specific Comments	Total Bottles
41813-01	MW-4 (8-10')	11/13/17	14:00	Soil	NHS	X	X	X							3

Container Type: A
Preservative: A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other — ice

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	11/13/17 15:05	Jm AL — AAL	11/14/17 14:40
Jm AL — AAL	11/14/17 14:40	[signature]	11/15/17 02:20

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1742330
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & E. BALCOM
Project Number:	T0239-016-001
Report Date:	11/27/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1742330-01	MW-3	WATER	BUFFALO, NY	11/16/17 15:00	11/16/17
L1742330-02	MW-4	WATER	BUFFALO, NY	11/16/17 13:30	11/16/17
L1742330-03	BD	WATER	BUFFALO, NY	11/16/17 16:00	11/16/17
L1742330-04	TRIP BLANK	WATER	BUFFALO, NY	11/16/17 00:00	11/16/17

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1742330
Project Number:	T0239-016-001	**Report Date:**	11/27/17

Case Narrative (continued)

Report Submission

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

Sample Receipt

L1742330-04: A sample identified as "TRIP BLANK" was received but not listed on the Chain of Custody. This sample was not analyzed.

Volatile Organics

The WG1065743-6/-7 MS/MSD recoveries, performed on L1742330-02, are outside the acceptance criteria for trans-1,2-dichloroethene (0%/0%). The unacceptable percent recoveries are attributed to the elevated concentrations of target compounds present in the native sample.

Total Metals

The WG1065298-3/-4 MS/MSD recoveries for calcium (0%/0%), magnesium (57%/65%) and sodium (MS 70%), performed on L1742330-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

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

Authorized Signature: Melissa Cripps Melissa Cripps

Title: Technical Director/Representative Date: 11/27/17

ORGANICS

VOLATILES

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01 D
Client ID: MW-3
Sample Location: BUFFALO, NY

Date Collected: 11/16/17 15:00
Date Received: 11/16/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/22/17 16:51
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	ND		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	30		ug/l	1.2	0.44	2.5
1,2-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,3-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5
1,4-Dichlorobenzene	ND		ug/l	6.2	1.8	2.5

Project Name: MAIN & E. BALCOM **Lab Number:** L1742330

Project Number: T0239-016-001 **Report Date:** 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01 D Date Collected: 11/16/17 15:00
Client ID: MW-3 Date Received: 11/16/17
Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	2.5	J	ug/l	6.2	1.8	2.5
Diisopropyl Ether	ND		ug/l	5.0	1.6	2.5
Styrene	ND		ug/l	6.2	1.8	2.5
Dichlorodifluoromethane	ND		ug/l	12	2.5	2.5
Acetone	51		ug/l	12	3.6	2.5
Carbon disulfide	ND		ug/l	12	2.5	2.5
2-Butanone	360		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
n-Butylbenzene	ND		ug/l	6.2	1.8	2.5
sec-Butylbenzene	ND		ug/l	6.2	1.8	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
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	6.2	1.8	2.5
1,2,4-Trimethylbenzene	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	115		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	105		70-130

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY

Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/22/17 17:16
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.18	J	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	3.4		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	6.9		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.27	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	100		ug/l	2.5	0.70	1
Trichloroethene	17		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY
Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	39		ug/l	2.5	0.70	1
Diisopropyl Ether	ND		ug/l	2.0	0.65	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.1	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	0.64	J	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	0.49	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	104		70-130

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY

Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 11/22/17 17:42
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.19	J	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	3.3		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	6.3		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	0.28	J	ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	97		ug/l	2.5	0.70	1
Trichloroethene	16		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1742330

Project Number: T0239-016-001 **Report Date:** 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03 Date Collected: 11/16/17 16:00

Client ID: BD Date Received: 11/16/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	38		ug/l	2.5	0.70	1
Diisopropyl Ether	ND		ug/l	2.0	0.65	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	2.5	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
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	0.61	J	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	0.43	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	96		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	103		70-130

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/22/17 09:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1065743-5					
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: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/22/17 09:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1065743-5					
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
Diisopropyl Ether	ND		ug/l	2.0	0.65
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
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
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: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 11/22/17 09:17
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1065743-5					

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

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1065743-3 WG1065743-4								
Methylene chloride	100		100		70-130	0		20
1,1-Dichloroethane	100		100		70-130	0		20
Chloroform	100		100		70-130	0		20
Carbon tetrachloride	100		96		63-132	4		20
1,2-Dichloropropane	100		100		70-130	0		20
Dibromochloromethane	96		94		63-130	2		20
1,1,2-Trichloroethane	110		100		70-130	10		20
Tetrachloroethene	91		89		70-130	2		20
Chlorobenzene	98		97		75-130	1		20
Trichlorofluoromethane	120		110		62-150	9		20
1,2-Dichloroethane	110		110		70-130	0		20
1,1,1-Trichloroethane	100		100		67-130	0		20
Bromodichloromethane	100		97		67-130	3		20
trans-1,3-Dichloropropene	92		90		70-130	2		20
cis-1,3-Dichloropropene	89		88		70-130	1		20
Bromoform	91		89		54-136	2		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	100		100		70-130	0		20
Toluene	100		100		70-130	0		20
Ethylbenzene	100		100		70-130	0		20
Chloromethane	120		120		64-130	0		20
Bromomethane	100		100		39-139	0		20
Vinyl chloride	130		130		55-140	0		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1065743-3 WG1065743-4								
Chloroethane	130		130		55-138	0		20
1,1-Dichloroethene	110		110		61-145	0		20
trans-1,2-Dichloroethene	99		97		70-130	2		20
Trichloroethene	100		99		70-130	1		20
1,2-Dichlorobenzene	95		96		70-130	1		20
1,3-Dichlorobenzene	95		96		70-130	1		20
1,4-Dichlorobenzene	93		94		70-130	1		20
Methyl tert butyl ether	110		110		63-130	0		20
p/m-Xylene	105		105		70-130	0		20
o-Xylene	100		95		70-130	5		20
cis-1,2-Dichloroethene	96		96		70-130	0		20
Diisopropyl Ether	99		97		70-130	2		20
Styrene	100		100		70-130	0		20
Dichlorodifluoromethane	130		120		36-147	8		20
Acetone	94		92		58-148	2		20
Carbon disulfide	110		110		51-130	0		20
2-Butanone	110		100		63-138	10		20
4-Methyl-2-pentanone	89		86		59-130	3		20
2-Hexanone	69		67		57-130	3		20
Bromochloromethane	100		100		70-130	0		20
1,2-Dibromoethane	100		100		70-130	0		20
n-Butylbenzene	97		98		53-136	1		20
sec-Butylbenzene	88		90		70-130	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1065743-3 WG1065743-4								
1,2-Dibromo-3-chloropropane	80		73		41-144	9		20
Isopropylbenzene	88		90		70-130	2		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	98		83		70-130	17		20
1,2,4-Trichlorobenzene	92		88		70-130	4		20
1,3,5-Trimethylbenzene	100		100		64-130	0		20
1,2,4-Trimethylbenzene	92		94		70-130	2		20
Methyl Acetate	100		96		70-130	4		20
Cyclohexane	110		100		70-130	10		20
1,4-Dioxane	118		102		56-162	15		20
Freon-113	120		120		70-130	0		20
Methyl cyclohexane	110		100		70-130	10		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	111		107		70-130
Toluene-d8	96		98		70-130
4-Bromofluorobenzene	99		102		70-130
Dibromofluoromethane	100		98		70-130

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

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): 01-03 QC Batch ID: WG1065743-6 WG1065743-7 QC Sample: L1742330-02 Client ID: MW-4												
Methylene chloride	ND	10	10	100		11	110		70-130	10		20
1,1-Dichloroethane	ND	10	11	110		12	120		70-130	9		20
Chloroform	ND	10	11	110		11	110		70-130	0		20
Carbon tetrachloride	ND	10	11	110		11	110		63-132	0		20
1,2-Dichloropropane	ND	10	9.8	98		11	110		70-130	12		20
Dibromochloromethane	ND	10	9.2	92		10	100		63-130	8		20
1,1,2-Trichloroethane	ND	10	10	100		11	110		70-130	10		20
Tetrachloroethene	ND	10	9.0	90		9.9	99		70-130	10		20
Chlorobenzene	ND	10	9.7	97		10	100		75-130	3		20
Trichlorofluoromethane	ND	10	13	130		14	140		62-150	7		20
1,2-Dichloroethane	0.18J	10	12	120		12	120		70-130	0		20
1,1,1-Trichloroethane	ND	10	11	110		12	120		67-130	9		20
Bromodichloromethane	ND	10	10	100		11	110		67-130	10		20
trans-1,3-Dichloropropene	ND	10	8.4	84		9.4	94		70-130	11		20
cis-1,3-Dichloropropene	ND	10	7.6	76		8.6	86		70-130	12		20
Bromoform	ND	10	8.5	85		9.3	93		54-136	9		20
1,1,2,2-Tetrachloroethane	ND	10	9.6	96		10	100		67-130	4		20
Benzene	3.4	10	14	106		15	116		70-130	7		20
Toluene	ND	10	10	100		11	110		70-130	10		20
Ethylbenzene	ND	10	10	100		11	110		70-130	10		20
Chloromethane	ND	10	12	120		13	130		64-130	8		20
Bromomethane	ND	10	8.3	83		10	100		39-139	19		20
Vinyl chloride	6.9	10	20	131		22	**151**	Q	55-140	10		20

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

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): 01-03 QC Batch ID: WG1065743-6 WG1065743-7 QC Sample: L1742330-02 Client ID: MW-4												
Chloroethane	ND	10	14	**140**	Q	15	**150**	Q	55-138	7		20
1,1-Dichloroethene	0.27J	10	11	110		12	120		61-145	9		20
trans-1,2-Dichloroethene	100	10	100	**0**	Q	100	**0**	Q	70-130	0		20
Trichloroethene	17	10	27	100		28	110		70-130	4		20
1,2-Dichlorobenzene	ND	10	9.3	93		10	100		70-130	7		20
1,3-Dichlorobenzene	ND	10	9.4	94		10	100		70-130	6		20
1,4-Dichlorobenzene	ND	10	9.2	92		9.8	98		70-130	6		20
Methyl tert butyl ether	ND	10	10	100		12	120		63-130	18		20
p/m-Xylene	ND	20	21	105		22	110		70-130	5		20
o-Xylene	ND	20	19	95		21	105		70-130	10		20
cis-1,2-Dichloroethene	39	10	49	100		49	100		70-130	0		20
Diisopropyl Ether	ND	10	9.0	90		10	100		70-130	11		20
Styrene	ND	20	20	100		21	105		70-130	5		20
Dichlorodifluoromethane	ND	10	13	130		14	140		36-147	7		20
Acetone	3.1J	10	10	100		11	110		58-148	10		20
Carbon disulfide	ND	10	11	110		12	120		51-130	9		20
2-Butanone	ND	10	10	100		11	110		63-138	10		20
4-Methyl-2-pentanone	ND	10	7.9	79		9.0	90		59-130	13		20
2-Hexanone	ND	10	6.1	61		7.3	73		57-130	18		20
Bromochloromethane	ND	10	11	110		11	110		70-130	0		20
1,2-Dibromoethane	ND	10	9.4	94		10	100		70-130	6		20
n-Butylbenzene	ND	10	9.2	92		10	100		53-136	8		20
sec-Butylbenzene	ND	10	8.6	86		9.5	95		70-130	10		20

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

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): 01-03 QC Batch ID: WG1065743-6 WG1065743-7 QC Sample: L1742330-02 Client ID: MW-4												
1,2-Dibromo-3-chloropropane	ND	10	7.5	75		8.4	84		41-144	11		20
Isopropylbenzene	ND	10	8.6	86		9.4	94		70-130	9		20
n-Propylbenzene	ND	10	9.7	97		11	110		69-130	13		20
1,2,3-Trichlorobenzene	ND	10	6.9	**69**	Q	10	100		70-130	**37**	Q	20
1,2,4-Trichlorobenzene	ND	10	8.1	81		10	100		70-130	**21**	Q	20
1,3,5-Trimethylbenzene	ND	10	10	100		11	110		64-130	10		20
1,2,4-Trimethylbenzene	ND	10	9.1	91		9.9	99		70-130	8		20
Methyl Acetate	ND	10	9.2	92		10	100		70-130	8		20
Cyclohexane	0.64J	10	11	110		12	120		70-130	9		20
1,4-Dioxane	ND	500	360	72		480	96		56-162	**29**	Q	20
Freon-113	ND	10	12	120		13	130		70-130	8		20
Methyl cyclohexane	0.49J	10	11	110		12	120		70-130	9		20

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	115		112		70-130
4-Bromofluorobenzene	98		97		70-130
Dibromofluoromethane	102		100		70-130
Toluene-d8	97		95		70-130

SEMIVOLATILES

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01
Client ID: MW-3
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 11/23/17 22:41
Analyst: RC

Date Collected: 11/16/17 15:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 21:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.73	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.69	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.71	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1742330

Project Number: T0239-016-001 **Report Date:** 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01 Date Collected: 11/16/17 15:00

Client ID: MW-3 Date Received: 11/16/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
2-Methylphenol	ND		ug/l	5.0	1.0	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Benzoic Acid	ND		ug/l	50	13.	1
Benzyl Alcohol	ND		ug/l	2.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	86		10-120
4-Terphenyl-d14	79		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01
Client ID: MW-3
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/25/17 06:08
Analyst: KL

Date Collected: 11/16/17 15:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.05	J	ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	0.06	J	ug/l	0.10	0.04	1
Phenanthrene	0.42		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1742330

Project Number: T0239-016-001 **Report Date:** 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01 Date Collected: 11/16/17 15:00

Client ID: MW-3 Date Received: 11/16/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	48		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	72		10-120
4-Terphenyl-d14	74		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 11/23/17 23:09
Analyst: RC

Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 21:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.73	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.69	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.71	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1742330

Project Number: T0239-016-001 **Report Date:** 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02 Date Collected: 11/16/17 13:30

Client ID: MW-4 Date Received: 11/16/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
2-Methylphenol	ND		ug/l	5.0	1.0	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Benzoic Acid	ND		ug/l	50	13.	1
Benzyl Alcohol	ND		ug/l	2.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	50		21-120
Phenol-d6	33		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	80		15-120
2,4,6-Tribromophenol	93		10-120
4-Terphenyl-d14	85		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/25/17 05:37
Analyst: KL

Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.05	J	ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.10	0.04	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	ND		ug/l	0.10	0.04	1
Phenanthrene	0.22		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	ND		ug/l	0.10	0.04	1
2-Methylnaphthalene	ND		ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: MAIN & E. BALCOM
Lab Number: L1742330
Project Number: T0239-016-001
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY
Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	84		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	78		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 11/23/17 23:38
Analyst: RC

Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 21:04

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66	1
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
1,2-Dichlorobenzene	ND		ug/l	2.0	0.73	1
1,3-Dichlorobenzene	ND		ug/l	2.0	0.69	1
1,4-Dichlorobenzene	ND		ug/l	2.0	0.71	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1

Project Name: MAIN & E. BALCOM **Lab Number:** L1742330

Project Number: T0239-016-001 **Report Date:** 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03 Date Collected: 11/16/17 16:00

Client ID: BD Date Received: 11/16/17

Sample Location: BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
2-Methylphenol	ND		ug/l	5.0	1.0	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Benzoic Acid	ND		ug/l	50	13.	1
Benzyl Alcohol	ND		ug/l	2.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	78		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	91		10-120
4-Terphenyl-d14	84		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 11/25/17 06:40
Analyst: KL

Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 21:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.04	J	ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.07	J	ug/l	0.10	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	0.04	J	ug/l	0.10	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04	1
Chrysene	ND		ug/l	0.10	0.04	1
Acenaphthylene	ND		ug/l	0.10	0.04	1
Anthracene	ND		ug/l	0.10	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.10	0.04	1
Fluorene	0.06	J	ug/l	0.10	0.04	1
Phenanthrene	0.32		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04	1
Pyrene	0.05	J	ug/l	0.10	0.04	1
2-Methylnaphthalene	0.06	J	ug/l	0.10	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY
Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	47		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	83		15-120
2,4,6-Tribromophenol	76		10-120
4-Terphenyl-d14	77		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/21/17 23:34
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 11/20/17 21:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1065030-1					
1,2,4-Trichlorobenzene	ND		ug/l	5.0	0.66
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
1,2-Dichlorobenzene	ND		ug/l	2.0	0.73
1,3-Dichlorobenzene	ND		ug/l	2.0	0.69
1,4-Dichlorobenzene	ND		ug/l	2.0	0.71
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Isophorone	ND		ug/l	5.0	0.60
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63
Dimethyl phthalate	ND		ug/l	5.0	0.65
Biphenyl	ND		ug/l	2.0	0.76
4-Chloroaniline	ND		ug/l	5.0	0.63
2-Nitroaniline	ND		ug/l	5.0	1.1
3-Nitroaniline	ND		ug/l	5.0	1.2
4-Nitroaniline	ND		ug/l	5.0	1.3
Dibenzofuran	ND		ug/l	2.0	0.66

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/21/17 23:34
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 11/20/17 21:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1065030-1					
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67
Acetophenone	ND		ug/l	5.0	0.85
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Phenol	ND		ug/l	5.0	1.9
2-Methylphenol	ND		ug/l	5.0	1.0
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72
Benzoic Acid	ND		ug/l	50	13.
Benzyl Alcohol	ND		ug/l	2.0	0.72
Carbazole	ND		ug/l	2.0	0.63
Atrazine	ND		ug/l	10	1.8
Benzaldehyde	ND		ug/l	5.0	1.1
Caprolactam	ND		ug/l	10	3.6
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 11/21/17 23:34
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 11/20/17 21:15

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1065030-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	44		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	95		10-120
4-Terphenyl-d14	92		41-149

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/25/17 02:25
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 11/20/17 21:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1065035-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.10	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.10	0.04
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.04
Benzo(b)fluoranthene	ND		ug/l	0.10	0.02
Benzo(k)fluoranthene	ND		ug/l	0.10	0.04
Chrysene	ND		ug/l	0.10	0.04
Acenaphthylene	ND		ug/l	0.10	0.04
Anthracene	ND		ug/l	0.10	0.04
Benzo(ghi)perylene	ND		ug/l	0.10	0.04
Fluorene	ND		ug/l	0.10	0.04
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.04
Pyrene	ND		ug/l	0.10	0.04
2-Methylnaphthalene	ND		ug/l	0.10	0.05
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 11/25/17 02:25
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 11/20/17 21:21

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG1065035-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	45		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	77		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1065030-2 WG1065030-3								
1,2,4-Trichlorobenzene	69		66		39-98	4		30
Bis(2-chloroethyl)ether	85		82		40-140	4		30
1,2-Dichlorobenzene	63		63		40-140	0		30
1,3-Dichlorobenzene	59		61		40-140	3		30
1,4-Dichlorobenzene	59		62		36-97	5		30
3,3'-Dichlorobenzidine	83		69		40-140	18		30
2,4-Dinitrotoluene	106		94		48-143	12		30
2,6-Dinitrotoluene	134		112		40-140	18		30
4-Chlorophenyl phenyl ether	89		85		40-140	5		30
4-Bromophenyl phenyl ether	99		92		40-140	7		30
Bis(2-chloroisopropyl)ether	110		106		40-140	4		30
Bis(2-chloroethoxy)methane	99		88		40-140	12		30
Hexachlorocyclopentadiene	49		49		40-140	0		30
Isophorone	110		97		40-140	13		30
Nitrobenzene	103		94		40-140	9		30
NDPA/DPA	98		91		40-140	7		30
n-Nitrosodi-n-propylamine	111		101		29-132	9		30
Bis(2-ethylhexyl)phthalate	90		85		40-140	6		30
Butyl benzyl phthalate	123		106		40-140	15		30
Di-n-butylphthalate	107		97		40-140	10		30
Di-n-octylphthalate	97		89		40-140	9		30
Diethyl phthalate	99		91		40-140	8		30
Dimethyl phthalate	111		94		40-140	17		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1065030-2 WG1065030-3								
Biphenyl	88		83		40-140	6		30
4-Chloroaniline	65		62		40-140	5		30
2-Nitroaniline	140		119		52-143	16		30
3-Nitroaniline	88		79		25-145	11		30
4-Nitroaniline	107		97		51-143	10		30
Dibenzofuran	82		80		40-140	2		30
1,2,4,5-Tetrachlorobenzene	86		82		2-134	5		30
Acetophenone	98		90		39-129	9		30
2,4,6-Trichlorophenol	115		103		30-130	11		30
p-Chloro-m-cresol	**111**	Q	97		23-97	13		30
2-Chlorophenol	86		81		27-123	6		30
2,4-Dichlorophenol	105		91		30-130	14		30
2,4-Dimethylphenol	68		80		30-130	16		30
2-Nitrophenol	118		105		30-130	12		30
4-Nitrophenol	79		68		10-80	15		30
2,4-Dinitrophenol	109		96		20-130	13		30
4,6-Dinitro-o-cresol	127		109		20-164	15		30
Phenol	48		44		12-110	9		30
2-Methylphenol	81		75		30-130	8		30
3-Methylphenol/4-Methylphenol	80		72		30-130	11		30
2,4,5-Trichlorophenol	119		101		30-130	16		30
Benzoic Acid	50		39		10-164	25		30
Benzyl Alcohol	93		85		26-116	9		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1065030-2 WG1065030-3								
Carbazole	97		93		55-144	4		30
Atrazine	**142**	Q	122		40-140	15		30
Benzaldehyde	89		87		40-140	2		30
Caprolactam	52		45		10-130	14		30
2,3,4,6-Tetrachlorophenol	112		104		40-140	7		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	54		51		21-120
Phenol-d6	44		39		10-120
Nitrobenzene-d5	107		97		23-120
2-Fluorobiphenyl	93		84		15-120
2,4,6-Tribromophenol	116		108		10-120
4-Terphenyl-d14	110		97		41-149

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1065035-2 WG1065035-3								
Acenaphthene	74		82		40-140	10		40
2-Chloronaphthalene	65		72		40-140	10		40
Fluoranthene	74		82		40-140	10		40
Hexachlorobutadiene	47		52		40-140	10		40
Naphthalene	65		73		40-140	12		40
Benzo(a)anthracene	74		82		40-140	10		40
Benzo(a)pyrene	79		87		40-140	10		40
Benzo(b)fluoranthene	82		89		40-140	8		40
Benzo(k)fluoranthene	79		86		40-140	8		40
Chrysene	80		89		40-140	11		40
Acenaphthylene	69		76		40-140	10		40
Anthracene	77		84		40-140	9		40
Benzo(ghi)perylene	81		89		40-140	9		40
Fluorene	71		78		40-140	9		40
Phenanthrene	78		85		40-140	9		40
Dibenzo(a,h)anthracene	78		86		40-140	10		40
Indeno(1,2,3-cd)pyrene	80		88		40-140	10		40
Pyrene	73		80		40-140	9		40
2-Methylnaphthalene	62		69		40-140	11		40
Pentachlorophenol	69		76		40-140	10		40
Hexachlorobenzene	62		67		40-140	8		40
Hexachloroethane	61		67		40-140	9		40

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG1065035-2 WG1065035-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	48		54		21-120
Phenol-d6	31		36		10-120
Nitrobenzene-d5	79		88		23-120
2-Fluorobiphenyl	73		80		15-120
2,4,6-Tribromophenol	68		76		10-120
4-Terphenyl-d14	75		81		41-149

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065030-4 WG1065030-5 QC Sample: L1742330-02 Client ID: MW-4												
1,2,4-Trichlorobenzene	ND	40	29	73		28	70		39-98	4		30
Bis(2-chloroethyl)ether	ND	40	29	73		29	73		40-140	0		30
1,2-Dichlorobenzene	ND	40	28	70		26	65		40-140	7		30
1,3-Dichlorobenzene	ND	40	27	68		25	63		40-140	8		30
1,4-Dichlorobenzene	ND	40	27	68		25	63		36-97	8		30
3,3'-Dichlorobenzidine	ND	40	20	50		10	**25**	Q	40-140	**67**	Q	30
2,4-Dinitrotoluene	ND	40	34	85		33	83		48-143	3		30
2,6-Dinitrotoluene	ND	40	31	78		30	75		40-140	3		30
4-Chlorophenyl phenyl ether	ND	40	31	78		31	78		40-140	0		30
4-Bromophenyl phenyl ether	ND	40	31	78		31	78		40-140	0		30
Bis(2-chloroisopropyl)ether	ND	40	29	73		29	73		40-140	0		30
Bis(2-chloroethoxy)methane	ND	40	31	78		31	78		40-140	0		30
Hexachlorocyclopentadiene	ND	40	25	63		23	58		40-140	8		30
Isophorone	ND	40	32	80		32	80		40-140	0		30
Nitrobenzene	ND	40	31	78		30	75		40-140	3		30
NDPA/DPA	ND	40	31	78		31	78		40-140	0		30
n-Nitrosodi-n-propylamine	ND	40	32	80		32	80		29-132	0		30
Bis(2-ethylhexyl)phthalate	ND	40	39	98		39	98		40-140	0		30
Butyl benzyl phthalate	ND	40	37	93		39	98		40-140	5		30
Di-n-butylphthalate	ND	40	35	88		36	90		40-140	3		30
Di-n-octylphthalate	ND	40	35	88		37	93		40-140	6		30
Diethyl phthalate	ND	40	32	80		33	83		40-140	3		30
Dimethyl phthalate	ND	40	29	73		28	70		40-140	4		30

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065030-4 WG1065030-5 QC Sample: L1742330-02 Client ID: MW-4												
Biphenyl	ND	40	28	70		27	68		40-140	4		30
4-Chloroaniline	ND	40	20	50		19	48		40-140	5		30
2-Nitroaniline	ND	40	32	80		31	78		52-143	3		30
3-Nitroaniline	ND	40	26	65		26	65		25-145	0		30
4-Nitroaniline	ND	40	31	78		28	70		51-143	10		30
Dibenzofuran	ND	40	30	75		30	75		40-140	0		30
1,2,4,5-Tetrachlorobenzene	ND	40	28	70		26	65		2-134	7		30
Acetophenone	ND	40	33	83		32	80		39-129	3		30
2,4,6-Trichlorophenol	ND	40	30	75		30	75		30-130	0		30
p-Chloro-m-cresol	ND	40	29	73		29	73		23-97	0		30
2-Chlorophenol	ND	40	31	78		30	75		27-123	3		30
2,4-Dichlorophenol	ND	40	33	83		34	85		30-130	3		30
2,4-Dimethylphenol	ND	40	30	75		25	63		30-130	18		30
2-Nitrophenol	ND	40	33	83		33	83		30-130	0		30
4-Nitrophenol	ND	40	20	50		20	50		10-80	0		30
2,4-Dinitrophenol	ND	40	33	83		32	80		20-130	3		30
4,6-Dinitro-o-cresol	ND	40	33	83		33	83		20-164	0		30
Phenol	ND	40	15	38		14	35		12-110	7		30
2-Methylphenol	ND	40	27	68		26	65		30-130	4		30
3-Methylphenol/4-Methylphenol	ND	40	26	65		27	68		30-130	4		30
2,4,5-Trichlorophenol	ND	40	31	78		31	78		30-130	0		30
Benzoic Acid	ND	40	18J	45		19.J	48		10-164	5		30
Benzyl Alcohol	ND	40	26	65		27	68		26-116	4		30

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065030-4 WG1065030-5 QC Sample: L1742330-02 Client ID: MW-4												
Carbazole	ND	40	32	80		32	80		55-144	0		30
Atrazine	ND	40	37	93		36	90		40-140	3		30
Benzaldehyde	ND	40	30	75		30	75		40-140	0		30
Caprolactam	ND	40	9.5J	24		10	25		10-130	5		30
2,3,4,6-Tetrachlorophenol	ND	40	32	80		32	80		40-140	0		30

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	87		86		10-120
2-Fluorobiphenyl	69		66		15-120
2-Fluorophenol	50		49		21-120
4-Terphenyl-d14	74		78		41-149
Nitrobenzene-d5	88		88		23-120
Phenol-d6	36		35		10-120

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065035-4 WG1065035-5 QC Sample: L1742330-02 Client ID: MW-4												
Acenaphthene	ND	40	36	90		36	90		40-140	0		40
2-Chloronaphthalene	ND	40	32	80		32	80		40-140	0		40
Fluoranthene	0.05J	40	34	85		35	88		40-140	3		40
Hexachlorobutadiene	ND	40	23	58		22	55		40-140	4		40
Naphthalene	ND	40	31	78		30	75		40-140	3		40
Benzo(a)anthracene	ND	40	34	85		35	88		40-140	3		40
Benzo(a)pyrene	ND	40	36	90		37	93		40-140	3		40
Benzo(b)fluoranthene	ND	40	36	90		38	95		40-140	5		40
Benzo(k)fluoranthene	ND	40	36	90		36	90		40-140	0		40
Chrysene	ND	40	36	90		37	93		40-140	3		40
Acenaphthylene	ND	40	33	83		33	83		40-140	0		40
Anthracene	ND	40	36	90		36	90		40-140	0		40
Benzo(ghi)perylene	ND	40	36	90		37	93		40-140	3		40
Fluorene	ND	40	34	85		34	85		40-140	0		40
Phenanthrene	0.22	40	36	89		37	92		40-140	3		40
Dibenzo(a,h)anthracene	ND	40	35	88		35	88		40-140	0		40
Indeno(1,2,3-cd)pyrene	ND	40	35	88		37	93		40-140	6		40
Pyrene	ND	40	33	83		34	85		40-140	3		40
2-Methylnaphthalene	ND	40	30	75		30	75		40-140	0		40
Pentachlorophenol	ND	40	32	80		34	85		40-140	6		40
Hexachlorobenzene	ND	40	30	75		30	75		40-140	0		40
Hexachloroethane	ND	40	29	73		27	68		40-140	7		40

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065035-4 WG1065035-5 QC Sample: L1742330-02 Client ID: MW-4												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
2,4,6-Tribromophenol	60		62		10-120
2-Fluorobiphenyl	79		82		15-120
2-Fluorophenol	43		40		21-120
4-Terphenyl-d14	74		76		41-149
Nitrobenzene-d5	79		78		23-120
Phenol-d6	32		32		10-120

PCBS

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01
Client ID: MW-3
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 11/27/17 12:46
Analyst: JW

Date Collected: 11/16/17 15:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 02:53
Cleanup Method: EPA 3665A
Cleanup Date: 11/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 11/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	65		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 11/22/17 17:47
Analyst: JW

Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 02:53
Cleanup Method: EPA 3665A
Cleanup Date: 11/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 11/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	66		30-150	A
Decachlorobiphenyl	42		30-150	A
2,4,5,6-Tetrachloro-m-xylene	69		30-150	B
Decachlorobiphenyl	45		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8082A
Analytical Date: 11/27/17 13:00
Analyst: JW

Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/21/17 02:53
Cleanup Method: EPA 3665A
Cleanup Date: 11/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 11/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/l	0.083	0.020	1	A
Aroclor 1221	ND		ug/l	0.083	0.032	1	A
Aroclor 1232	ND		ug/l	0.083	0.027	1	A
Aroclor 1242	ND		ug/l	0.083	0.030	1	A
Aroclor 1248	ND		ug/l	0.083	0.023	1	A
Aroclor 1254	ND		ug/l	0.083	0.035	1	A
Aroclor 1260	ND		ug/l	0.083	0.020	1	A
Aroclor 1262	ND		ug/l	0.083	0.017	1	A
Aroclor 1268	ND		ug/l	0.083	0.027	1	A
PCBs, Total	ND		ug/l	0.083	0.017	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	95		30-150	B
Decachlorobiphenyl	75		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 11/27/17 13:59
Analyst: JW

Extraction Method: EPA 3510C
Extraction Date: 11/20/17 20:31
Cleanup Method: EPA 3665A
Cleanup Date: 11/22/17
Cleanup Method: EPA 3660B
Cleanup Date: 11/22/17

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 01-03 Batch: WG1065021-1						
Aroclor 1016	ND		ug/l	0.083	0.020	A
Aroclor 1221	ND		ug/l	0.083	0.032	A
Aroclor 1232	ND		ug/l	0.083	0.027	A
Aroclor 1242	ND		ug/l	0.083	0.030	A
Aroclor 1248	ND		ug/l	0.083	0.023	A
Aroclor 1254	ND		ug/l	0.083	0.035	A
Aroclor 1260	ND		ug/l	0.083	0.020	A
Aroclor 1262	ND		ug/l	0.083	0.017	A
Aroclor 1268	ND		ug/l	0.083	0.027	A
PCBs, Total	ND		ug/l	0.083	0.017	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	53		30-150	A
Decachlorobiphenyl	90		30-150	A
2,4,5,6-Tetrachloro-m-xylene	79		30-150	B
Decachlorobiphenyl	99		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1065021-2 WG1065021-3									
Aroclor 1016	63		68		40-140	8		50	A
Aroclor 1260	72		70		40-140	3		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	52		55		30-150	A
Decachlorobiphenyl	66		62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	47		52		30-150	B
Decachlorobiphenyl	62		63		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065021-4 WG1065021-5 QC Sample: L1742330-02 Client ID: MW-4													
Aroclor 1016	ND	2.6	2.13	82		2.18	84		40-140	2		50	A
Aroclor 1260	ND	2.6	1.61	62		1.76	68		40-140	9		50	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		77		30-150	A
Decachlorobiphenyl	52		53		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		80		30-150	B
Decachlorobiphenyl	54		61		30-150	B

PESTICIDES

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01
Client ID: MW-3
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 11/22/17 23:30
Analyst: KEG

Date Collected: 11/16/17 15:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/22/17 05:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	0.012	J	ug/l	0.040	0.004	1	B
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	0.012	J	ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	87		30-150	B
Decachlorobiphenyl	49		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01
Client ID: MW-3
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 11/20/17 02:24
Analyst: SL

Methylation Date: 11/18/17 17:55

Date Collected: 11/16/17 15:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 11/18/17 08:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	109		30-150	A
DCAA	81		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 11/22/17 23:45
Analyst: KEG

Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/22/17 05:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	ND		ug/l	0.020	0.006	1	A
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	0.020	J	ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	ND		ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	102		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	43		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 11/20/17 02:45
Analyst: SL

Methylation Date: 11/18/17 17:55

Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 11/18/17 08:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	105		30-150	A
DCAA	78		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8081B
Analytical Date: 11/23/17 00:29
Analyst: KEG

Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 11/22/17 05:09

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/l	0.020	0.005	1	A
Lindane	ND		ug/l	0.020	0.004	1	A
Alpha-BHC	ND		ug/l	0.020	0.004	1	A
Beta-BHC	0.008	JPI	ug/l	0.020	0.006	1	B
Heptachlor	ND		ug/l	0.020	0.003	1	A
Aldrin	ND		ug/l	0.020	0.002	1	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	1	A
Endrin	ND		ug/l	0.040	0.004	1	A
Endrin aldehyde	ND		ug/l	0.040	0.008	1	A
Endrin ketone	ND		ug/l	0.040	0.005	1	A
Dieldrin	ND		ug/l	0.040	0.004	1	A
4,4'-DDE	ND		ug/l	0.040	0.004	1	A
4,4'-DDD	ND		ug/l	0.040	0.005	1	A
4,4'-DDT	ND		ug/l	0.040	0.004	1	A
Endosulfan I	ND		ug/l	0.020	0.003	1	A
Endosulfan II	ND		ug/l	0.040	0.005	1	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	1	A
Methoxychlor	ND		ug/l	0.200	0.007	1	A
Toxaphene	ND		ug/l	0.200	0.063	1	A
cis-Chlordane	ND		ug/l	0.020	0.007	1	A
trans-Chlordane	0.010	JPI	ug/l	0.020	0.006	1	A
Chlordane	ND		ug/l	0.200	0.046	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	101		30-150	A
Decachlorobiphenyl	56		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	88		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY

Matrix: Water
Analytical Method: 1,8151A
Analytical Date: 11/20/17 03:50
Analyst: SL

Methylation Date: 11/18/17 17:55

Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified
Extraction Method: EPA 8151A
Extraction Date: 11/18/17 08:55

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Chlorinated Herbicides by GC - Westborough Lab							
2,4-D	ND		ug/l	10.0	0.498	1	A
2,4,5-T	ND		ug/l	2.00	0.531	1	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
DCAA	107		30-150	A
DCAA	84		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8151A
Analytical Date: 11/20/17 05:44
Analyst: SL

Extraction Method: EPA 8151A
Extraction Date: 11/18/17 08:55

Methylation Date: 11/18/17 17:55

Parameter	Result	Qualifier	Units	RL	MDL	Column
Chlorinated Herbicides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1064453-1						
2,4-D	ND		ug/l	10.0	0.498	A
2,4,5-T	ND		ug/l	2.00	0.531	A
2,4,5-TP (Silvex)	ND		ug/l	2.00	0.539	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
DCAA	139		30-150	A
DCAA	114		30-150	B

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 11/22/17 22:44
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 11/22/17 05:09

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1065541-1						
Delta-BHC	ND		ug/l	0.020	0.005	A
Lindane	ND		ug/l	0.020	0.004	A
Alpha-BHC	ND		ug/l	0.020	0.004	A
Beta-BHC	ND		ug/l	0.020	0.006	A
Heptachlor	ND		ug/l	0.020	0.003	A
Aldrin	ND		ug/l	0.020	0.002	A
Heptachlor epoxide	ND		ug/l	0.020	0.004	A
Endrin	ND		ug/l	0.040	0.004	A
Endrin aldehyde	ND		ug/l	0.040	0.008	A
Endrin ketone	ND		ug/l	0.040	0.005	A
Dieldrin	ND		ug/l	0.040	0.004	A
4,4'-DDE	ND		ug/l	0.040	0.004	A
4,4'-DDD	ND		ug/l	0.040	0.005	A
4,4'-DDT	ND		ug/l	0.040	0.004	A
Endosulfan I	ND		ug/l	0.020	0.003	A
Endosulfan II	ND		ug/l	0.040	0.005	A
Endosulfan sulfate	ND		ug/l	0.040	0.005	A
Methoxychlor	ND		ug/l	0.200	0.007	A
Toxaphene	ND		ug/l	0.200	0.063	A
cis-Chlordane	ND		ug/l	0.020	0.007	A
trans-Chlordane	ND		ug/l	0.020	0.006	A
Chlordane	ND		ug/l	0.200	0.046	A

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8081B
Analytical Date: 11/22/17 22:44
Analyst: KEG

Extraction Method: EPA 3510C
Extraction Date: 11/22/17 05:09

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 01-03 Batch: WG1065541-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	90		30-150	A
Decachlorobiphenyl	51		30-150	A
2,4,5,6-Tetrachloro-m-xylene	86		30-150	B
Decachlorobiphenyl	53		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1064453-2 WG1064453-3									
2,4-D	118		114		30-150	3		25	A
2,4,5-T	124		120		30-150	3		25	A
2,4,5-TP (Silvex)	116		113		30-150	3		25	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
DCAA	142		137		30-150	A
DCAA	135		132		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1065541-2 WG1065541-3									
Delta-BHC	96		110		30-150	14		20	A
Lindane	88		103		30-150	16		20	A
Alpha-BHC	90		107		30-150	17		20	A
Beta-BHC	84		97		30-150	15		20	A
Heptachlor	80		94		30-150	16		20	A
Aldrin	81		95		30-150	16		20	A
Heptachlor epoxide	86		100		30-150	15		20	A
Endrin	87		103		30-150	17		20	A
Endrin aldehyde	74		87		30-150	17		20	A
Endrin ketone	84		100		30-150	17		20	A
Dieldrin	90		105		30-150	15		20	A
4,4'-DDE	89		103		30-150	15		20	A
4,4'-DDD	96		112		30-150	15		20	A
4,4'-DDT	79		93		30-150	17		20	A
Endosulfan I	82		95		30-150	15		20	A
Endosulfan II	86		99		30-150	14		20	A
Endosulfan sulfate	79		91		30-150	14		20	A
Methoxychlor	70		83		30-150	18		20	A
cis-Chlordane	85		98		30-150	15		20	A
trans-Chlordane	87		100		30-150	14		20	A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 Batch: WG1065541-2 WG1065541-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	81		93		30-150	A
Decachlorobiphenyl	55		38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		89		30-150	B
Decachlorobiphenyl	53		38		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Chlorinated Herbicides by GC - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1064453-4 WG1064453-5 QC Sample: L1742330-02 Client ID: MW-4													
2,4-D	ND	10	9.86J	99		9.84J	98		30-150	0		25	A
2,4,5-T	ND	10	9.24	92		9.46	95		30-150	2		25	A
2,4,5-TP (Silvex)	ND	10	11.0	110		11.1	111		30-150	1		25	A

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
DCAA	117		119		30-150	A
DCAA	92		91		30-150	B

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065541-4 WG1065541-5 QC Sample: L1742330-02 Client ID: MW-4													
Delta-BHC	ND	0.5	0.610	122		0.614	123		30-150	1		30	A
Lindane	ND	0.5	0.479	96		0.518	104		30-150	8		30	A
Alpha-BHC	ND	0.5	0.512	102		0.519	104		30-150	1		30	A
Beta-BHC	ND	0.5	0.627	125		0.625	125		30-150	0		30	A
Heptachlor	ND	0.5	0.529	106		0.528	106		30-150	0		30	A
Aldrin	ND	0.5	0.518	104		0.524	105		30-150	1		30	A
Heptachlor epoxide	ND	0.5	0.545	109		0.554	111		30-150	2		30	A
Endrin	ND	0.5	0.652	130		0.648	130		30-150	1		30	A
Endrin aldehyde	ND	0.5	0.500	100		0.502	100		30-150	0		30	A
Endrin ketone	ND	0.5	0.558	112		0.570	114		30-150	2		30	A
Dieldrin	ND	0.5	0.587	117		0.598	120		30-150	2		30	A
4,4'-DDE	ND	0.5	0.536	107		0.552	110		30-150	3		30	A
4,4'-DDD	0.020J	0.5	0.620	124		0.636	127		30-150	3		30	A
4,4'-DDT	ND	0.5	0.536	107		0.560	112		30-150	4		30	A
Endosulfan I	ND	0.5	0.533	107		0.537	107		30-150	1		30	A
Endosulfan II	ND	0.5	0.548	110		0.557	111		30-150	2		30	A
Endosulfan sulfate	ND	0.5	0.520	104		0.537	107		30-150	3		30	A
Methoxychlor	ND	0.5	0.493	99		0.503	101		30-150	2		30	A
cis-Chlordane	ND	0.5	0.502	100		0.517	103		30-150	3		30	A
trans-Chlordane	ND	0.5	0.542	108		0.556	111		30-150	3		30	A

Matrix Spike Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1065541-4 WG1065541-5 QC Sample: L1742330-02 Client ID: MW-4												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	113		112		30-150	A
Decachlorobiphenyl	49		62		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		72		30-150	B
Decachlorobiphenyl	44		52		30-150	B

METALS

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-01
Client ID: MW-3
Sample Location: BUFFALO, NY
Matrix: Water
Date Collected: 11/16/17 15:00
Date Received: 11/16/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2.40		mg/l	0.0100	0.00327	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Antimony, Total	0.00059	J	mg/l	0.00400	0.00042	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Arsenic, Total	0.01029		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Barium, Total	0.1009		mg/l	0.00050	0.00017	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Beryllium, Total	0.00016	J	mg/l	0.00050	0.00010	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Cadmium, Total	0.00008	J	mg/l	0.00020	0.00005	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Calcium, Total	142.		mg/l	0.100	0.0394	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Chromium, Total	0.00420		mg/l	0.00100	0.00017	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00238		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Copper, Total	0.00449		mg/l	0.00100	0.00038	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Iron, Total	6.09		mg/l	0.0500	0.0191	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Lead, Total	0.01491		mg/l	0.00100	0.00034	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Magnesium, Total	105.		mg/l	0.0700	0.0242	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Manganese, Total	0.2688		mg/l	0.00100	0.00044	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	11/20/17 15:27	11/21/17 14:29	EPA 7470A	1,7470A	MG
Nickel, Total	0.01044		mg/l	0.00200	0.00055	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Potassium, Total	4.89		mg/l	0.100	0.0309	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Selenium, Total	0.00247	J	mg/l	0.00500	0.00173	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Sodium, Total	78.5		mg/l	0.200	0.0293	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00574		mg/l	0.00500	0.00157	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM
Zinc, Total	0.02254		mg/l	0.01000	0.00341	1	11/21/17 13:30	11/22/17 16:18	EPA 3005A	1,6020A	AM

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-02
Client ID: MW-4
Sample Location: BUFFALO, NY
Matrix: Water
Date Collected: 11/16/17 13:30
Date Received: 11/16/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.971		mg/l	0.0100	0.00327	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Antimony, Total	0.00220	J	mg/l	0.00400	0.00042	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00211		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Barium, Total	0.06502		mg/l	0.00050	0.00017	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Calcium, Total	236.		mg/l	0.100	0.0394	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Chromium, Total	0.00185		mg/l	0.00100	0.00017	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00158		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Copper, Total	0.00274		mg/l	0.00100	0.00038	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Iron, Total	3.37		mg/l	0.0500	0.0191	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Lead, Total	0.00371		mg/l	0.00100	0.00034	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Magnesium, Total	54.9		mg/l	0.0700	0.0242	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Manganese, Total	0.1710		mg/l	0.00100	0.00044	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	11/20/17 15:27	11/21/17 14:09	EPA 7470A	1,7470A	MG
Nickel, Total	0.00434		mg/l	0.00200	0.00055	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Potassium, Total	13.6		mg/l	0.100	0.0309	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Sodium, Total	174.		mg/l	0.200	0.0293	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00250	J	mg/l	0.00500	0.00157	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM
Zinc, Total	0.01368		mg/l	0.01000	0.00341	1	11/21/17 13:30	11/22/17 15:58	EPA 3005A	1,6020A	AM

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

SAMPLE RESULTS

Lab ID: L1742330-03
Client ID: BD
Sample Location: BUFFALO, NY
Matrix: Water
Date Collected: 11/16/17 16:00
Date Received: 11/16/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	1.93		mg/l	0.0100	0.00327	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Arsenic, Total	0.00239		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Barium, Total	0.06958		mg/l	0.00050	0.00017	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Calcium, Total	239.		mg/l	0.100	0.0394	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Chromium, Total	0.00317		mg/l	0.00100	0.00017	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Cobalt, Total	0.00223		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Copper, Total	0.00364		mg/l	0.00100	0.00038	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Iron, Total	4.72		mg/l	0.0500	0.0191	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Lead, Total	0.00558		mg/l	0.00100	0.00034	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Magnesium, Total	55.6		mg/l	0.0700	0.0242	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Manganese, Total	0.1897		mg/l	0.00100	0.00044	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Mercury, Total	ND		mg/l	0.00020	0.00006	1	11/20/17 15:27	11/21/17 14:31	EPA 7470A	1,7470A	MG
Nickel, Total	0.00550		mg/l	0.00200	0.00055	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Potassium, Total	13.1		mg/l	0.100	0.0309	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Sodium, Total	174.		mg/l	0.200	0.0293	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Vanadium, Total	0.00421	J	mg/l	0.00500	0.00157	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM
Zinc, Total	0.01202		mg/l	0.01000	0.00341	1	11/21/17 13:30	11/22/17 16:22	EPA 3005A	1,6020A	AM

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1064917-1										
Mercury, Total	ND		mg/l	0.00020	0.00006	1	11/20/17 15:27	11/21/17 14:05	1,7470A	MG

Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-03 Batch: WG1065298-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Antimony, Total	0.00049	J	mg/l	0.00400	0.00042	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Sodium, Total	ND		mg/l	0.200	0.0293	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	11/21/17 13:30	11/22/17 15:51	1,6020A	AM

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001
Lab Number: L1742330
Report Date: 11/27/17

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1064917-2								
Mercury, Total	107		-		80-120	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1065298-2					
Aluminum, Total	110	-	80-120	-	
Antimony, Total	99	-	80-120	-	
Arsenic, Total	110	-	80-120	-	
Barium, Total	100	-	80-120	-	
Beryllium, Total	109	-	80-120	-	
Cadmium, Total	106	-	80-120	-	
Calcium, Total	114	-	80-120	-	
Chromium, Total	99	-	80-120	-	
Cobalt, Total	99	-	80-120	-	
Copper, Total	101	-	80-120	-	
Iron, Total	106	-	80-120	-	
Lead, Total	107	-	80-120	-	
Magnesium, Total	113	-	80-120	-	
Manganese, Total	104	-	80-120	-	
Nickel, Total	99	-	80-120	-	
Potassium, Total	110	-	80-120	-	
Selenium, Total	112	-	80-120	-	
Silver, Total	100	-	80-120	-	
Sodium, Total	110	-	80-120	-	
Thallium, Total	103	-	80-120	-	
Vanadium, Total	102	-	80-120	-	

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM

Project Number: T0239-016-001

Lab Number: L1742330

Report Date: 11/27/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 Batch: WG1065298-2					
Zinc, Total	114	-	80-120	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1064917-3 WG1064917-4 QC Sample: L1742330-02 Client ID: MW-4												
Mercury, Total	ND	0.005	0.00477	95		0.00460	92		75-125	4		20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery		MSD Found	MSD %Recovery		Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1065298-3 WG1065298-4 QC Sample: L1742330-02 Client ID: MW-4											
Aluminum, Total	0.971	2	3.14	108		3.23	113		75-125	3	20
Antimony, Total	0.00220J	0.5	0.4998	100		0.4971	99		75-125	1	20
Arsenic, Total	0.00211	0.12	0.1323	108		0.1334	109		75-125	1	20
Barium, Total	0.06502	2	2.026	98		2.066	100		75-125	2	20
Beryllium, Total	ND	0.05	0.05260	105		0.05417	108		75-125	3	20
Cadmium, Total	ND	0.051	0.05186	102		0.05052	99		75-125	3	20
Calcium, Total	236.	10	230	**0**	Q	236	**0**	Q	75-125	3	20
Chromium, Total	0.00185	0.2	0.1996	99		0.2066	102		75-125	3	20
Cobalt, Total	0.00158	0.5	0.4827	96		0.5090	101		75-125	5	20
Copper, Total	0.00274	0.25	0.2414	95		0.2519	100		75-125	4	20
Iron, Total	3.37	1	4.37	100		4.46	109		75-125	2	20
Lead, Total	0.00371	0.51	0.5501	107		0.5496	107		75-125	0	20
Magnesium, Total	54.9	10	60.6	**57**	Q	61.4	**65**	Q	75-125	1	20
Manganese, Total	0.1710	0.5	0.6823	102		0.7129	108		75-125	4	20
Nickel, Total	0.00434	0.5	0.4871	96		0.5009	99		75-125	3	20
Potassium, Total	13.6	10	23.5	99		24.6	110		75-125	5	20
Selenium, Total	ND	0.12	0.125	104		0.139	116		75-125	11	20
Silver, Total	ND	0.05	0.04978	100		0.04953	99		75-125	1	20
Sodium, Total	174.	10	181	**70**	Q	182	80		75-125	1	20
Thallium, Total	ND	0.12	0.1251	104		0.1276	106		75-125	2	20
Vanadium, Total	0.00250J	0.5	0.5052	101		0.5328	106		75-125	5	20

Matrix Spike Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-03 QC Batch ID: WG1065298-3 WG1065298-4 QC Sample: L1742330-02 Client ID: MW-4									
Zinc, Total	0.01368	0.5	0.5302	103	0.5459	106	75-125	3	20

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1742330-01A	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1742330-01B	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1742330-01C	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1742330-01D	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1742330-01E	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1742330-01F	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1742330-01G	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-01H	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-01I	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1742330-01J	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1742330-01K	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-01L	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-02A	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1742330-02A1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1742330-02A2	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1742330-02B	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1742330-02B1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1742330-02B2	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1742330-02C	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1742330-02C1	Vial HCl preserved	B	NA		3.6	Y	Absent		NYTCL-8260-R2(14)
L1742330-02C2	Vial HCl preserved	C	NA		2.9	Y	Absent		NYTCL-8260-R2(14)
L1742330-02D	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1742330-02D1	Plastic 250ml HNO3 preserved	B	<2	<2	3.6	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1742330-02D2	Plastic 250ml HNO3 preserved	C	<2	<2	2.9	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1742330-02E	Amber 500ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1742330-02E1	Amber 500ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1742330-02E2	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1742330-02F	Amber 500ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1742330-02F1	Amber 500ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8081(7)
L1742330-02F2	Amber 500ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8081(7)
L1742330-02G	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-02G1	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-02G2	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)

*Values in parentheses indicate holding time in days

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1742330-02H	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-02H1	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-02H2	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-02I	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1742330-02I1	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1742330-02I2	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1742330-02J	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1742330-02J1	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		HERB-APA(7)
L1742330-02J2	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		HERB-APA(7)
L1742330-02K	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-02K1	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-02K2	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-02L	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-02L1	Amber 1000ml unpreserved	B	7	7	3.6	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-02L2	Amber 1000ml unpreserved	C	7	7	2.9	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-03A	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1742330-03B	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1742330-03C	Vial HCl preserved	A	NA		2.5	Y	Absent		NYTCL-8260-R2(14)
L1742330-03D	Plastic 250ml HNO3 preserved	A	<2	<2	2.5	Y	Absent		BA-6020T(180),FE-6020T(180),SE-6020T(180),TL-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),NI-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),AS-6020T(180),SB-6020T(180),V-6020T(180),AG-6020T(180),AL-6020T(180),CD-6020T(180),HG-T(28),MG-6020T(180),CO-6020T(180)
L1742330-03E	Amber 500ml unpreserved	A	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1742330-03F	Amber 500ml unpreserved	A	7	7	2.5	Y	Absent		NYTCL-8081(7)
L1742330-03G	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-03H	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		NYTCL-8082-1200ML(7)
L1742330-03I	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		HERB-APA(7)

*Values in parentheses indicate holding time in days

Project Name: MAIN & E. BALCOM
Project Number: T0239-016-001

Lab Number: L1742330
Report Date: 11/27/17

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1742330-03J	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		HERB-APA(7)
L1742330-03K	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-03L	Amber 1000ml unpreserved	A	7	7	2.5	Y	Absent		NYTCL-8270(7),NYTCL-8270-SIM(7)
L1742330-04A	Vial HCl preserved	A	NA		2.5	Y	Absent		ARCHIVE()
L1742330-04B	Vial HCl preserved	A	NA		2.5	Y	Absent		ARCHIVE()
L1742330-04C	Vial HCl preserved	A	NA		2.5	Y	Absent		ARCHIVE()
L1742330-04D	Vial HCl preserved	A	NA		2.5	Y	Absent		ARCHIVE()

*Values in parentheses indicate holding time in days

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1742330
Project Number:	T0239-016-001	**Report Date:**	11/27/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1742330
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Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM	**Lab Number:**	L1742330
Project Number:	T0239-016-001	**Report Date:**	11/27/17

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.**

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

ALPHA

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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

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 11/17/17

ALPHA Job #: L1702330

Client Information
Client: Turnkey ENV Restoration
Address: 2558 Hamburg Pike
Buffalo, NY 14218
Phone: 716-713-3927
Fax:
Email: [illegible] NMunley@Turnkeyenv.com

Project Information
Project Name: Main & E. Bullom
Project Location: Buffalo, NY
Project #: T0239-016-001
(Use Project name as Project #)
Project Manager: Nate Munley
ALPHAQuote #:

Turn-Around Time
Standard: X
Rush (only if pre approved):
Due Date:
# of Days:

These samples have been previously analyzed by Alpha:

Other project specific requirements/comments:
Category B

Please specify Metals or TAL.

Deliverables
ASP-A: ASP-B: X
EQuIS (1 File): EQuIS (4 File):
Other:

Regulatory Requirement
NY TOGS: NY Part 375:
AWQ Standards: NY CP-51:
NY Restricted Use: Other:
NY Unrestricted Use:
NYC Sewer Discharge:

Billing Information
Same as Client Info:
PO #:

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
NJ: NY:
Other:

Sample Filtration
Done:
Lab to do:
Preservation
Lab to do:
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL VOA's	TCL SVOA's	TAL Metals	PCB's	Pesticides	Herbicides	Sample Specific Comments	Total Bottles
42330-01	MW-3	11/16/17	15:00	Water	NAS	X	X	X	X	X	X		12
-02	MW-4		13:30			X	X	X	X	X	X	MS/MSD	36
-03	BD		16:00			X	X	X	X	X	X		12

Container Type: V A A A A A
Preservative: B O O O O O

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	11/16/17 16:30	[signature]	11/16/17 16:35
[signature] AAL	11/16/17 16:35	[signature]	11/16/17 0150 11/17/17

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1804490
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & E. BALCOM ST. SITE
Project Number:	B0239-016-001
Report Date:	02/14/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & E. BALCOM ST. SITE
Project Number: B0239-016-001

Lab Number: L1804490
Report Date: 02/14/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1804490-01	MW-5 (20-24')	SOIL	BUFFALO, NY	02/08/18 10:00	02/08/18

Project Name:	MAIN & E. BALCOM ST. SITE	**Lab Number:**	L1804490
Project Number:	B0239-016-001	**Report Date:**	02/14/18

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	MAIN & E. BALCOM ST. SITE	**Lab Number:**	L1804490
Project Number:	B0239-016-001	**Report Date:**	02/14/18

Case Narrative (continued)

Report Submission

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

Volatile Organics

Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

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

Authorized Signature: Cristin Walker

Title: Technical Director/Representative Date: 02/14/18

ORGANICS

VOLATILES

Project Name: MAIN & E. BALCOM ST. SITE
Lab Number: L1804490
Project Number: B0239-016-001
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804490-01
Client ID: MW-5 (20-24')
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 02/13/18 20:58
Analyst: MV
Percent Solids: 87%

Date Collected: 02/08/18 10:00
Date Received: 02/08/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.8	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.29	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.37	1
1,2-Dichloropropane	ND		ug/kg	3.7	0.24	1
Dibromochloromethane	ND		ug/kg	1.1	0.19	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.32	1
Chlorobenzene	ND		ug/kg	1.1	0.37	1
Trichlorofluoromethane	ND		ug/kg	5.3	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.26	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.37	1
Bromodichloromethane	ND		ug/kg	1.1	0.33	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.22	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.25	1
Bromoform	ND		ug/kg	4.3	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.32	1
Benzene	ND		ug/kg	1.1	0.21	1
Toluene	1.1	J	ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.18	1
Chloromethane	ND		ug/kg	5.3	0.46	1
Bromomethane	ND		ug/kg	2.1	0.36	1
Vinyl chloride	ND		ug/kg	2.1	0.34	1
Chloroethane	ND		ug/kg	2.1	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.40	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.26	1
Trichloroethene	ND		ug/kg	1.1	0.32	1
1,2-Dichlorobenzene	ND		ug/kg	5.3	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	5.3	0.23	1

Project Name: MAIN & E. BALCOM ST. SITE **Lab Number:** L1804490

Project Number: B0239-016-001 **Report Date:** 02/14/18

SAMPLE RESULTS

Lab ID: L1804490-01 Date Collected: 02/08/18 10:00
Client ID: MW-5 (20-24') Date Received: 02/08/18
Sample Location: BUFFALO, NY Field Prep: Not Specified
Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/kg	5.3	0.19	1
Methyl tert butyl ether	ND		ug/kg	2.1	0.16	1
p/m-Xylene	0.59	J	ug/kg	2.1	0.37	1
o-Xylene	ND		ug/kg	2.1	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.36	1
Styrene	ND		ug/kg	2.1	0.43	1
Dichlorodifluoromethane	ND		ug/kg	11	0.53	1
Acetone	6.7	J	ug/kg	11	2.4	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.74	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
2-Hexanone	ND		ug/kg	11	0.71	1
Bromochloromethane	ND		ug/kg	5.3	0.38	1
1,2-Dibromoethane	ND		ug/kg	4.3	0.21	1
n-Butylbenzene	ND		ug/kg	1.1	0.24	1
sec-Butylbenzene	ND		ug/kg	1.1	0.23	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.3	0.42	1
Isopropylbenzene	ND		ug/kg	1.1	0.21	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.22	1
n-Propylbenzene	ND		ug/kg	1.1	0.23	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.3	0.27	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.3	0.23	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.3	0.17	1
1,2,4-Trimethylbenzene	0.22	J	ug/kg	5.3	0.20	1
Methyl Acetate	ND		ug/kg	21	0.49	1
Cyclohexane	ND		ug/kg	21	0.46	1
1,4-Dioxane	ND		ug/kg	43	15.	1
Freon-113	ND		ug/kg	21	0.55	1
Methyl cyclohexane	ND		ug/kg	4.3	0.26	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	108		70-130
4-Bromofluorobenzene	118		70-130
Dibromofluoromethane	95		70-130

Project Name: MAIN & E. BALCOM ST. SITE
Project Number: B0239-016-001
Lab Number: L1804490
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/13/18 20:31
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1089110-5					
Methylene chloride	ND		ug/kg	10	1.6
1,1-Dichloroethane	ND		ug/kg	1.5	0.27
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.34
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.18
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.31
Tetrachloroethene	ND		ug/kg	1.0	0.30
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.42
1,2-Dichloroethane	ND		ug/kg	1.0	0.25
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.35
Bromodichloromethane	ND		ug/kg	1.0	0.31
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.21
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.23
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.30
Benzene	ND		ug/kg	1.0	0.19
Toluene	ND		ug/kg	1.5	0.20
Ethylbenzene	ND		ug/kg	1.0	0.17
Chloromethane	ND		ug/kg	5.0	0.44
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.32
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.37
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.24
Trichloroethene	ND		ug/kg	1.0	0.30
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.22

Project Name: MAIN & E. BALCOM ST. SITE
Project Number: B0239-016-001
Lab Number: L1804490
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/13/18 20:31
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1089110-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.18
Methyl tert butyl ether	ND		ug/kg	2.0	0.15
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.34
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.50
Acetone	ND		ug/kg	10	2.3
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.69
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.36
1,2-Dibromoethane	ND		ug/kg	4.0	0.20
n-Butylbenzene	ND		ug/kg	1.0	0.23
sec-Butylbenzene	ND		ug/kg	1.0	0.22
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.19
p-Isopropyltoluene	ND		ug/kg	1.0	0.20
n-Propylbenzene	ND		ug/kg	1.0	0.22
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.25
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.22
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.16
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.19
Methyl Acetate	ND		ug/kg	20	0.46
Cyclohexane	ND		ug/kg	20	0.43
1,4-Dioxane	ND		ug/kg	40	14.
Freon-113	ND		ug/kg	20	0.51
Methyl cyclohexane	ND		ug/kg	4.0	0.24

Project Name: MAIN & E. BALCOM ST. SITE
Project Number: B0239-016-001
Lab Number: L1804490
Report Date: 02/14/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/13/18 20:31
Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1089110-5					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	124		70-130
Toluene-d8	106		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	95		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM ST. SITE

Project Number: B0239-016-001

Lab Number: L1804490

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1089110-3 WG1089110-4								
Methylene chloride	70		**68**	Q	70-130	3		30
1,1-Dichloroethane	92		91		70-130	1		30
Chloroform	98		96		70-130	2		30
Carbon tetrachloride	98		98		70-130	0		30
1,2-Dichloropropane	88		85		70-130	3		30
Dibromochloromethane	98		95		70-130	3		30
1,1,2-Trichloroethane	105		103		70-130	2		30
Tetrachloroethene	94		90		70-130	4		30
Chlorobenzene	99		96		70-130	3		30
Trichlorofluoromethane	93		92		70-139	1		30
1,2-Dichloroethane	108		106		70-130	2		30
1,1,1-Trichloroethane	102		100		70-130	2		30
Bromodichloromethane	97		95		70-130	2		30
trans-1,3-Dichloropropene	114		110		70-130	4		30
cis-1,3-Dichloropropene	95		94		70-130	1		30
Bromoform	100		95		70-130	5		30
1,1,2,2-Tetrachloroethane	123		110		70-130	11		30
Benzene	88		86		70-130	2		30
Toluene	102		98		70-130	4		30
Ethylbenzene	106		104		70-130	2		30
Chloromethane	87		73		52-130	18		30
Bromomethane	88		80		57-147	10		30
Vinyl chloride	78		72		67-130	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM ST. SITE

Project Number: B0239-016-001

Lab Number: L1804490

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1089110-3 WG1089110-4								
Chloroethane	84		80		50-151	5		30
1,1-Dichloroethene	79		87		65-135	10		30
trans-1,2-Dichloroethene	88		86		70-130	2		30
Trichloroethene	90		90		70-130	0		30
1,2-Dichlorobenzene	100		99		70-130	1		30
1,3-Dichlorobenzene	100		99		70-130	1		30
1,4-Dichlorobenzene	100		97		70-130	3		30
Methyl tert butyl ether	108		98		66-130	10		30
p/m-Xylene	101		99		70-130	2		30
o-Xylene	107		103		70-130	4		30
cis-1,2-Dichloroethene	88		86		70-130	2		30
Styrene	106		100		70-130	6		30
Dichlorodifluoromethane	71		67		30-146	6		30
Acetone	118		**178**	Q	54-140	**41**	Q	30
Carbon disulfide	77		82		59-130	6		30
2-Butanone	107		122		70-130	13		30
4-Methyl-2-pentanone	105		98		70-130	7		30
2-Hexanone	**139**	Q	123		70-130	12		30
Bromochloromethane	87		85		70-130	2		30
1,2-Dibromoethane	101		97		70-130	4		30
n-Butylbenzene	123		121		70-130	2		30
sec-Butylbenzene	111		110		70-130	1		30
1,2-Dibromo-3-chloropropane	88		86		68-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & E. BALCOM ST. SITE

Project Number: B0239-016-001

Lab Number: L1804490

Report Date: 02/14/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1089110-3 WG1089110-4								
Isopropylbenzene	120		108		70-130	11		30
p-Isopropyltoluene	111		110		70-130	1		30
n-Propylbenzene	126		115		70-130	9		30
1,2,3-Trichlorobenzene	97		95		70-130	2		30
1,2,4-Trichlorobenzene	99		96		70-130	3		30
1,3,5-Trimethylbenzene	121		107		70-130	12		30
1,2,4-Trimethylbenzene	109		107		70-130	2		30
Methyl Acetate	102		101		51-146	1		30
Cyclohexane	91		90		59-142	1		30
1,4-Dioxane	105		94		65-136	11		30
Freon-113	90		96		50-139	6		30
Methyl cyclohexane	100		97		70-130	3		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	121		122		70-130
Toluene-d8	108		107		70-130
4-Bromofluorobenzene	124		116		70-130
Dibromofluoromethane	97		97		70-130

INORGANICS
&
MISCELLANEOUS

Project Name: MAIN & E. BALCOM ST. SITE
Project Number: B0239-016-001
Lab Number: L1804490
Report Date: 02/14/18

SAMPLE RESULTS

Lab ID: L1804490-01
Client ID: MW-5 (20-24')
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil

Date Collected: 02/08/18 10:00
Date Received: 02/08/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.7		%	0.100	NA	1	-	02/09/18 10:27	121,2540G	RI

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & E. BALCOM ST. SITE
Project Number: B0239-016-001

Lab Number: L1804490
Report Date: 02/14/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01 QC Batch ID: WG1087953-1 QC Sample: L1804457-01 Client ID: DUP Sample						
Solids, Total	91.7	91.7	%	0		20

Project Name: MAIN & E. BALCOM ST. SITE
Project Number: B0239-016-001

Lab Number: L1804490
Report Date: 02/14/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804490-01A	Vial Large Septa unpreserved (4oz)	A	NA		2.7	Y	Absent		NYTCL-8260-R2(14),TS(7)
L1804490-01X	Vial MeOH preserved split	A	NA		2.7	Y	Absent		NYTCL-8260-R2(14)
L1804490-01Y	Vial Water preserved split	A	NA		2.7	Y	Absent	09-FEB-18 12:11	NYTCL-8260-R2(14)
L1804490-01Z	Vial Water preserved split	A	NA		2.7	Y	Absent	09-FEB-18 12:11	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	MAIN & E. BALCOM ST. SITE	**Lab Number:**	L1804490
Project Number:	B0239-016-001	**Report Date:**	02/14/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM ST. SITE	**Lab Number:**	L1804490
Project Number:	B0239-016-001	**Report Date:**	02/14/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & E. BALCOM ST. SITE	**Lab Number:**	L1804490
Project Number:	B0239-016-001	**Report Date:**	02/14/18

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: 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**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, 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, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

ALPHA

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 2/9/18

ALPHA Job #: L1804490

Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193
Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

Project Information
Project Name: Main E. Balcom St Site
Project Location: Buffalo, NY
Project # B0239-016-001
(Use Project name as Project #) ☐
Project Manager: Nate Munley
ALPHAQuote #:

Turn-Around Time
Standard ☒
Rush (only if pre approved) ☐
Due Date:
# of Days:

Client Information
Client: Turnkey ENV. Restoration
Address: 2558 Hamburg Tpke, Buffalo, NY 14218
Phone: 716-713-3437
Fax:
Email: NMunley@Turnkeyllc.com

Deliverables
☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information
☐ Same as Client Info
PO #

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Category B

Please specify Metals or TAL.

ANALYSIS: TCL+CP-51 VOCs

Sample Filtration: ☐ Done ☐ Lab to do
Preservation: ☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL+CP-51 VOCs	Sample Specific Comments	Total Bottles
04490-01	MW-5 (20-24')	2/8/18	10:00	Soil	NHS	X	[illegible]	

Container Type	A	
Preservative	A	

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	2/8/18 12:00	Jack Sherry AAL	2/8/18 16:05
Jack Sherry AAL	2/8/18 16:45	[signature]	2/9/18 0150

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1804815
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & EAST BALCOM ST. SITE
Project Number:	B0234-016-001-004
Report Date:	02/19/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

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

Project Name: MAIN & EAST BALCOM ST. SITE
Project Number: B0234-016-001-004

Lab Number: L1804815
Report Date: 02/19/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1804815-01	MW-3	WATER	BUFFALO, NY	02/11/18 14:20	02/12/18
L1804815-02	MW-4	WATER	BUFFALO, NY	02/12/18 07:55	02/12/18
L1804815-03	MW-5	WATER	BUFFALO, NY	02/12/18 09:15	02/12/18

Project Name:	MAIN & EAST BALCOM ST. SITE	**Lab Number:**	L1804815
Project Number:	B0234-016-001-004	**Report Date:**	02/19/18

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	MAIN & EAST BALCOM ST. SITE	**Lab Number:**	L1804815
Project Number:	B0234-016-001-004	**Report Date:**	02/19/18

Case Narrative (continued)

Report Submission

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

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: 02/19/18

ORGANICS

VOLATILES

Project Name: MAIN & EAST BALCOM ST. SITE **Lab Number:** L1804815

Project Number: B0234-016-001-004 **Report Date:** 02/19/18

SAMPLE RESULTS

Lab ID: L1804815-01
Client ID: MW-3
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/13/18 10:51
Analyst: PD

Date Collected: 02/11/18 14:20
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	10		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: MAIN & EAST BALCOM ST. SITE **Lab Number:** L1804815

Project Number: B0234-016-001-004 **Report Date:** 02/19/18

SAMPLE RESULTS

Lab ID: L1804815-01 Date Collected: 02/11/18 14:20
Client ID: MW-3 Date Received: 02/12/18
Sample Location: BUFFALO, NY Field Prep: Not Specified
Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	4.5	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
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
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	106		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	94		70-130

Project Name: MAIN & EAST BALCOM ST. SITE **Lab Number:** L1804815

Project Number: B0234-016-001-004 **Report Date:** 02/19/18

SAMPLE RESULTS

Lab ID: L1804815-02
Client ID: MW-4
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/13/18 11:16
Analyst: PD

Date Collected: 02/12/18 07:55
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	0.16	J	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	1.9		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	2.5		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	58		ug/l	2.5	0.70	1
Trichloroethene	8.0		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: MAIN & EAST BALCOM ST. SITE **Lab Number:** L1804815

Project Number: B0234-016-001-004 **Report Date:** 02/19/18

SAMPLE RESULTS

Lab ID: L1804815-02 Date Collected: 02/12/18 07:55

Client ID: MW-4 Date Received: 02/12/18

Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	21		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	93		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	13		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
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	0.29	J	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	108		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	95		70-130

Project Name: MAIN & EAST BALCOM ST. SITE **Lab Number:** L1804815

Project Number: B0234-016-001-004 **Report Date:** 02/19/18

SAMPLE RESULTS

Lab ID: L1804815-03
Client ID: MW-5
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 02/13/18 11:41
Analyst: PD

Date Collected: 02/12/18 09:15
Date Received: 02/12/18
Field Prep: Not Specified

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

Project Name: MAIN & EAST BALCOM ST. SITE **Lab Number:** L1804815

Project Number: B0234-016-001-004 **Report Date:** 02/19/18

SAMPLE RESULTS

Lab ID: L1804815-03 Date Collected: 02/12/18 09:15

Client ID: MW-5 Date Received: 02/12/18

Sample Location: BUFFALO, NY Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
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	5.2		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	9.0		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
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	108		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	95		70-130

Project Name: MAIN & EAST BALCOM ST. SITE
Project Number: B0234-016-001-004
Lab Number: L1804815
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/13/18 07:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1088799-5					
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: MAIN & EAST BALCOM ST. SITE
Project Number: B0234-016-001-004
Lab Number: L1804815
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/13/18 07:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1088799-5					
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
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
n-Propylbenzene	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
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
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: MAIN & EAST BALCOM ST. SITE
Project Number: B0234-016-001-004
Lab Number: L1804815
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 02/13/18 07:56
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1088799-5					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	93		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM ST. SITE

Project Number: B0234-016-001-004

Lab Number: L1804815

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1088799-3 WG1088799-4								
Methylene chloride	85		85		70-130	0		20
1,1-Dichloroethane	94		93		70-130	1		20
Chloroform	91		91		70-130	0		20
Carbon tetrachloride	78		76		63-132	3		20
1,2-Dichloropropane	93		93		70-130	0		20
Dibromochloromethane	80		82		63-130	2		20
1,1,2-Trichloroethane	94		97		70-130	3		20
Tetrachloroethene	86		83		70-130	4		20
Chlorobenzene	90		89		75-130	1		20
Trichlorofluoromethane	110		100		62-150	10		20
1,2-Dichloroethane	95		97		70-130	2		20
1,1,1-Trichloroethane	86		83		67-130	4		20
Bromodichloromethane	86		87		67-130	1		20
trans-1,3-Dichloropropene	87		88		70-130	1		20
cis-1,3-Dichloropropene	84		86		70-130	2		20
Bromoform	74		77		54-136	4		20
1,1,2,2-Tetrachloroethane	95		100		67-130	5		20
Benzene	90		88		70-130	2		20
Toluene	93		90		70-130	3		20
Ethylbenzene	95		93		70-130	2		20
Chloromethane	96		91		64-130	5		20
Bromomethane	88		80		39-139	10		20
Vinyl chloride	89		87		55-140	2		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM ST. SITE

Project Number: B0234-016-001-004

Lab Number: L1804815

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1088799-3 WG1088799-4								
Chloroethane	100		97		55-138	3		20
1,1-Dichloroethene	84		82		61-145	2		20
trans-1,2-Dichloroethene	87		84		70-130	4		20
Trichloroethene	87		85		70-130	2		20
1,2-Dichlorobenzene	89		89		70-130	0		20
1,3-Dichlorobenzene	90		89		70-130	1		20
1,4-Dichlorobenzene	90		89		70-130	1		20
Methyl tert butyl ether	76		80		63-130	5		20
p/m-Xylene	95		90		70-130	5		20
o-Xylene	95		90		70-130	5		20
cis-1,2-Dichloroethene	86		84		70-130	2		20
Styrene	95		95		70-130	0		20
Dichlorodifluoromethane	74		71		36-147	4		20
Acetone	100		100		58-148	0		20
Carbon disulfide	83		80		51-130	4		20
2-Butanone	100		110		63-138	10		20
4-Methyl-2-pentanone	85		90		59-130	6		20
2-Hexanone	85		90		57-130	6		20
Bromochloromethane	81		84		70-130	4		20
1,2-Dibromoethane	85		88		70-130	3		20
n-Butylbenzene	100		100		53-136	0		20
sec-Butylbenzene	99		97		70-130	2		20
1,2-Dibromo-3-chloropropane	72		75		41-144	4		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM ST. SITE

Project Number: B0234-016-001-004

Lab Number: L1804815

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1088799-3 WG1088799-4								
Isopropylbenzene	98		95		70-130	3		20
p-Isopropyltoluene	96		94		70-130	2		20
n-Propylbenzene	100		100		69-130	0		20
1,2,3-Trichlorobenzene	84		94		70-130	11		20
1,2,4-Trichlorobenzene	84		90		70-130	7		20
1,3,5-Trimethylbenzene	97		95		64-130	2		20
1,2,4-Trimethylbenzene	97		96		70-130	1		20
Methyl Acetate	94		100		70-130	6		20
Cyclohexane	98		96		70-130	2		20
1,4-Dioxane	70		70		56-162	0		20
Freon-113	86		84		70-130	2		20
Methyl cyclohexane	89		89		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		110		70-130
Toluene-d8	105		103		70-130
4-Bromofluorobenzene	105		103		70-130
Dibromofluoromethane	96		96		70-130

Project Name: MAIN & EAST BALCOM ST. SITE
Project Number: B0234-016-001-004

Lab Number: L1804815
Report Date: 02/19/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804815-01A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-01B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-01C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-02A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-02B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-02C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-03A	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-03B	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)
L1804815-03C	Vial HCl preserved	A	NA		3.1	Y	Absent		NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

Project Name:	MAIN & EAST BALCOM ST. SITE	**Lab Number:**	L1804815
Project Number:	B0234-016-001-004	**Report Date:**	02/19/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & EAST BALCOM ST. SITE	**Lab Number:**	L1804815
Project Number:	B0234-016-001-004	**Report Date:**	02/19/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	MAIN & EAST BALCOM ST. SITE	**Lab Number:**	L1804815
Project Number:	B0234-016-001-004	**Report Date:**	02/19/18

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: 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**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, 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, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

NEW YORK CHAIN OF CUSTODY

ALPHA
Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 2/13/18

ALPHA Job #: L1805815

Project Information

Project Name: Main & East Bellam St. Site
Project Location: Buffalo, NY
Project # B0234-016-001-004-005
(Use Project name as Project #) ☐
Project Manager: Nate Munley
ALPHAQuote #:

Turn-Around Time

Standard ☒
Rush (only if pre approved) ☐
Due Date:
\# of Days:

Client Information

Client: BenchMark EES
Address: 2558 Hamburg TPK
Buffalo, NY, 14218
Phone: 716-713-3437
Fax:
Email: Nmunley@Turnkeyllc.com

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Category B deliverables

Please specify Metals or TAL.

ANALYSIS: TCL+CP-51 VOC's

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL+CP-51 VOC's	Sample Specific Comments	Total Bottles
05815-01	MW-3	2/11/18	14:20	AQ	NAS	X		3
02	MW-4	2/12/18	7:55	AQ	NAS	X		3
03	MW-5	2/12/18	9:15	AQ	NAS	X		3

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Container Type	V
Preservative	B

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	2/12/18 12:00	Audrey Tilleyman	2/12/18 13:30
Audrey Tilleyman	2/12/18 13:45	[signature]	2/13/18 0100

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

Form No: 01-25 HC (rev. 30-Sept-2013)

ANALYTICAL REPORT

Lab Number:	L1804819
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 856-0599
Project Name:	MAIN & EAST BALCOM STREET SITE
Project Number:	B0239-016-001-004
Report Date:	02/19/18

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1804819
Report Date: 02/19/18

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1804819-01	SSV-1	SOIL_VAPOR	BUFFALO, NY	02/12/18 05:46	02/12/18
L1804819-02	BD	SOIL_VAPOR	BUFFALO, NY	02/12/18 05:47	02/12/18
L1804819-03	AMBIENT-1	AIR	BUFFALO, NY	02/12/18 05:47	02/12/18
L1804819-04	SSV-2	SOIL_VAPOR	BUFFALO, NY	02/12/18 05:50	02/12/18
L1804819-05	AMBIENT-2	AIR	BUFFALO, NY	02/12/18 05:49	02/12/18
L1804819-06	AMBIENT-3	AIR	BUFFALO, NY	02/12/18 05:43	02/12/18
L1804819-07	OUTDOOR-1	AIR	BUFFALO, NY	02/12/18 05:50	02/12/18
L1804819-08	UNUSED CAN #160	AIR	BUFFALO, NY		02/12/18

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1804819
Project Number:	B0239-016-001-004	**Report Date:**	02/19/18

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

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

HOLD POLICY

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

Please contact Client Services at 800-624-9220 with any questions.

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1804819
Project Number:	B0239-016-001-004	**Report Date:**	02/19/18

Case Narrative (continued)

Volatile Organics in Air

Canisters were released from the laboratory on February 2, 2018. The canister certification results are provided as an addendum.

The WG1089689-3 LCS recoveries for bromoform (136%), 4-ethyltoluene (142%) and 1,2,4-trimethylbenzene (132%) are above the upper 130% acceptance limit. All samples associated with this LCS do not have reportable amounts of these analytes.

L1804819-01 and -02: The samples have elevated detection limits due to the dilution required by the elevated concentrations of target compounds in the samples.

L1804819-01, -02 and -04 The presence of 2,2,4-Triemthylpentane could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

L1804819-01 and -02 The presence of Acetone could not be determined in these samples due to a non-target compound interfering with the identification and quantification of this compound.

L1804819-04 and -07 results for Acetone should be considered estimated due to co-elution with a non-target peak.

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: Christopher J. Anderson

Title: Technical Director/Representative Date: 02/19/18

AIR

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-01 D
Client ID: SSV-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/15/18 20:55
Analyst: MB

Date Collected: 02/12/18 05:46
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	1.00	--	ND	4.94	--		5
Chloromethane	ND	1.00	--	ND	2.07	--		5
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	1.00	--	ND	6.99	--		5
Vinyl chloride	ND	1.00	--	ND	2.56	--		5
1,3-Butadiene	ND	1.00	--	ND	2.21	--		5
Bromomethane	ND	1.00	--	ND	3.88	--		5
Chloroethane	ND	1.00	--	ND	2.64	--		5
Ethyl Alcohol	81.6	25.0	--	154	47.1	--		5
Vinyl bromide	ND	1.00	--	ND	4.37	--		5
Acetone	ND	5.00	--	ND	11.9	--		5
Trichlorofluoromethane	ND	1.00	--	ND	5.62	--		5
iso-Propyl Alcohol	5.39	2.50	--	13.2	6.15	--		5
1,1-Dichloroethene	ND	1.00	--	ND	3.96	--		5
tert-Butyl Alcohol	ND	2.50	--	ND	7.58	--		5
Methylene chloride	ND	2.50	--	ND	8.69	--		5
3-Chloropropene	ND	1.00	--	ND	3.13	--		5
Carbon disulfide	30.7	1.00	--	95.6	3.11	--		5
1,1,2-Trichloro-1,2,2-Trifluoroethane	1.22	1.00	--	9.35	7.66	--		5
trans-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
1,1-Dichloroethane	ND	1.00	--	ND	4.05	--		5
Methyl tert butyl ether	ND	1.00	--	ND	3.61	--		5
2-Butanone	3.88	2.50	--	11.4	7.37	--		5
cis-1,2-Dichloroethene	ND	1.00	--	ND	3.96	--		5
Ethyl Acetate	ND	2.50	--	ND	9.01	--		5

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-01 D
Client ID: SSV-1
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:46
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	1.00	--	ND	4.88	--		5
Tetrahydrofuran	ND	2.50	--	ND	7.37	--		5
1,2-Dichloroethane	ND	1.00	--	ND	4.05	--		5
n-Hexane	328	1.00	--	1160	3.52	--		5
1,1,1-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Benzene	28.9	1.00	--	92.3	3.19	--		5
Carbon tetrachloride	ND	1.00	--	ND	6.29	--		5
Cyclohexane	454	1.00	--	1560	3.44	--		5
1,2-Dichloropropane	ND	1.00	--	ND	4.62	--		5
Bromodichloromethane	ND	1.00	--	ND	6.70	--		5
1,4-Dioxane	ND	1.00	--	ND	3.60	--		5
Trichloroethene	ND	1.00	--	ND	5.37	--		5
2,2,4-Trimethylpentane	ND	1.00	--	ND	4.67	--		5
Heptane	54.9	1.00	--	225	4.10	--		5
cis-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
4-Methyl-2-pentanone	ND	2.50	--	ND	10.2	--		5
trans-1,3-Dichloropropene	ND	1.00	--	ND	4.54	--		5
1,1,2-Trichloroethane	ND	1.00	--	ND	5.46	--		5
Toluene	5.92	1.00	--	22.3	3.77	--		5
2-Hexanone	ND	1.00	--	ND	4.10	--		5
Dibromochloromethane	ND	1.00	--	ND	8.52	--		5
1,2-Dibromoethane	ND	1.00	--	ND	7.69	--		5
Tetrachloroethene	ND	1.00	--	ND	6.78	--		5
Chlorobenzene	ND	1.00	--	ND	4.61	--		5
Ethylbenzene	ND	1.00	--	ND	4.34	--		5
p/m-Xylene	3.68	2.00	--	16.0	8.69	--		5
Bromoform	ND	1.00	--	ND	10.3	--		5

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-01 D
Client ID: SSV-1
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:46
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	1.00	--	ND	4.26	--		5
1,1,2,2-Tetrachloroethane	ND	1.00	--	ND	6.87	--		5
o-Xylene	1.10	1.00	--	4.78	4.34	--		5
4-Ethyltoluene	ND	1.00	--	ND	4.92	--		5
1,3,5-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
1,2,4-Trimethylbenzene	ND	1.00	--	ND	4.92	--		5
Benzyl chloride	ND	1.00	--	ND	5.18	--		5
1,3-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,4-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2-Dichlorobenzene	ND	1.00	--	ND	6.01	--		5
1,2,4-Trichlorobenzene	ND	1.00	--	ND	7.42	--		5
Hexachlorobutadiene	ND	1.00	--	ND	10.7	--		5

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	95		60-140
Bromochloromethane	95		60-140
chlorobenzene-d5	91		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-02 D
Client ID: BD
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/15/18 21:27
Analyst: MB

Date Collected: 02/12/18 05:47
Date Received: 02/12/18
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	2.00	--	ND	9.89	--		10
Chloromethane	ND	2.00	--	ND	4.13	--		10
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	2.00	--	ND	14.0	--		10
Vinyl chloride	ND	2.00	--	ND	5.11	--		10
1,3-Butadiene	ND	2.00	--	ND	4.42	--		10
Bromomethane	ND	2.00	--	ND	7.77	--		10
Chloroethane	ND	2.00	--	ND	5.28	--		10
Ethyl Alcohol	62.9	50.0	--	119	94.2	--		10
Vinyl bromide	ND	2.00	--	ND	8.74	--		10
Acetone	ND	10.0	--	ND	23.8	--		10
Trichlorofluoromethane	ND	2.00	--	ND	11.2	--		10
iso-Propyl Alcohol	ND	5.00	--	ND	12.3	--		10
1,1-Dichloroethene	ND	2.00	--	ND	7.93	--		10
tert-Butyl Alcohol	ND	5.00	--	ND	15.2	--		10
Methylene chloride	ND	5.00	--	ND	17.4	--		10
3-Chloropropene	ND	2.00	--	ND	6.26	--		10
Carbon disulfide	52.4	2.00	--	163	6.23	--		10
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	2.00	--	ND	15.3	--		10
trans-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
1,1-Dichloroethane	ND	2.00	--	ND	8.09	--		10
Methyl tert butyl ether	ND	2.00	--	ND	7.21	--		10
2-Butanone	5.71	5.00	--	16.8	14.7	--		10
cis-1,2-Dichloroethene	ND	2.00	--	ND	7.93	--		10
Ethyl Acetate	ND	5.00	--	ND	18.0	--		10

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-02 D
Client ID: BD
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:47
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	ND	2.00	--	ND	9.77	--		10
Tetrahydrofuran	ND	5.00	--	ND	14.7	--		10
1,2-Dichloroethane	ND	2.00	--	ND	8.09	--		10
n-Hexane	538	2.00	--	1900	7.05	--		10
1,1,1-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Benzene	71.8	2.00	--	229	6.39	--		10
Carbon tetrachloride	ND	2.00	--	ND	12.6	--		10
Cyclohexane	834	2.00	--	2870	6.88	--		10
1,2-Dichloropropane	ND	2.00	--	ND	9.24	--		10
Bromodichloromethane	ND	2.00	--	ND	13.4	--		10
1,4-Dioxane	ND	2.00	--	ND	7.21	--		10
Trichloroethene	ND	2.00	--	ND	10.7	--		10
2,2,4-Trimethylpentane	ND	2.00	--	ND	9.34	--		10
Heptane	204	2.00	--	836	8.20	--		10
cis-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
4-Methyl-2-pentanone	ND	5.00	--	ND	20.5	--		10
trans-1,3-Dichloropropene	ND	2.00	--	ND	9.08	--		10
1,1,2-Trichloroethane	ND	2.00	--	ND	10.9	--		10
Toluene	6.36	2.00	--	24.0	7.54	--		10
2-Hexanone	ND	2.00	--	ND	8.20	--		10
Dibromochloromethane	ND	2.00	--	ND	17.0	--		10
1,2-Dibromoethane	ND	2.00	--	ND	15.4	--		10
Tetrachloroethene	ND	2.00	--	ND	13.6	--		10
Chlorobenzene	ND	2.00	--	ND	9.21	--		10
Ethylbenzene	ND	2.00	--	ND	8.69	--		10
p/m-Xylene	4.17	4.00	--	18.1	17.4	--		10
Bromoform	ND	2.00	--	ND	20.7	--		10

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-02 D
Client ID: BD
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:47
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	2.00	--	ND	8.52	--		10
1,1,2,2-Tetrachloroethane	ND	2.00	--	ND	13.7	--		10
o-Xylene	ND	2.00	--	ND	8.69	--		10
4-Ethyltoluene	ND	2.00	--	ND	9.83	--		10
1,3,5-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
1,2,4-Trimethylbenzene	ND	2.00	--	ND	9.83	--		10
Benzyl chloride	ND	2.00	--	ND	10.4	--		10
1,3-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,4-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2-Dichlorobenzene	ND	2.00	--	ND	12.0	--		10
1,2,4-Trichlorobenzene	ND	2.00	--	ND	14.8	--		10
Hexachlorobutadiene	ND	2.00	--	ND	21.3	--		10

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	97		60-140
Bromochloromethane	94		60-140
chlorobenzene-d5	90		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-03
Client ID: AMBIENT-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/15/18 18:39
Analyst: MB

Date Collected: 02/12/18 05:47
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.393	0.200	--	1.94	0.989	--		1
Chloromethane	0.384	0.200	--	0.793	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	10.7	1.00	--	25.4	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	0.656	0.500	--	1.61	1.23	--		1
tert-Butyl Alcohol	2.12	0.500	--	6.43	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	5.19	0.500	--	15.3	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	4.65	0.500	--	13.7	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-03
Client ID: AMBIENT-1
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:47
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.338	0.200	--	1.19	0.705	--		1
Benzene	0.200	0.200	--	0.639	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.214	0.200	--	0.877	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.31	0.200	--	4.94	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.998	0.200	--	4.33	0.869	--		1
p/m-Xylene	5.80	0.400	--	25.2	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.88	0.200	--	8.17	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.273	0.200	--	1.34	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-03
Client ID: AMBIENT-1
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:47
Date Received: 02/12/18
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	83		60-140
Bromochloromethane	89		60-140
chlorobenzene-d5	91		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-03
Client ID: AMBIENT-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 18:39
Analyst: MB

Date Collected: 02/12/18 05:47
Date Received: 02/12/18
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.059	0.020	--	0.371	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	84		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	92		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-04
Client ID: SSV-2
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Soil_Vapor
Anaytical Method: 48,TO-15
Analytical Date: 02/15/18 22:02
Analyst: MB

Date Collected: 02/12/18 05:50
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.202	0.200	--	0.999	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	0.617	0.200	--	1.36	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	15.1	5.00	--	28.5	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	31.0	1.00	--	73.6	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	1.53	0.500	--	3.76	1.23	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	0.561	0.500	--	1.70	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	3.44	0.200	--	10.7	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.78	0.500	--	8.20	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-04
Client ID: SSV-2
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:50
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chloroform	0.389	0.200	--	1.90	0.977	--		1
Tetrahydrofuran	0.596	0.500	--	1.76	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	14.6	0.200	--	51.5	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	6.12	0.200	--	19.6	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	8.56	0.200	--	29.5	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	7.34	0.200	--	30.1	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	11.7	0.200	--	44.1	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.18	0.200	--	5.13	0.869	--		1
p/m-Xylene	4.68	0.400	--	20.3	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-04
Client ID: SSV-2
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:50
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.68	0.200	--	7.30	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	0.281	0.200	--	1.38	0.983	--		1
1,2,4-Trimethylbenzene	0.654	0.200	--	3.22	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	89		60-140
Bromochloromethane	91		60-140
chlorobenzene-d5	104		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-05
Client ID: AMBIENT-2
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/15/18 19:48
Analyst: MB

Date Collected: 02/12/18 05:49
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.447	0.200	--	2.21	0.989	--		1
Chloromethane	0.352	0.200	--	0.727	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	8.34	1.00	--	19.8	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	0.545	0.500	--	1.34	1.23	--		1
tert-Butyl Alcohol	1.82	0.500	--	5.52	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	4.26	0.500	--	12.6	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	4.26	0.500	--	12.6	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-05
Client ID: AMBIENT-2
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:49
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.310	0.200	--	1.09	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	0.209	0.200	--	0.857	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	1.19	0.200	--	4.48	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	1.05	0.200	--	4.56	0.869	--		1
p/m-Xylene	5.78	0.400	--	25.1	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	1.93	0.200	--	8.38	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	0.238	0.200	--	1.17	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-05
Client ID: AMBIENT-2
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:49
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	85		60-140
Bromochloromethane	96		60-140
chlorobenzene-d5	94		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-05
Client ID: AMBIENT-2
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 19:48
Analyst: MB

Date Collected: 02/12/18 05:49
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.058	0.020	--	0.365	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	85		60-140
bromochloromethane	95		60-140
chlorobenzene-d5	94		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-06
Client ID: AMBIENT-3
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/15/18 20:23
Analyst: MB

Date Collected: 02/12/18 05:43
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.320	0.200	--	1.58	0.989	--		1
Chloromethane	0.326	0.200	--	0.673	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	7.54	1.00	--	17.9	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
tert-Butyl Alcohol	0.952	0.500	--	2.89	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	2.63	0.500	--	7.76	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	2.75	0.500	--	8.11	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-06
Client ID: AMBIENT-3
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:43
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	0.288	0.200	--	1.02	0.705	--		1
Benzene	0.201	0.200	--	0.642	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	0.977	0.200	--	3.68	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	0.359	0.200	--	1.56	0.869	--		1
p/m-Xylene	1.97	0.400	--	8.56	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	0.662	0.200	--	2.88	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-06
Client ID: AMBIENT-3
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:43
Date Received: 02/12/18
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-Difluorobenzene	85		60-140
Bromochloromethane	93		60-140
chlorobenzene-d5	89		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-06
Client ID: AMBIENT-3
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 20:23
Analyst: MB

Date Collected: 02/12/18 05:43
Date Received: 02/12/18
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.057	0.020	--	0.359	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	85		60-140
bromochloromethane	90		60-140
chlorobenzene-d5	90		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-07
Client ID: OUTDOOR-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 02/15/18 18:05
Analyst: MB

Date Collected: 02/12/18 05:50
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	0.311	0.200	--	1.54	0.989	--		1
Chloromethane	0.316	0.200	--	0.653	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	1.02	1.00	--	2.42	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-07
Client ID: OUTDOOR-1
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:50
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Hexane	ND	0.200	--	ND	0.705	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-07
Client ID: OUTDOOR-1
Sample Location: BUFFALO, NY
Sample Depth:

Date Collected: 02/12/18 05:50
Date Received: 02/12/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	88		60-140
Bromochloromethane	102		60-140
chlorobenzene-d5	99		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

SAMPLE RESULTS

Lab ID: L1804819-07
Client ID: OUTDOOR-1
Sample Location: BUFFALO, NY
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 18:05
Analyst: MB

Date Collected: 02/12/18 05:50
Date Received: 02/12/18
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air by SIM - Mansfield Lab								
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Carbon tetrachloride	0.050	0.020	--	0.315	0.126	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1

Internal Standard	**% Recovery**	**Qualifier**	**Acceptance Criteria**
1,4-difluorobenzene	89		60-140
bromochloromethane	101		60-140
chlorobenzene-d5	102		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 16:34

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-07 Batch: WG1089689-4								
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1

Project Name: MAIN & EAST BALCOM STREET SITE **Lab Number:** L1804819

Project Number: B0239-016-001-004 **Report Date:** 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 16:34

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-07 Batch: WG1089689-4								
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 16:34

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-07 Batch: WG1089689-4								
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
1,2,3-Trichloropropane	ND	0.020	--	ND	0.121	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15-SIM
Analytical Date: 02/15/18 16:34

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab for sample(s): 03,05-07 Batch: WG1089689-4								
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/18 16:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1089690-4								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethyl Alcohol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
iso-Propyl Alcohol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/18 16:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1089690-4								
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Isopropyl Ether	ND	0.200	--	ND	0.836	--		1
Ethyl-Tert-Butyl-Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Tertiary-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/18 16:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1089690-4								
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl Acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/18 16:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1089690-4								
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane (C9)	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
o-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
p-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane (C10)	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane (C12)	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004
Lab Number: L1804819
Report Date: 02/19/18

Method Blank Analysis
Batch Quality Control

Analytical Method: 48,TO-15
Analytical Date: 02/15/18 16:00

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab for sample(s): 01-07 Batch: WG1089690-4								
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1804819

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-07 Batch: WG1089689-3								
Propylene	91		-		70-130	-		25
Dichlorodifluoromethane	104		-		70-130	-		25
Chloromethane	81		-		70-130	-		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	103		-		70-130	-		25
Vinyl chloride	90		-		70-130	-		25
1,3-Butadiene	99		-		70-130	-		25
Bromomethane	101		-		70-130	-		25
Chloroethane	89		-		70-130	-		25
Ethyl Alcohol	74		-		70-130	-		25
Vinyl bromide	112		-		70-130	-		25
Acetone	96		-		70-130	-		25
Trichlorofluoromethane	105		-		70-130	-		25
iso-Propyl Alcohol	92		-		70-130	-		25
Acrylonitrile	87		-		70-130	-		25
1,1-Dichloroethene	93		-		70-130	-		25
tert-Butyl Alcohol[1]	100		-		70-130	-		25
Methylene chloride	88		-		70-130	-		25
3-Chloropropene	92		-		70-130	-		25
Carbon disulfide	101		-		70-130	-		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	108		-		70-130	-		25
trans-1,2-Dichloroethene	95		-		70-130	-		25
1,1-Dichloroethane	93		-		70-130	-		25
Methyl tert butyl ether	109		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1804819

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-07 Batch: WG1089689-3								
Vinyl acetate	97		-		70-130	-		25
2-Butanone	86		-		70-130	-		25
cis-1,2-Dichloroethene	96		-		70-130	-		25
Ethyl Acetate	121		-		70-130	-		25
Chloroform	110		-		70-130	-		25
Tetrahydrofuran	90		-		70-130	-		25
1,2-Dichloroethane	97		-		70-130	-		25
n-Hexane	84		-		70-130	-		25
1,1,1-Trichloroethane	90		-		70-130	-		25
Benzene	84		-		70-130	-		25
Carbon tetrachloride	91		-		70-130	-		25
Cyclohexane	84		-		70-130	-		25
Dibromomethane[1]	74		-		70-130	-		25
1,2-Dichloropropane	80		-		70-130	-		25
Bromodichloromethane	92		-		70-130	-		25
1,4-Dioxane	103		-		70-130	-		25
Trichloroethene	91		-		70-130	-		25
2,2,4-Trimethylpentane	89		-		70-130	-		25
cis-1,3-Dichloropropene	89		-		70-130	-		25
4-Methyl-2-pentanone	82		-		70-130	-		25
trans-1,3-Dichloropropene	77		-		70-130	-		25
1,1,2-Trichloroethane	91		-		70-130	-		25
Toluene	108		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1804819

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-07 Batch: WG1089689-3								
2-Hexanone	99		-		70-130	-		25
Dibromochloromethane	129		-		70-130	-		25
1,2-Dibromoethane	114		-		70-130	-		25
Tetrachloroethene	119		-		70-130	-		25
1,1,1,2-Tetrachloroethane	110		-		70-130	-		25
Chlorobenzene	113		-		70-130	-		25
Ethylbenzene	117		-		70-130	-		25
p/m-Xylene	122		-		70-130	-		25
Bromoform	**136**	Q	-		70-130	-		25
Styrene	125		-		70-130	-		25
1,1,2,2-Tetrachloroethane	116		-		70-130	-		25
o-Xylene	123		-		70-130	-		25
1,2,3-Trichloropropane[1]	108		-		70-130	-		25
Isopropylbenzene	112		-		70-130	-		25
Bromobenzene[1]	106		-		70-130	-		25
4-Ethyltoluene	**142**	Q	-		70-130	-		25
1,3,5-Trimethylbenzene	130		-		70-130	-		25
1,2,4-Trimethylbenzene	**132**	Q	-		70-130	-		25
Benzyl chloride	125		-		70-130	-		25
1,3-Dichlorobenzene	126		-		70-130	-		25
1,4-Dichlorobenzene	120		-		70-130	-		25
sec-Butylbenzene	110		-		70-130	-		25
p-Isopropyltoluene	106		-		70-130	-		25

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1804819

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-07 Batch: WG1089689-3								
1,2-Dichlorobenzene	123		-		70-130	-		25
n-Butylbenzene	112		-		70-130	-		25
1,2,4-Trichlorobenzene	130		-		70-130	-		25
Naphthalene	118		-		70-130	-		25
1,2,3-Trichlorobenzene	118		-		70-130	-		25
Hexachlorobutadiene	125		-		70-130	-		25

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1804819
Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1089690-3								
Chlorodifluoromethane	84		-		70-130	-		
Propylene	94		-		70-130	-		
Propane	72		-		70-130	-		
Dichlorodifluoromethane	119		-		70-130	-		
Chloromethane	89		-		70-130	-		
1,2-Dichloro-1,1,2,2-tetrafluoroethane	129		-		70-130	-		
Methanol	72		-		70-130	-		
Vinyl chloride	94		-		70-130	-		
1,3-Butadiene	100		-		70-130	-		
Butane	78		-		70-130	-		
Bromomethane	109		-		70-130	-		
Chloroethane	94		-		70-130	-		
Ethyl Alcohol	72		-		70-130	-		
Dichlorofluoromethane	92		-		70-130	-		
Vinyl bromide	111		-		70-130	-		
Acrolein	86		-		70-130	-		
Acetone	101		-		70-130	-		
Acetonitrile	76		-		70-130	-		
Trichlorofluoromethane	107		-		70-130	-		
iso-Propyl Alcohol	88		-		70-130	-		
Acrylonitrile	90		-		70-130	-		
Pentane	78		-		70-130	-		
1,1-Dichloroethene	94		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1804819

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1089690-3								
tert-Butyl Alcohol	94		-		70-130	-		
Methylene chloride	90		-		70-130	-		
3-Chloropropene	91		-		70-130	-		
Carbon disulfide	103		-		70-130	-		
1,1,2-Trichloro-1,2,2-Trifluoroethane	109		-		70-130	-		
trans-1,2-Dichloroethene	99		-		70-130	-		
1,1-Dichloroethane	93		-		70-130	-		
Methyl tert butyl ether	107		-		70-130	-		
Vinyl acetate	99		-		70-130	-		
2-Butanone	85		-		70-130	-		
cis-1,2-Dichloroethene	83		-		70-130	-		
Ethyl Acetate	112		-		70-130	-		
Chloroform	107		-		70-130	-		
Tetrahydrofuran	93		-		70-130	-		
2,2-Dichloropropane	100		-		70-130	-		
1,2-Dichloroethane	98		-		70-130	-		
n-Hexane	80		-		70-130	-		
Isopropyl Ether	85		-		70-130	-		
Ethyl-Tert-Butyl-Ether	78		-		70-130	-		
1,1,1-Trichloroethane	87		-		70-130	-		
1,1-Dichloropropene	80		-		70-130	-		
Benzene	85		-		70-130	-		
Carbon tetrachloride	88		-		70-130	-		

Lab Control Sample Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1804819
Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1089690-3								
Cyclohexane	85		-		70-130	-		
Tertiary-Amyl Methyl Ether	82		-		70-130	-		
Dibromomethane	81		-		70-130	-		
1,2-Dichloropropane	80		-		70-130	-		
Bromodichloromethane	87		-		70-130	-		
1,4-Dioxane	98		-		70-130	-		
Trichloroethene	88		-		70-130	-		
2,2,4-Trimethylpentane	90		-		70-130	-		
Methyl Methacrylate	88		-		70-130	-		
Heptane	79		-		70-130	-		
cis-1,3-Dichloropropene	89		-		70-130	-		
4-Methyl-2-pentanone	83		-		70-130	-		
trans-1,3-Dichloropropene	73		-		70-130	-		
1,1,2-Trichloroethane	87		-		70-130	-		
Toluene	107		-		70-130	-		
1,3-Dichloropropane	98		-		70-130	-		
2-Hexanone	97		-		70-130	-		
Dibromochloromethane	126		-		70-130	-		
1,2-Dibromoethane	108		-		70-130	-		
Butyl Acetate	104		-		70-130	-		
Octane	105		-		70-130	-		
Tetrachloroethene	110		-		70-130	-		
1,1,1,2-Tetrachloroethane	103		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1804819

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1089690-3								
Chlorobenzene	108		-		70-130	-		
Ethylbenzene	111		-		70-130	-		
p/m-Xylene	110		-		70-130	-		
Bromoform	127		-		70-130	-		
Styrene	115		-		70-130	-		
1,1,2,2-Tetrachloroethane	108		-		70-130	-		
o-Xylene	114		-		70-130	-		
1,2,3-Trichloropropane	99		-		70-130	-		
Nonane (C9)	90		-		70-130	-		
Isopropylbenzene	112		-		70-130	-		
Bromobenzene	100		-		70-130	-		
o-Chlorotoluene	110		-		70-130	-		
n-Propylbenzene	114		-		70-130	-		
p-Chlorotoluene	103		-		70-130	-		
4-Ethyltoluene	121		-		70-130	-		
1,3,5-Trimethylbenzene	106		-		70-130	-		
tert-Butylbenzene	112		-		70-130	-		
1,2,4-Trimethylbenzene	116		-		70-130	-		
Decane (C10)	104		-		70-130	-		
Benzyl chloride	124		-		70-130	-		
1,3-Dichlorobenzene	114		-		70-130	-		
1,4-Dichlorobenzene	117		-		70-130	-		
sec-Butylbenzene	112		-		70-130	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE

Project Number: B0239-016-001-004

Lab Number: L1804819

Report Date: 02/19/18

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 Batch: WG1089690-3								
p-Isopropyltoluene	106		-		70-130	-		
1,2-Dichlorobenzene	116		-		70-130	-		
n-Butylbenzene	110		-		70-130	-		
1,2-Dibromo-3-chloropropane	96		-		70-130	-		
Undecane	109		-		70-130	-		
Dodecane (C12)	101		-		70-130	-		
1,2,4-Trichlorobenzene	120		-		70-130	-		
Naphthalene	108		-		70-130	-		
1,2,3-Trichlorobenzene	106		-		70-130	-		
Hexachlorobutadiene	117		-		70-130	-		

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1804819
Report Date: 02/19/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air by SIM - Mansfield Lab Associated sample(s): 03,05-07 QC Batch ID: WG1089689-5 QC Sample: L1804819-03 Client ID: AMBIENT-1						
Vinyl chloride	ND	ND	ppbV	NC		25
1,1-Dichloroethene	ND	ND	ppbV	NC		25
cis-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1,1-Trichloroethane	ND	ND	ppbV	NC		25
Carbon tetrachloride	0.059	0.058	ppbV	2		25
Trichloroethene	ND	ND	ppbV	NC		25
Tetrachloroethene	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1804819
Report Date: 02/19/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1089690-5 QC Sample: L1804819-03 Client ID: AMBIENT-1						
Dichlorodifluoromethane	0.393	0.481	ppbV	20		25
Chloromethane	0.384	0.402	ppbV	5		25
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND	ND	ppbV	NC		25
1,3-Butadiene	ND	ND	ppbV	NC		25
Bromomethane	ND	ND	ppbV	NC		25
Chloroethane	ND	ND	ppbV	NC		25
Ethyl Alcohol	ND	ND	ppbV	NC		25
Vinyl bromide	ND	ND	ppbV	NC		25
Acetone	10.7	9.92	ppbV	8		25
Trichlorofluoromethane	ND	ND	ppbV	NC		25
iso-Propyl Alcohol	0.656	0.630	ppbV	4		25
tert-Butyl Alcohol	2.12	2.03	ppbV	4		25
Methylene chloride	ND	ND	ppbV	NC		25
3-Chloropropene	ND	ND	ppbV	NC		25
Carbon disulfide	ND	ND	ppbV	NC		25
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND	ND	ppbV	NC		25
trans-1,2-Dichloroethene	ND	ND	ppbV	NC		25
1,1-Dichloroethane	ND	ND	ppbV	NC		25
Methyl tert butyl ether	ND	ND	ppbV	NC		25
2-Butanone	5.19	5.11	ppbV	2		25
Ethyl Acetate	ND	ND	ppbV	NC		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1804819
Report Date: 02/19/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1089690-5 QC Sample: L1804819-03 Client ID: AMBIENT-1						
Chloroform	ND	ND	ppbV	NC		25
Tetrahydrofuran	4.65	4.67	ppbV	0		25
1,2-Dichloroethane	ND	ND	ppbV	NC		25
n-Hexane	0.338	0.371	ppbV	9		25
Benzene	0.200	ND	ppbV	NC		25
Cyclohexane	ND	ND	ppbV	NC		25
1,2-Dichloropropane	ND	ND	ppbV	NC		25
Bromodichloromethane	ND	ND	ppbV	NC		25
1,4-Dioxane	ND	ND	ppbV	NC		25
2,2,4-Trimethylpentane	ND	ND	ppbV	NC		25
Heptane	0.214	0.230	ppbV	7		25
cis-1,3-Dichloropropene	ND	ND	ppbV	NC		25
4-Methyl-2-pentanone	ND	ND	ppbV	NC		25
trans-1,3-Dichloropropene	ND	ND	ppbV	NC		25
1,1,2-Trichloroethane	ND	ND	ppbV	NC		25
Toluene	1.31	1.30	ppbV	1		25
2-Hexanone	ND	ND	ppbV	NC		25
Dibromochloromethane	ND	ND	ppbV	NC		25
1,2-Dibromoethane	ND	ND	ppbV	NC		25
Chlorobenzene	ND	ND	ppbV	NC		25
Ethylbenzene	0.998	1.02	ppbV	2		25

Lab Duplicate Analysis
Batch Quality Control

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-00

Lab Number: L1804819
Report Date: 02/19/18

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics in Air - Mansfield Lab Associated sample(s): 01-07 QC Batch ID: WG1089690-5 QC Sample: L1804819-03 Client ID: AMBIENT-1						
p/m-Xylene	5.80	5.54	ppbV	5		25
Bromoform	ND	ND	ppbV	NC		25
Styrene	ND	ND	ppbV	NC		25
1,1,2,2-Tetrachloroethane	ND	ND	ppbV	NC		25
o-Xylene	1.88	1.83	ppbV	3		25
4-Ethyltoluene	ND	ND	ppbV	NC		25
1,3,5-Trimethylbenzene	ND	ND	ppbV	NC		25
1,2,4-Trimethylbenzene	0.273	0.288	ppbV	5		25
Benzyl chloride	ND	ND	ppbV	NC		25
1,3-Dichlorobenzene	ND	ND	ppbV	NC		25
1,4-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2-Dichlorobenzene	ND	ND	ppbV	NC		25
1,2,4-Trichlorobenzene	ND	ND	ppbV	NC		25
Hexachlorobutadiene	ND	ND	ppbV	NC		25

Project Name: MAIN & EAST BALCOM STREET SITE

Lab Number: L1804819

Project Number: B0239-016-001-004

Report Date: 02/19/18

Canister and Flow Controller Information

Samplenum	Client ID	Media ID	Media Type	Date Prepared	Bottle Order	Cleaning Batch ID	Can Leak Check	Initial Pressure (in. Hg)	Pressure on Receipt (in. Hg)	Flow Controler Leak Chk	Flow Out mL/min	Flow In mL/min	% RPD
L1804819-01	SSV-1	0635	Flow 5	02/02/18	258701		-	-	-	Pass	3.3	3.9	17
L1804819-01	SSV-1	2270	6.0L Can	02/02/18	258701	L1803067-02	Pass	-30.0	-8.5	-	-	-	-
L1804819-02	BD	0334	Flow 5	02/02/18	258701		-	-	-	Pass	3.3	3.8	14
L1804819-02	BD	2129	6.0L Can	02/02/18	258701	L1803067-02	Pass	-30.0	-8.3	-	-	-	-
L1804819-03	AMBIENT-1	0868	Flow 5	02/02/18	258701		-	-	-	Pass	3.3	3.8	14
L1804819-03	AMBIENT-1	649	6.0L Can	02/02/18	258701	L1803067-02	Pass	-30.0	-8.5	-	-	-	-
L1804819-04	SSV-2	0037	Flow 5	02/02/18	258701		-	-	-	Pass	3.3	3.8	14
L1804819-04	SSV-2	1709	6.0L Can	02/02/18	258701	L1803067-02	Pass	-30.0	-12.0	-	-	-	-
L1804819-05	AMBIENT-2	0150	Flow 5	02/02/18	258701		-	-	-	Pass	3.3	3.7	11
L1804819-05	AMBIENT-2	1780	6.0L Can	02/02/18	258701	L1803067-02	Pass	-30.0	-12.3	-	-	-	-
L1804819-06	AMBIENT-3	0408	Flow 5	02/02/18	258701		-	-	-	Pass	3.3	3.5	6
L1804819-06	AMBIENT-3	2275	6.0L Can	02/02/18	258701	L1803067-02	Pass	-30.0	-13.4	-	-	-	-
L1804819-07	OUTDOOR-1	0237	Flow 5	02/02/18	258701		-	-	-	Pass	3.3	3.5	6
L1804819-07	OUTDOOR-1	1988	6.0L Can	02/02/18	258701	L1803067-02	Pass	-30.0	-12.9	-	-	-	-

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/15/17 09:49
Analyst: MB

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Acetaldehyde	ND	2.50	--	ND	4.50	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	2.50	--	ND	4.71	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
tert-Butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	1.00	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Thiophene	ND	0.200	--	ND	0.688	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
2-Methylthiophene	ND	0.200	--	ND	0.803	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
3-Methylthiophene	ND	0.200	--	ND	0.803	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1728360

Project Number: CANISTER QC BAT **Report Date:** 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
2-Ethylthiophene	ND	0.200	--	ND	0.918	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,2,3-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
Indane	ND	0.200	--	ND	0.967	--		1
Indene	ND	0.200	--	ND	0.951	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
1,2,4,5-Tetramethylbenzene	ND	0.500	--	ND	2.74	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
Benzothiophene	ND	0.500	--	ND	2.74	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1
2-Methylnaphthalene	ND	1.00	--	ND	5.82	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
1-Methylnaphthalene	ND	1.00	--	ND	5.82	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	99		60-140
Bromochloromethane	102		60-140
chlorobenzene-d5	102		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 08/15/17 11:44
Analyst: MB

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

	ppbV			ug/m3				
Parameter	**Results**	**RL**	**MDL**	**Results**	**RL**	**MDL**	**Qualifier**	**Dilution Factor**
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
tert-Butyl Ethyl Ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
tert-Amyl Methyl Ether	ND	0.200	--	ND	0.836	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1728360

Project Number: CANISTER QC BAT **Report Date:** 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					
No Tentatively Identified Compounds					

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	87		60-140
Bromochloromethane	90		60-140
chlorobenzene-d5	90		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 08/15/17 11:44
Analyst: MB

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.020	--	ND	0.053	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
Halothane	ND	0.050	--	ND	0.404	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1728360
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1728360-01
Client ID: CAN 149 SHELF 1
Sample Location:
Sample Depth:

Date Collected: 08/14/17 16:00
Date Received: 08/15/17
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	84		60-140
bromochloromethane	86		60-140
chlorobenzene-d5	86		60-140

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1803067
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1803067-02
Client ID: CAN 2274 SHELF 43
Sample Location:
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15
Analytical Date: 01/29/18 15:20
Analyst: MB

Date Collected: 01/26/18 16:00
Date Received: 01/29/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Chlorodifluoromethane	ND	0.200	--	ND	0.707	--		1
Propylene	ND	0.500	--	ND	0.861	--		1
Propane	ND	0.500	--	ND	0.902	--		1
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.200	--	ND	1.40	--		1
Methanol	ND	5.00	--	ND	6.55	--		1
Vinyl chloride	ND	0.200	--	ND	0.511	--		1
1,3-Butadiene	ND	0.200	--	ND	0.442	--		1
Butane	ND	0.200	--	ND	0.475	--		1
Bromomethane	ND	0.200	--	ND	0.777	--		1
Chloroethane	ND	0.200	--	ND	0.528	--		1
Ethanol	ND	5.00	--	ND	9.42	--		1
Dichlorofluoromethane	ND	0.200	--	ND	0.842	--		1
Vinyl bromide	ND	0.200	--	ND	0.874	--		1
Acrolein	ND	0.500	--	ND	1.15	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Acetonitrile	ND	0.200	--	ND	0.336	--		1
Trichlorofluoromethane	ND	0.200	--	ND	1.12	--		1
Isopropanol	ND	0.500	--	ND	1.23	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
Pentane	ND	0.200	--	ND	0.590	--		1
Ethyl ether	ND	0.200	--	ND	0.606	--		1
1,1-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Tertiary butyl Alcohol	ND	0.500	--	ND	1.52	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1803067
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1803067-02
Client ID: CAN 2274 SHELF 43
Sample Location:
Sample Depth:

Date Collected: 01/26/18 16:00
Date Received: 01/29/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methylene chloride	ND	0.500	--	ND	1.74	--		1
3-Chloropropene	ND	0.200	--	ND	0.626	--		1
Carbon disulfide	ND	0.200	--	ND	0.623	--		1
Freon-113	ND	0.200	--	ND	1.53	--		1
trans-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
1,1-Dichloroethane	ND	0.200	--	ND	0.809	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
Vinyl acetate	ND	1.00	--	ND	3.52	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.200	--	ND	0.793	--		1
Ethyl Acetate	ND	0.500	--	ND	1.80	--		1
Chloroform	ND	0.200	--	ND	0.977	--		1
Tetrahydrofuran	ND	0.500	--	ND	1.47	--		1
2,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
1,2-Dichloroethane	ND	0.200	--	ND	0.809	--		1
n-Hexane	ND	0.200	--	ND	0.705	--		1
Diisopropyl ether	ND	0.200	--	ND	0.836	--		1
1,1,1-Trichloroethane	ND	0.200	--	ND	1.09	--		1
1,1-Dichloropropene	ND	0.200	--	ND	0.908	--		1
Benzene	ND	0.200	--	ND	0.639	--		1
Carbon tetrachloride	ND	0.200	--	ND	1.26	--		1
Cyclohexane	ND	0.200	--	ND	0.688	--		1
Dibromomethane	ND	0.200	--	ND	1.42	--		1
1,2-Dichloropropane	ND	0.200	--	ND	0.924	--		1
Bromodichloromethane	ND	0.200	--	ND	1.34	--		1
1,4-Dioxane	ND	0.200	--	ND	0.721	--		1
Trichloroethene	ND	0.200	--	ND	1.07	--		1
2,2,4-Trimethylpentane	ND	0.200	--	ND	0.934	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1803067
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1803067-02
Client ID: CAN 2274 SHELF 43
Sample Location:
Sample Depth:

Date Collected: 01/26/18 16:00
Date Received: 01/29/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
Methyl Methacrylate	ND	0.500	--	ND	2.05	--		1
Heptane	ND	0.200	--	ND	0.820	--		1
cis-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.200	--	ND	0.908	--		1
1,1,2-Trichloroethane	ND	0.200	--	ND	1.09	--		1
Toluene	ND	0.200	--	ND	0.754	--		1
1,3-Dichloropropane	ND	0.200	--	ND	0.924	--		1
2-Hexanone	ND	0.200	--	ND	0.820	--		1
Dibromochloromethane	ND	0.200	--	ND	1.70	--		1
1,2-Dibromoethane	ND	0.200	--	ND	1.54	--		1
Butyl acetate	ND	0.500	--	ND	2.38	--		1
Octane	ND	0.200	--	ND	0.934	--		1
Tetrachloroethene	ND	0.200	--	ND	1.36	--		1
1,1,1,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
Chlorobenzene	ND	0.200	--	ND	0.921	--		1
Ethylbenzene	ND	0.200	--	ND	0.869	--		1
p/m-Xylene	ND	0.400	--	ND	1.74	--		1
Bromoform	ND	0.200	--	ND	2.07	--		1
Styrene	ND	0.200	--	ND	0.852	--		1
1,1,2,2-Tetrachloroethane	ND	0.200	--	ND	1.37	--		1
o-Xylene	ND	0.200	--	ND	0.869	--		1
1,2,3-Trichloropropane	ND	0.200	--	ND	1.21	--		1
Nonane	ND	0.200	--	ND	1.05	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
Bromobenzene	ND	0.200	--	ND	0.793	--		1
2-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
n-Propylbenzene	ND	0.200	--	ND	0.983	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1803067
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1803067-02
Client ID: CAN 2274 SHELF 43
Sample Location:
Sample Depth:

Date Collected: 01/26/18 16:00
Date Received: 01/29/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air - Mansfield Lab								
4-Chlorotoluene	ND	0.200	--	ND	1.04	--		1
4-Ethyltoluene	ND	0.200	--	ND	0.983	--		1
1,3,5-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
tert-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trimethylbenzene	ND	0.200	--	ND	0.983	--		1
Decane	ND	0.200	--	ND	1.16	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
1,4-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.200	--	ND	1.20	--		1
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2-Dibromo-3-chloropropane	ND	0.200	--	ND	1.93	--		1
Undecane	ND	0.200	--	ND	1.28	--		1
Dodecane	ND	0.200	--	ND	1.39	--		1
1,2,4-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Naphthalene	ND	0.200	--	ND	1.05	--		1
1,2,3-Trichlorobenzene	ND	0.200	--	ND	1.48	--		1
Hexachlorobutadiene	ND	0.200	--	ND	2.13	--		1

	Results	Qualifier	Units	RDL	Dilution Factor
Tentatively Identified Compounds					

No Tentatively Identified Compounds

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-Difluorobenzene	92		60-140

Project Name: BATCH CANISTER CERTIFICATION **Lab Number:** L1803067

Project Number: CANISTER QC BAT **Report Date:** 02/19/18

Air Canister Certification Results

Lab ID: L1803067-02
Client ID: CAN 2274 SHELF 43
Sample Location:
Sample Depth:
Matrix: Air
Anaytical Method: 48,TO-15-SIM
Analytical Date: 01/29/18 15:20
Analyst: MB

Date Collected: 01/26/18 16:00
Date Received: 01/29/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
Dichlorodifluoromethane	ND	0.200	--	ND	0.989	--		1
Chloromethane	ND	0.200	--	ND	0.413	--		1
Freon-114	ND	0.050	--	ND	0.349	--		1
Vinyl chloride	ND	0.020	--	ND	0.051	--		1
1,3-Butadiene	ND	0.020	--	ND	0.044	--		1
Bromomethane	ND	0.020	--	ND	0.078	--		1
Chloroethane	ND	0.100	--	ND	0.264	--		1
Acetone	ND	1.00	--	ND	2.38	--		1
Trichlorofluoromethane	ND	0.050	--	ND	0.281	--		1
Acrylonitrile	ND	0.500	--	ND	1.09	--		1
1,1-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Methylene chloride	ND	0.500	--	ND	1.74	--		1
Freon-113	ND	0.050	--	ND	0.383	--		1
trans-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
1,1-Dichloroethane	ND	0.020	--	ND	0.081	--		1
Methyl tert butyl ether	ND	0.200	--	ND	0.721	--		1
2-Butanone	ND	0.500	--	ND	1.47	--		1
cis-1,2-Dichloroethene	ND	0.020	--	ND	0.079	--		1
Chloroform	ND	0.020	--	ND	0.098	--		1
1,2-Dichloroethane	ND	0.020	--	ND	0.081	--		1
1,1,1-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Benzene	ND	0.100	--	ND	0.319	--		1
Carbon tetrachloride	ND	0.020	--	ND	0.126	--		1
1,2-Dichloropropane	ND	0.020	--	ND	0.092	--		1
Bromodichloromethane	ND	0.020	--	ND	0.134	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT

Lab Number: L1803067
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1803067-02
Client ID: CAN 2274 SHELF 43
Sample Location:
Sample Depth:

Date Collected: 01/26/18 16:00
Date Received: 01/29/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
1,4-Dioxane	ND	0.100	--	ND	0.360	--		1
Trichloroethene	ND	0.020	--	ND	0.107	--		1
cis-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
4-Methyl-2-pentanone	ND	0.500	--	ND	2.05	--		1
trans-1,3-Dichloropropene	ND	0.020	--	ND	0.091	--		1
1,1,2-Trichloroethane	ND	0.020	--	ND	0.109	--		1
Toluene	ND	0.050	--	ND	0.188	--		1
Dibromochloromethane	ND	0.020	--	ND	0.170	--		1
1,2-Dibromoethane	ND	0.020	--	ND	0.154	--		1
Tetrachloroethene	ND	0.020	--	ND	0.136	--		1
1,1,1,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
Chlorobenzene	ND	0.100	--	ND	0.461	--		1
Ethylbenzene	ND	0.020	--	ND	0.087	--		1
p/m-Xylene	ND	0.040	--	ND	0.174	--		1
Bromoform	ND	0.020	--	ND	0.207	--		1
Styrene	ND	0.020	--	ND	0.085	--		1
1,1,2,2-Tetrachloroethane	ND	0.020	--	ND	0.137	--		1
o-Xylene	ND	0.020	--	ND	0.087	--		1
Isopropylbenzene	ND	0.200	--	ND	0.983	--		1
4-Ethyltoluene	ND	0.020	--	ND	0.098	--		1
1,3,5-Trimethybenzene	ND	0.020	--	ND	0.098	--		1
1,2,4-Trimethylbenzene	ND	0.020	--	ND	0.098	--		1
Benzyl chloride	ND	0.200	--	ND	1.04	--		1
1,3-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
1,4-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1
sec-Butylbenzene	ND	0.200	--	ND	1.10	--		1
p-Isopropyltoluene	ND	0.200	--	ND	1.10	--		1
1,2-Dichlorobenzene	ND	0.020	--	ND	0.120	--		1

Project Name: BATCH CANISTER CERTIFICATION
Project Number: CANISTER QC BAT
Lab Number: L1803067
Report Date: 02/19/18

Air Canister Certification Results

Lab ID: L1803067-02
Client ID: CAN 2274 SHELF 43
Sample Location:
Sample Depth:

Date Collected: 01/26/18 16:00
Date Received: 01/29/18
Field Prep: Not Specified

Parameter	ppbV Results	ppbV RL	ppbV MDL	ug/m3 Results	ug/m3 RL	ug/m3 MDL	Qualifier	Dilution Factor
Volatile Organics in Air by SIM - Mansfield Lab								
n-Butylbenzene	ND	0.200	--	ND	1.10	--		1
1,2,4-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Naphthalene	ND	0.050	--	ND	0.262	--		1
1,2,3-Trichlorobenzene	ND	0.050	--	ND	0.371	--		1
Hexachlorobutadiene	ND	0.050	--	ND	0.533	--		1

Internal Standard	% Recovery	Qualifier	Acceptance Criteria
1,4-difluorobenzene	94		60-140
bromochloromethane	96		60-140
chlorobenzene-d5	92		60-140

Project Name: MAIN & EAST BALCOM STREET SITE
Project Number: B0239-016-001-004

Lab Number: L1804819
Report Date: 02/19/18

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
NA	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1804819-01A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1804819-02A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1804819-03A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1804819-04A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30)
L1804819-05A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1804819-06A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1804819-07A	Canister - 6 Liter	NA	NA			Y	Absent		TO15-LL(30),TO15-SIM(30)
L1804819-08A	Canister - 2.7 Liter	NA	NA			Y	Absent		CLEAN-FEE()

*Values in parentheses indicate holding time in days

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1804819
Project Number:	B0239-016-001-004	**Report Date:**	02/19/18

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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

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

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

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related

Report Format: Data Usability Report

Project Name:	MAIN & EAST BALCOM STREET SITE	**Lab Number:**	L1804819
Project Number:	B0239-016-001-004	**Report Date:**	02/19/18

Data Qualifiers

projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the reporting limit (RL) for the sample.

Report Format: Data Usability Report

REFERENCES

48 Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air. Second Edition. EPA/625/R-96/010b, January 1999.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility
SM 2540D: TSS
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: EPA 3050B

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

Westborough Facility:

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: 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**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, SM9222D.**

Mansfield Facility:

Drinking Water
EPA 200.7: Al, Ba, Be, Cd, Cr, Cu, 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, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

AIR ANALYSIS

PAGE 1 OF ____

CHAIN OF CUSTODY

ALPHA ANALYTICAL
320 Forbes Blvd, Mansfield, MA 02048
TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 2/13/18

ALPHA Job #: L1804819

Client Information

Client: BenchMark EES
Address: 2558 Hamburg Tpke
Buffalo, NY, 14218
Phone: 716-713-3437
Fax:
Email: NMonley@Turnkeyllc.com
☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: Main & East Ballworks Site
Project Location: Buffalo, NY
Project #: B0239-016-001-004-005
Project Manager: Nate Monley
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved)
Date Due: Time:

Report Information - Data Deliverables

☐ FAX
☐ ADEx
Criteria Checker: ____
(Default based on Regulatory Criteria Indicated)
Other Formats: ____
☐ EMAIL (standard pdf report)
☒ Additional Deliverables: Category B
Report to: (if different than Project Manager)

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed	Program	Res / Comm

Other Project Specific Requirements/Comments: [illegible]

Project-Specific Target Compound List: ☐

All Columns Below Must Be Filled Out

ALPHA Lab ID (Lab Use Only)	Sample ID	COLLECTION End Date	Start Time	End Time	Initial Vacuum	Final Vacuum	Sample Matrix*	Sampler's Initials	Can Size	ID Can	ID - Flow Controller	ANALYSIS TO-15	TO-15 SIM	APH Subset Non-petroleum HCs	Fixed Gases	Sulfides & Mercaptans by TO-15	☐	Sample Comments (i.e. PID)
04819-01	SSV-1	2/12/18	12:07	5:46	-24.47	-8.03	SV	NAS	6L	2270	0635	X						
02	BD	2/12/18	12:07	5:47	-29.27	-7.89	SV	NAS	6L	2129	0334	X						
03	Outdoor Ambient-1	2/12/18	12:09	5:47	-29.18	-8.30	AA	NAS	6L	649	0868	X						
04	SSV-2	2/12/18	13:06	5:50	-29.70	-11.82	SV	NAS	6L	1704	0037	X						
05	Ambient-2	2/12/18	13:05	5:49	-29.02	-11.40	AA	NAS	6L	1780	0150	X						
06	Ambient-3	2/12/18	13:14	5:43	-28.95	-13.35	AA	NAS	6L	2275	0408	X						
07	Outdoor-1	2/12/18	13:27	5:50	-28.64	-13.18	AA	NAS	6L	1488	0237	X						Tag Fell Off Can

*SAMPLE MATRIX CODES
AA = Ambient Air (Indoor/Outdoor)
SV = Soil Vapor/Landfill Gas/SVE
Other = Please Specify

Container Type

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

Relinquished By:	Date/Time	Received By:	Date/Time:
[signature]	2/12/18 1200	Audrey Liley AAL	2/12/18 13:30
Audrey Liley AAL	2/12/18 13:45	[signature]	2/13/18 0100
[signature] 02/13/18 0330	[illegible]	[signature] AAL	02/13/18 2/13/18 330

Form No: 101-02 Rev: (25-Sep-15)

APPENDIX E

DATA USABILITY SUMMARY REPORT (DUSR)

Data Validation Services

120 Cobble Creek Road P.O. Box 208
North Creek, NY 12853

Phone 518-251-4429
harry@frontiernet.net

March 5, 2018

Nathan Munley
Turnkey Environmental Restoration
2558 Hamburg Turnpike Suite 300
Buffalo, NY 14218

RE: Validation of the Main and East Balcom Street Site Analytical Laboratory Data
Data Usability Summary Report (DUSR)
SDG Nos. 480-92593-1, 480-92594-1, L1724381, L1724590, L1733060, L1733355. L1738416, L1738668, L1738847, L1741810, L1741813, L1742330, L1804490, L1804815, and L1804819

Dear Mr. Munley:

Review has been completed for the data packages generated by TestAmerica Laboratories, Inc. and Alpha Analytical that pertain to samples collected between 12/10/15 and 02/12/18 at the Main and East Balcom Street site. Six soil samples, two soil field duplicates, two aqueous samples, and an aqueous field duplicate were processed for TCL and NYSDEC 6 NYCRR Part 375 CP-51 volatiles, TCL semivolatiles, TCL pesticides, Aroclor PCBs, TCL herbicides, and TAL metals; three of these and a field duplicate were processed for an expanded list of herbicides. Five soil samples were processed for TCL semivolatiles, Aroclor PCBs, and TAL metals. Fourteen soil samples were processed for CP-51 volatiles and CP-51 semivolatiles. Four soil samples were processed for TCL and CP-51 volatiles. Seven soil samples were processed for TCL semivolatiles and RCRA metals; two of them were also processed for TCL volatiles. Five soil samples were processed for TCL Semivolatiles and TAL metals; two of them were also processed for TCL and CP-51 volatiles. One soil sample was processed for TCL volatiles, TCL semivolatiles, and TAL metals. Six 6 L summa canister canisters were processed for volatile analytes. Analytical methodologies utilized are USEPA SW846 and USEPA TO-15.

The data packages submitted by the laboratory contain 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/ Preparation/Trip Blanks
* Matrix Spike Recoveries/Duplicate Correlations
* Blind Field Duplicate Correlations

* Instrumental Tunes
* Initial and Continuing Calibration Standards
* ICP Serial Dilution Evaluation
* 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 or edit, with the following rejected results:

- 1,4-Dioxane in all samples
- 2,4-Dinitrophenol in one sample
- Dinoseb in three soil samples and a field duplicate

Data completeness, representativeness, accuracy, precision, reproducibility, sensitivity, and comparability are acceptable. However, atypical variances were observed in the field duplicate precision of the soil vapor.

Validation qualifier definitions and the client sample identification summaries are attached to this text. Also included in this report are laboratory EQuIS EDDs with recommended qualifiers/edits applied in red.

Chain-of-Custody/Sample Receipt

The sample identifications for the groundwaters are the same in both samping events, and so have been differentiated in this report parenthetically by the month of collection.

Times are omitted on the interim receipt and relinquish entries for the air samples.

Two soil samples and one trip blank were received but not entered onto custody forms. They were not processed.

Although TCL volatiles were requested for samples reported in SDG 480-92594, TCL and CP-51 analytes were reported.

The notation for analytical requirements was not entered for samples reported in SDG L1724381.

Blind Field Duplicate

The blind field duplicate evaluations of MW-4 (November), TP-18, MW-3(16-20'), and SSV-1 show correlations within validation guidelines, with the following exceptions, the results for which should be qualified as estimated in the indicated parent sample and its duplicate:

- Carbon disulfide, benzene, 2-butanone, n-hexane, heptane, and cyclohexane in SSV-1
- Lead and zinc in TP-18
- Aluminum, chromium, cobalt, lead in MW-4 (November)

TCL and CP-51 Volatile Analyses by EPA 8260C, Full Scan and SIM

The following detected results are considered contamination and edited to reflect non-detection due to presence in the associated method blanks:

- Acetone and carbon disulfide in the samples reported in SDG L1724590
- Methyl-t-butyl ether in SW-4(8-10')
- Acetone in TP-10(10-12)

The detected values in SW-6(7-9') are qualified as estimated, with a high bias, due to an elevated surrogate recovery indicating matrix interference contribution.

The following detected results are edited to reflect non-detection due to very poor mass spectral quality:

- 1,2,4-Trimethylbenzene in B-2(13')
- t-Butylbenzene in SW-1(8-10')
- Methyl cyclohexane in MW-4 (November)

The following detections are qualified as tentative in identification and estimated in value due to poor mass spectral quality:

- Methyl cyclohexane in MW-1(16-18')
- 2-Butanone in MW-3 (November)

The matrix spike/duplicate evaluation performed on TP-14 and MW-4 (November) show acceptable recoveries and correlations, with the following exceptions, results for which are qualified as estimated in the parent sample:

Parent Sample	Analyte	Outlying % Recoveries	Outlying %RPD
TP-14	trans-1,3-dichloropropene	60,69	
	bromoform	58,67	
	1,2-dichlorobenzene	53,60	
	1,3-dichlorobenzene	53,61	
	1,4-dichlorobenzene	51,65	
	2-hexanone	67,66	
	1,2-dibromomethane	59,69	
	1,2-dibromo-3-chloropropane	51,62	
	1,2,3-trichlorobenzene	35,48	43
	1,2,4-trichlorobenzene	34,44	35
MW-4	1,2,3-trichlorobenzene	69	37

LCS recoveries are within laboratory acceptance ranges/validation guidelines, although only sixteen of the analytes underwent the recovery/correlation evaluation in the LCSs associated with the samples collected in 2015.

The results for 1,4-dioxane in the samples are rejected and not usable due to low calibration standard response (RRF<0.01) inherent in the methodology used by the laboratory. Other calibration standards showed acceptable responses, with the following exceptions, the results for which are qualified in the indicated associated samples:

- Vinyl chloride and 1,1-dichloroethene (21%D and 22%D) in sample MW-5 (20-24')
- Carbon tetrachloride and bromoform (21%D and 26%D) in samples reported in SDG L1804815
- Bromomethane (25%D and 31%D) in samples reported in SDGs L1733355 and L1738416

Surrogate and internal standard responses are acceptable.

TCL Semivolatile Analyses by EPA8270D

The matrix spikes of TP-14 show no recovery of 2,4-dinitrophenol, and the result for that compound in TP-14 is therefore rejected, and not usable. The other matrix spike/duplicate evaluations that were performed on TP-14 and MW-4 (November) show acceptable recoveries and correlations, with the following exceptions, results for which are qualified as estimated in the parent sample:

Parent Sample	Analyte	Outlying % Recoveries	Outlying %RPD
TP-14	hexachlorocyclopentadiene	34,34	
MW-4	3,3'-dichlorobenzidine	25	67

The following analytes show outlying recoveries/correlations in LCSs, and results for the indicated associated samples have been therefore qualified as estimated in value:

Affected Samples	Analyte	Outlying % Recoveries	Outlying %RPD
UST-BOTTOM-1	indeno (1,2,3-cd) pyrene	17	118
MW-4(9-10')	hexachlorocyclopentadiene	26,25	

The detected results for acenaphthylene in BSB-1(1-2') and BSB-2(4-5') are edited to reflect non-detection due to very poor mass spectral quality.

Benzo(b)fluoranthene and benzo(k)fluoranthene were not resolved in TP-9(3-6), and the results for those compound in that sample are therefore qualified as estimated in value.

Calibration standards show responses within validation action levels. Surrogate and internal standard responses are compliant. Instrument tunes meet fragmentation requirements.

Some of the samples were processed only at dilution due to appearance and/or viscosity of the extract. This results in elevated reporting limits.

TCL Pesticide, TCL Herbicides, and Aroclor PCBs by EPA 8081B, 8151A and 8082A

Many detected pesticide results exhibit elevated dual column quantitative correlations, are qualified to reflect the uncertainty in identification and/or quantitation. The values have been qualified either as estimated ("J") in value, as tentative in identification and estimated in value ("NJ"), or with edit to non-detection, depending on the degree of variance.

Results for detected Aroclors in samples reporting detections of multiple Aroclor mixtures have been qualified as estimated, with a possible high bias, due to cross-contribution.

Dinoseb failed to recover in the matrix spikes of TP-14 and the associated LCSs. The results for that compound in the samples reported in SDG L1724590 have therefore been rejected and are not usable. The recoveries for the other herbicides in those spikes are acceptable.

The pesticide and Aroclor 1016/1260 matrix spikes of TP-14 and MW-4 (November) show acceptable recoveries and duplicate correlations.

Holding times were met, surrogate standards are within validation guidelines, and blanks show no contamination affecting reported results. Calibration standards are compliant.

TAL Metals/CN Analyses by EPA 6010C, 6020A, 7470, 7471B, and 9012B

The detected results for antimony in MW-3 (November) and MW-4 (November) are considered external contamination due to presence in the associated blanks, and have been edited to reflect non-detection.

Matrix spikes/duplicates were performed for TAL metals on TP-14 and MW-4 (November) and for mercury on TP-4(1-4'), and show recoveries and correlations within validation guidelines, with the following exception, the result for which are qualified as estimated in the indicated parent sample:

Parent Sample	Element	Outlying % Recoveries
TP-14	thallium	58,65

The ICP serial dilution evaluations of MW-2(15-16) and MW-4 (November) show acceptable correlations, with the following exceptions. The results for those elements in the indicated parent sample have been qualified as estimated, with a possible low bias, due to matrix interferences:

Parent Sample	Element	%Difference
TP-14	aluminum	25
	barium	27
	calcium	34
	iron	36
	magnesium	38
	manganese	32

Instrument performance is compliant.

Volatile Analyses by TO-15

2,2,4-Trimethylpentane could not be analyzed in SSV-1, BD, and SSV-2, and acetone could not be analyzed in SSV-1 and BD, due to interferences. There was stated in the laboratory case narrative based on analyst review. Although reported without laboratory flag on the data package report forms, those results have been rejected on the EDD during validation.

The detected result for styrene in SSV-1 is qualified as tentative in identification and estimated in value due to poor mass spectral quality.

The detected result for hexane in Ambient-1 is edited to non-detection due to very poor mass spectral quality.

Acetone results in SSV-2 and Outdoor-1 are qualified as estimated, with high bias, and low bias, respectively, due to interferences in the ion fragment used for quantitation.

The laboratory duplicate evaluation of Ambient 1 shows acceptable correlations.

SSV-1 and BD were processed only at dilution due to target analyte concentrations.

Holding times and instrument tunes are acceptable. The LCS recoveries are within laboratory and validation guidelines. Blanks show no contamination. Internal standard responses fall within required ranges.

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.

APPENDIX F

NYSDEC PETROLEUM BULK STORAGE CLOSURE FORM

New York State Department of Environmental Conservation
Division of Environmental Remediation

Petroleum Bulk Storage Application

Pursuant to the Environmental Conservation Law: Article 17, Title 10; and
Regulations 6 NYCRR Part 613 and 6 NYCRR Subpart 374-2
(Please Type or Print Clearly and Complete All Items for Sections A, B & C)

PBS Number: NA

Return Completed Form & Fees To:

Expiration Date:

Section A - Facility/Property Owner/Contact Information

Transaction Type: 3

1) Initial/New Facility
2) Change of Ownership
3) Tank Installation, Closing, or Repair
4) Information Correction
5) Renewal

FACILITY

Facility Name: Main and E. Balcom Street Site

Tax Map Info: Borough/Section:

Facility Address (Physical Address, No P.O. Boxes): 1661 Main Street

Block:

Facility Address (cont.):

Lot:

City: Buffalo | State: NY | ZIP Code: 14209

County: Erie | Township/City | Facility Phone Number:

Name of Class B (Daily On-Site) Operator: NA | Operator Authorization No.: NA

Name of Class A (Primary) Operator: NA | Operator Authorization No.: NA

TYPE OF PETROLEUM FACILITY (Check only one)

- ☐ 01=Storage Terminal/Petrol. Distributor
- ☐ 02=Retail Gasoline Sales
- ☐ 03=Other Retail Sales
- ☐ 04=Manufacturing
- ☐ 05=Utility
- ☐ 06=Trucking/Transportation/Fleet
- ☐ 07=Apartment/Office Building
- ☐ 08=School
- ☐ 09=Farm
- ☐ 10=Private Residence
- ☐ 11=Airline/Air Taxi/Airport
- ☐ 12=Chemical Distributor
- ☐ 13=Municipality
- ☐ 15=Railroad
- ☐ 25=Auto Service/Repair (No Gasoline Sales)
- ☐ 16=Nuclear Power Plant
- ☐ 26=Religious (Church, Synagogue, Mosque, Temple, etc.)
- ☐ 27=Hospital/Nursing Home/Health Care
- ☐ 28=Cemetery / Memorial
- ☐ 52=Marina
- ■ 99=Other (Specify): Remediation of BCP Site C915306

NOTE:

Fill in Property Owner information here……>>>

Indicate Tank Owner in Section C.

OWNER

Facility (Property) Owner (from Deed): 1665 Main Street Group, LLC

Facility Owner Address (Street and/or P.O. Box): 617 Main Street, Suite 200

City: Buffalo | State: NY | ZIP Code: 14203

Federal Tax ID Number: | Owner Telephone Number: 716-220-8468

Type of Owner: (check only one)

- 1 ☐ Private Resident
- 2 ☐ State Government
- 3 ☐ Local Government
- 4 ☐ Federal Government
- 5 ■ Corporate/Commercial/Other

Emergency Contact Name: | Emergency Telephone Number:

I hereby certify, under penalty of law, that all of the information provided on this form is true and correct. False statements made herein may be punishable as a criminal offense and/or a civil violation in accordance with applicable state and federal law.

Name of Property Owner or Authorized Representative: Nick SInatra | Amount Enclosed: $ NA

Title: Authorized Member

Signature: | Date:

Official Use Only

Date Received: ____/____/____

Date Processed: ____/____/____

Amount Received: $_____

Reviewed By: _____

Rev. 10/03/15

CORRESPONDENCE

(Please keep this information up to date) Facility Contact Person Name: Cole Hatley

Contact Person Company Name: Sinatra Development

Address: 617 Main Street, Suite 200

Address (cont.):

City/State/ZIP Code: Buffalo, NY 14203

Tel. Number: 716-220-8468 | eMail Address: chatley@sinatraandcompany.com

For Overdue Registrations Only:

If you are submitting an application for an overdue registration, you may settle the violation by submitting the normal fee, any back fees due, and a penalty of $50 for every month the application is overdue. If you decline to settle, or make no choice, the case will be referred for enforcement which may result in higher penalties to resolve the violations. Please indicate your choice below:

- ☐ I agree to settle and have enclosed the proper fees and penalty amounts.
- ☐ I decline to settle and understand that higher penalties may result.

PBS Number:
NA

Section B - Tank Information

(Please use the key located on the last page to complete each item/column)

Registration Expiration Date:

(1) Action	(2) Tank Number	(3) Tank Location	(4) Status	(5) Installation, Out of service or Permanent Closure Date (MM/DD/YYYY) **Application will be returned if blank**	(6) Capacity (Gallons)	(7) Product Stored (If Gasoline w/ethanol or Biodiesel, list %additive) %	(8) Tank Type	(9) Tank Internal Protection	(10) Tank External Protection	(11) Tank Secondary Containment	(12) Tank Leak Detection	(13) Tank Overfill Prevention	(14) Tank Spill Prevention	(15) Pumping/Dispensing Method	(16) Piping Location	(17) Piping Type	(18) Piping External Protection	(19) Piping Secondary Containment	(20) Piping Leak Detection	(21) Under Dispenser Containment (UDC) (Check box if present)
3	1	5	3	7/17/2017	5000	9999	01	00	00	00	00	00	00	00	02	01	00	00	00	☐
3	2	2	3	10/19/2017	1000	9999	01	00	00	00	00	00	00	00	01	01	00	00	00	☐
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Note: If you need to add tanks to your registration, write them in using blank lines above. Attach additional sheets as needed.
Blank Section B is available at http://www.dec.ny.gov/docs/remediation_hudson_pdf/pbsrenewal.pdf

PETROLEUM BULK STORAGE APPLICATION – SECTION B – TANK INFORMATION – CODE KEYS

Action (1)
1. Initial Listing
2. Add Tank
3. Close/Remove Tank
4. Information Correction
5. Repair/Reline Tank

Tank Location (3)
1. Aboveground-contact w/ soil
2. Aboveground-contact w/ impervious barrier
3. Aboveground on saddles, legs, stilts, rack or cradle
4. Tank with 10% or more below ground
5. Underground including vaulted with no access for inspection
6. Aboveground in Subterranean Vault w/ access for inspections

Status (4)
1. In-service
2. Out-of-service
3. Closed-Removed
4. Closed-In Place
5. Tank converted to Non-Regulated use

D. Delivery Prohibited

Products Stored (7)

Heating Oils: On-Site Consumption
0001. #2 Fuel Oil
0002. #4 Fuel Oil
0259. #5 Fuel Oil
0003. #6 Fuel Oil
0012. Kerosene
0591. Clarified Oil
2711. Biodiesel (Heating)
2642. Used Oil (Heating)

Heating Oils: Resale/ Redistribution
2718. #2 Fuel Oil
2719. #4 Fuel Oil
2720. #5 Fuel Oil
2721. #6 Fuel Oil
2722. Kerosene
2723. Clarified Oil
2724. Biodiesel (Heating)

Motor Fuels
0009. Gasoline
2712. Gasoline/Ethanol
0008. Diesel
2710. Biodiesel
0011. Jet Fuel
1044. Jet Fuel (Biofuel)
2641. Aviation Gasoline

Lubricating/Cutting Oils
0013. Lube Oil
0015. Motor Oil
1045. Gear/Spindle Oil
0010. Hydraulic Oil
0007. Cutting Oil
0021. Transmission Fluid
1836. Turbine Oil
0308. Petroleum Grease

Oils Used as Building Materials
2626. Asphaltic Emulsions
0748. Form Oil

Petroleum Spirits
0014. White/Mineral Spirits
1731. Naphtha

Mineral/Insulating Oils
0020. Insulating Oil (e.g., Transformer, Cable Oil)
2630. Mineral Oil

Waste/Used/Other Oils
0022. Waste/Used Oil
9999. Other-Please list:*

Crude Oil
0006. Crude Oil
0701. Crude Oil Fractions

Tank Type (8)
01. Steel/Carbon Steel/Iron
02. Galvanized Steel Alloy
03. Stainless Steel Alloy
04. Fiberglass Coated Steel
05. Steel Tank in Concrete
06. Fiberglass Reinforced Plastic (FRP)
07. Plastic
08. Equivalent Technology
09. Concrete
10. Urethane Clad Steel
99. Other-Please list:*

Internal Protection (9)
00. None
01. Epoxy Liner
02. Rubber Liner
03. Fiberglass Liner (FRP)
04. Glass Liner
99. Other-Please list:*

External Protection (10/18)
00. None
01. Painted/Asphalt Coating
02. Original Sacrificial Anode
03. Original Impressed Current
04. Fiberglass
05. Jacketed
06. Wrapped (Piping)
07. Retrofitted Sacrificial Anode
08. Retrofitted Impressed Current
09. Urethane
99. Other-Please list:*

Tank Secondary Containment (11)
00. None
01. Diking (AST Only)
02. Vault (w/access)
03. Vault (w/o access)
04. Double-Walled (UST Only)
05. Synthetic Liner
06. Remote Impounding Area
07. Excavation Liner
09. Modified Double-Walled (AST Only)
10. Impervious Underlayment (AST only)**
11. Double Bottom (AST Only)**
12. Double-Walled (AST Only)
99. Other-Please list*

Tank Leak Detection (12)
00. None
01. Interstitial Electronic Monitoring
02. Interstitial Manual Monitoring
03. Vapor Well
04. Groundwater Well
05. In-Tank System (Auto Tank Gauge)
06. Impervious Barrier/Concrete Pad (AST Only)
07. Statistical Inventory Reconciliation (SIR)
08. Weep holes in vaults with no access for inspection
99. Other-Please list:*

Overfill Protection (13)
00. None
01. Float Vent Valve
02. High Level Alarm
03. Automatic Shut-Off
04. Product Level Gauge (AST Only)
05. Vent Whistle
99. Other-Please list:*

Spill Prevention (14)
00. None
01. Catch Basin
99. Other-Please list:*

Pumping/Dispensing Method (15)
00. None
01. Pressurized Dispenser
02. Suction Dispenser
03. Gravity
04. On-Site Heating System (Suction)
05. On-Site Heating System (Supply/Return)
06. Tank-Mounted Dispenser
07. Loading Rack/Transfer Pump

Piping Location (16)
00. No Piping
01. Aboveground
02. Underground/On-ground
03. Aboveground/Underground Combination

Piping Type (17)
00. None
01. Steel/Carbon Steel/Iron
02. Galvanized Steel
03. Stainless Steel Alloy
04. Fiberglass Coated Steel
05. Steel Encased in Concrete
06. Fiberglass Reinforced Plastic (FRP)
07. Plastic
08. Equivalent Technology
09. Concrete
10. Copper
11. Flexible Piping
99. Other-Please list:*

Piping Secondary Containment (19)
00. None
01. Diking (Aboveground Only)
02. Vault (w/access)
04. Double-Walled (Underground Only)
06. Remote Impounding Area
07. Trench Liner
12. Double-Walled (Aboveground Only)
99. Other-Please list:*

Pipe Leak Detection (20)
00. None
01. Interstitial Electronic Monitoring
02. Interstitial Manual Monitoring
03. Vapor Well
04. Groundwater Well
07. Pressurized Piping Leak Detector
09. Exempt Suction Piping
10. Statistical Inventory Reconciliation (SIR)
99. Other-Please list:*

Under Dispenser Containment (UDC) (21)
Check Box if Present

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* If other, please list on a separate sheet including tank number.

** Each of these codes must be combined with code 01 or 06 to meet compliance requirements.

APPENDIX G

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