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# **PERIODIC REVIEW REPORT**

**MARCH 11, 2020 TO MARCH 11, 2021**

**3 GATES CIRCLE SITE  
(BCP SITE No. C915272)**

**BUFFALO, NEW YORK**

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May 2021

0309-021-001

Prepared for:

**Montante/Morgan Gates Circle LLC  
and  
Episcopal Church Home and Affiliates Life Care Community,  
Inc.**

Prepared By:



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# PERIODIC REVIEW REPORT

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3 Gates Circle Site (C915272)

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**3 Gates Circle Site (C915272)**

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## 1.0 INTRODUCTION

Benchmark Environmental Engineering and Science, PLLC (Benchmark), in association with TurnKey Environmental Restoration, LLC (TurnKey) has prepared this Periodic Review Report (PRR) to summarize the post-remedial status of the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP) 3 Gates Circle Site No. C915272, located in the City of Buffalo, Erie County, New York (see Figure 1).

This PRR has been prepared in accordance with the NYSDEC DER-10 *Technical Guidance for Site Investigation and Remediation* (May 2010; Ref. 1); and the NYSDEC's Institutional and Engineering Controls (IC/EC) Certification Form has been prepared for the Site. This PRR and the associated IC/EC Form (see Appendix A) have been completed for the post-remedial period from March 11, 2020 to March 11, 2021. Site photographs are included as Appendix B.

### 1.1 Site Background

Gates Circle Holdings, LLC (GCH) entered into a Brownfield Cleanup Agreement (BCA) with NYSDEC on March 19, 2013, amended in January 2015, to investigate and remediate the approximate 6.9-acre Site formerly located at 3 Gates Circle (address changes and subdivisions are discussed later in this section), in the City of Buffalo, County of Erie, New York. BCP site activities were performed in accordance with Brownfield Cleanup Agreement (BCA) Index#C915272-02-13.

The Site is located in the County of Erie, New York and is identified as a portion of Block 4 and Lot 1 on the City of Buffalo Tax Map # 89.79 per Erie County Tax Map records. The Site is bounded by Lafayette Street and Gates Circle to the north, commercial buildings and a parking ramp to the south, Linwood Avenue to the east, and Delaware Avenue to the west (see Figures 1 and 2).

The Site operated as a commercial/medical facility dating back to the early 1900s and continuing until March 2012. When it closed, the Site consisted of 13 interconnected buildings covering most of the Site. These buildings were primarily used for patient care and hospital administration operations, but included other supporting facilities (i.e., laboratories, research facilities, staff housing, auditorium, and a kitchen). The Power Plant located on the



southeast corner of the property contained boilers, cooling towers, backup generators, and a maintenance area for buildings and grounds equipment. The Power Plant was connected to the main campus via an underground tunnel. The historic backup generator and boiler fuel underground storage tanks (USTs) were located proximate to the former Power Plant.

After the remedial investigation and remedial activities were completed under the BCP (further discussed in Section 1.2) but prior to the start of redevelopment, five (5) buildings were demolished as well as portions of 3 other buildings. On May 10, 2016, 1.35 acres of the 6.9 acres Site was sold by GCH to Episcopal Church Home and Affiliates Life Care Community, Inc. d/b/a Canterbury Woods (Canterbury Woods, see Figure 2). The 1.35-acre area located in the northwestern portion of the Site was redeveloped as an assisted living facility. The southern and eastern portions of the Site are still awaiting redevelopment and five (5) former Millard Fillmore hospital buildings remain in the northeastern portion. Two (2) new roadways, the Lancaster Avenue Extension and Lafayette Connector were constructed and are substantially complete (see Figure 2).

In March 2017, the remaining 5.55-acre parcel owned by GCH was subdivided (see Figure 2) and the ownership transferred to Montante/Morgan Gates Circle LLC (M/MGC). Notice of Transfer of Certificate of Completion was filed with the Erie County Clerk's Office on May 3, 2017. The table below identifies the new property addresses, associated SBL Numbers, acreage, and owner information.

Address	SBL Number	Acreage	Owner
1 Gates Circle	89.79-4-1.1	1.35	Episcopal Church Home and Affiliates Life Care Community, Inc.
1285 Delaware Ave	89.79-4-1.5	1.96	M/MGC
1291 Delaware Ave	89.79-4-1.4	0.77	M/MGC
1299 Delaware Ave	89.79-4-1.6	0.3	M/MGC
865 Lafayette Ave	89.79-4-1.2	0.48	M/MGC
630 Linwood Ave	89.79-4-1.3	2.04	M/MGC

## 1.2 Remedial History

In August 2008, the two (2) No. 6 fuel oil USTs associated with the Power Plant were removed along with accessible contamination (approximately 962 tons). Due to the

presence of impacts beneath the Power Plant foundation, a groundwater remediation system was installed to collect and pretreat perched groundwater impacted by No. 6 fuel oil.

A Remedial Investigation (RI) was performed as part of the BCP in October 2014 to characterize the nature and extent of contamination at the Site. The results of the RI are described in detail in the Remedial Investigation/Alternatives Analysis (RI/AA) Report (Ref. 2). Generally, the RI determined the following contaminants of concern (COCs) in Site soil/fill were present: polycyclic aromatic hydrocarbons (PAHs), mercury, and No. 6 fuel oil. Groundwater was not identified as a concern.

The RI/AA Report recommended remediation of five (5) areas, with cover system placement recommended as the final remedial measure under a Restricted-Residential Track 4 Cleanup approach. Additional requirements included development and adherence to a Site Management Plan (SMP, Ref. 3) and filing of an Environmental Easement to restrict use of the property to restricted residential, commercial, and industrial applications and to place other limitations on post-redevelopment activities.

Remedial activities completed at the Site were conducted in accordance with the IRM Work Plan (Ref. 4) dated January 29, 2015 and the Decision Document (Ref. 5) dated May 28, 2015. The remedial program was successful in achieving the remedial objectives for the Site. An Environmental Easement restricting end use of the Site and enforcing adherence to the SMP was recorded in October 2015. The remedial activities were documented in the Final Engineering Report (FER, Ref. 6) dated November 2015. The Site received its Certificate of Completion (COC) on December 10, 2015. The following remedial activities were completed at the Site:

- Approximately 635 tons of SVOC-impacted soil/fill was removed from three (3) locations in the central and southern central portions of the Site. The three (3) excavations had horizontal dimensions ranging from 25 to 50 ft and were advanced to depths of 3 to 4.5 fbgs.
- Approximately 191 tons of mercury-impacted soil/fill was removed from one (1) location in the southern central portion of the Site. The 40 by 40 ft excavation was completed to a depth of approximately 3 fbgs. An additional 30 by 20 ft excavation was completed from approximately 3 to 6 fbgs in the southern/central

portion of the larger mercury excavation where black petroleum-like globules and odors were observed.

- Approximately 2,434 tons of No. 6 fuel oil-impacted (grossly impacted) soil/fill and stone was removed from beneath the former Power Plant building after its partial demolition. The 150 by 75 ft excavation was completed to depths ranging from 1 to 5 feet below the former basement floor slab (approximately 16 to 20 fbg), based on the thickness of the impacted bedding stone. The native clay soil did not appear to have been impacted by the No. 6 fuel oil due to the low permeability of the clay and high viscosity of the fuel oil.
- After the RI/AA was completed, NYSDEC requested additional soil/fill samples from the greenspace areas to remain as part of the cover system. SVOCs (specifically PAHs) only were detected above their respective Restricted Residential Soil Cleanup Objectives (RRSCOs) in five (5) of the six (6), 0 to 6-inch topsoil samples collected. Topsoil excavations were completed in five (5) areas around the perimeter of the Site to a depth of 6-inches. Approximately 918 tons of SVOC-impacted topsoil was removed, disposed off-site, and replaced with 6-inches of 2-inch crusher run stone.

Upon receiving the COC, redevelopment activities commenced within the 1.35-acre parcel (1 Gates Circle) for construction of the Canterbury Woods 6-story assisted living facility. During redevelopment material was disposed off-site because the material contained solid waste and/or was impacted. The solid waste and/or impacted materials was generated from site redevelopment activities to establish subgrade in the northern portion of the Site.

The Canterbury Woods building has a footprint of approximately 21,480 square feet and provides hardscape cover in the form of concrete foundation and slab. Additional hardscape cover also consisted of six (6) elevated terraces, two (2) parking lots, and sidewalks around the building. A vegetated soil cover system was used in the non-hardscape areas of the 1.35-acre Canterbury Woods parcel. The vegetated soil cover system was constructed of a minimum of 2-feet of DER-10 compliant materials which consisted of 6-inches of imported topsoil or 9-inches of washed #2 stone overlying 18-inches to 15-inches of imported 2-inch crushed stone over a demarcation layer (orange mesh) to separate the

cover system from existing Site soil/fill. The Canterbury Woods redevelopment activities were completed in August 2017.

M/MGC placed a final “top coat” asphalt layer on the Lafayette Avenue Connector, installed 1,750 square feet of side walk hardscape and placed 6-inches of imported topsoil to complete the final 2-foot cover of green space along the western side of the Lafayette Avenue Connector.

In July 2020, M/MGC replaced the top 6-inches of crushed stone of the cover system with 6-inches of NYSDEC-approved topsoil in an approximate 15-foot wide area along Delaware Avenue on the western portion of the Site, south of the Canterbury Woods property greenspace, at the City of Buffalo’s request. Topsoil (2 to 3-inches) was also placed on top of the crushed stone/existing soil cover system in an approximate 15-foot wide area along Lafayette Avenue (north end of Site) and Linwood Avenue (east end of Site) to promote vegetative growth. Additional information on the topsoil import is provided in Section 4.2.3. These activities were observed by Benchmark-TurnKey personnel to verify conformance with the SMP. Figure 3 identifies the updated cover system for the Site.

### **1.3 Compliance**

The Canterbury Woods redevelopment, the roadways, and the five (5) former Millard Fillmore hospital buildings still awaiting redevelopment are in compliance with the SMP, as the cover system is in place (see Figure 3). Areas that are to undergo redevelopment in the near future and will have its final cover established as part of the redevelopment are also shown on Figure 3.

### **1.4 Recommendations**

We recommend that the redevelopment activities continue to be conducted in accordance with the SMP and that the SMP be updated to include the redevelopment/cover system changes once they are completed.

## 2.0 SITE OVERVIEW

The Site was remediated under the BCP (as discussed in Section 1.2). The remediated property is subject to a comprehensive, site-wide SMP which identifies requirements for monitoring and maintenance of engineering and institutional controls and procedures for post-remedial excavation and related activities.

No redevelopment activities occurred at the Site within the March 11, 2020 to March 11, 2021 reporting period. However, the cover system was slightly altered along Delaware Avenue, Lafayette Avenue and Linwood Avenue. Along Delaware Avenue, the 6-inches of crushed stone that was formerly present, was removed and replaced with imported topsoil, per the City of Buffalo's request. The 6-inches of crushed stone that was removed along Delaware Avenue was placed on-Site in the vicinity of the remaining South building east of the Lafayette Connector. This area is still awaiting redevelopment and final cover system placement.

Along Lafayette and Linwood Avenues, excess topsoil was placed approximately 2 to 3 inches thick over the crushed stone cover system to provide a medium for vegetative growth. After the topsoil placement, the areas were seeded. Approximately 180 cubic yards of topsoil (10 dump truck loads at approximately 15 cubic yards per load) were imported in July 2020. The topsoil materials import request, NYSDEC approval, and import documentation are included in Appendix C.

A small stone ramp was constructed along the southern property boundary of the Site from an existing stone stockpile that was present on the Site. NYSDEC was made aware of the ramp construction on April 13, 2020 via email. The stone ramp was constructed over the top of the existing cover system in this area of the Site, is temporary and not considered to be cover system modification. See Figure 3 for approximate location of the temporary stone ramp.

The purpose of the ramp was to allow delivery trucks from the adjacent property to the south (1275 Delaware Ave) to exit on to the Gates Circle Site during construction activities at 1275 Delaware, that will not be able to turnaround on the 1275 Delaware Ave property due to their size and limited room. The 1275 Delaware Ave property is owned and being redevelopment by Montante, which is one of the owners of the 3 Gates Circle Site. The 1275 Delaware Ave property is approximately 3 feet higher in elevation than the

Gates Circle Site and there is a small retaining wall between them. The crushed stone pile used to make the ramp was remaining at the Site from the cover system installation work in 2015 and is 2-inch crusher run stone.

The area surrounding the Site has not significantly changed. A residential development was constructed across Linwood Avenue to the east of the Site at the corner of Linwood Avenue and Lafayette Avenue (2019) and another is under construction across Delaware Avenue to the west along Gates Circle.

### **3.0 REMEDY PERFORMANCE**

A post-remedial site inspection involving a walk-over of the Site covered by this PRR was performed by Christopher Boron, P.G. on March 5, 2021 to visually observe and document the use of the Site for restricted residential, commercial, and/or industrial use, confirm absence of site groundwater use, inspect the cover system integrity, and verify conformance with other requirements under the SMP.

The site inspection completed during this reporting period indicates that areas of the Site not undergoing redevelopment are in compliance and functioning as intended in accordance with the SMP. M/MGC is planning to continue redevelopment activities on the Site in 2021.

The completed IC/EC Certification forms and site photographs taken during the inspection are included in Appendices A and B, respectively.

## 4.0 SITE MANAGEMENT PLAN

A site-wide SMP was prepared for the Site and approved by the Department in November 2015, revised January 2021. Key components of the SMP are described below.

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

Since remaining contaminated soil/fill exists beneath the site, Institutional Controls and Engineering Controls (IC/ECs) are required to protect human health and the environment. The Engineering and Institutional Control Plan describes the procedures for the implementation and management of all IC/ECs at the Site. At the time of the site inspection, the Site is compliant with all engineering and institutional control requirements with the exception of the areas slated for redevelopment as shown on Figure 3.

#### *4.1.1 Institutional Controls (ICs)*

The Site has a series of Institutional Controls in the form of site restrictions. Adherence to these Institutional Controls is required by the Environmental Easement. Site restrictions that apply to the Controlled Property are:

- The property may be used for restricted residential; commercial, industrial uses, subject to local zoning laws;
- All ECs must be operated and maintained as specified in the SMP;
- The use of groundwater underlying the property is prohibited without necessary water quality treatment as determined by the NYSDOH or the Erie Department of Health to render it safe for use as drinking water or for industrial purposes, and the user must first notify and obtain written approval to do so from the Department;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- Operation, maintenance, monitoring, inspection, and reporting of the soil cover system shall be performed as defined in the SMP;
- Access to the site must be provided to agents, employees or other representatives of the State of New York with reasonable prior notice to the property owner to assure compliance with the restrictions identified by the Environmental Easement;



- Vegetable gardens and farming on the property are prohibited;

#### ***4.1.2 Engineering Controls (ECs)***

Engineering controls at the Site include:

- Cover System – Exposure to remaining contamination in soil/fill at the Site is prevented by a final cover system placed over the site. This cover system is comprised of a minimum of 24 inches of clean soil (with underlying demarcation layer), asphalt pavement, concrete-covered sidewalks, concrete basement building slabs, or crushed stone that was placed over the remedial excavation areas and/or to adjust grades at the Site. The cover system must be maintained in compliance with the SMP.

## **4.2 Excavation Work Plan**

An Excavation Work Plan (EWP) was included in the NYSDEC-approved SMP for the Site. The EWP provides guidelines for the management of soil/fill material during intrusive activities. Future intrusive work that will penetrate the cover or cap, or encounter or disturb the remaining contamination, including any modifications or repairs to the existing cover system, will be performed in compliance with the EWP.

#### ***4.2.1 Site Redevelopment Activities***

No redevelopment activities occurred during the past reporting period. We note that soil from the Canterbury Woods excavation activities that was sampled and requested for on-site use (Benchmark February 8, 2016 letter to NYSDEC and approved by NYSDEC via email dated February 10, 2016) remain in a stockpile in the eastern portion of the Site for reuse when redevelopment activities continue.

#### ***4.2.2 Exported Materials***

No materials were exported from the Site during the past reporting period.



#### ***4.2.3 Imported Materials***

Approximately 180 yards of topsoil were imported to the Site in July 2020. The topsoil materials import request and NYSDEC approval are included in Appendix C. No other materials were imported to the Site during the past reporting period.

### **4.3 Annual Inspection and Certification Program**

The Annual Inspection and Certification Program outlines requirements for certifying and attesting that the institutional controls and engineering controls employed on the Site are unchanged from the original design and/or previous certification. The Annual Certification includes a Site Inspection and completion of the NYSDEC's IC/EC Certification Form. The Site inspection is intended to verify that the IC/ECs are in place, effective, and performing as designed, that nothing has occurred that would impair the ability of the controls to protect the public health and environment, that nothing has occurred that would constitute a violation or failure to comply with any operation and maintenance plan for such controls, and that access is available to the Site to evaluate continued maintenance of such controls.

Inspection of the Site was conducted by Mr. Christopher Boron, P.G. of TurnKey Environmental Restoration, LLC on March 5, 2021, a Qualified Environmental Professional (QEP) per 6NYCRR Part 375.12. At the time of the inspection, no construction activities were being performed. Existing cover systems (see Figure 3) are performing as intended. Upcoming redevelopment projects that disturb the existing cover system are subject to the NYSDEC-approved SMP.

No observable indication of intrusive activities was noted during the Site inspection beyond those described in Section 4.2. The assisted living building which was constructed utilizes the local municipal water supply, and no observable use of groundwater was noted during the Site inspection.

The completed Site Management Periodic Review Report Notice – Institutional and Engineering Controls Certification Form is included in Appendix A. A photographic log of the Site inspection is included in Appendix B.

#### **4.4 Operation, Monitoring and Maintenance Plan**

The remedy for the Site does not rely on any mechanical systems such as sub-slab depressurization or soil vapor extraction, to protect public health and the environment. Therefore, an Operation and Maintenance Plan is not required.

## 5.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions for this reporting period and recommendations for the next reporting period are as follows:

- No redevelopment activities occurred during the past reporting period. Existing cover systems are performing as intended; therefore, the Site is compliant. Areas that are awaiting redevelopment and final cover system placement are fenced off from public access.
- If redevelopment activities involving cover system modification or import/export of soil or stone materials occur in the next reporting period they will be subject to the SMP. In areas subject to redevelopment, Site access will be restricted via construction fencing and will be limited to authorized construction personnel.

The following modifications are recommended for the Site:

- No modifications are recommended at this time.

## 6.0 DECLARATION/LIMITATION

Personnel under direct supervision of Benchmark conducted the annual site inspection for BCP Site No. C915272, located in Buffalo, New York, according to generally accepted practices. This report complied with the scope of work provided to M/MGC and Canterbury Woods by Benchmark.

This report has been prepared for the exclusive use of the M/MGC and Canterbury Woods. The contents of this report are limited to information available at the time of the site inspection. The findings herein may be relied upon only at the discretion of M/MGC and Canterbury Woods. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of Benchmark.

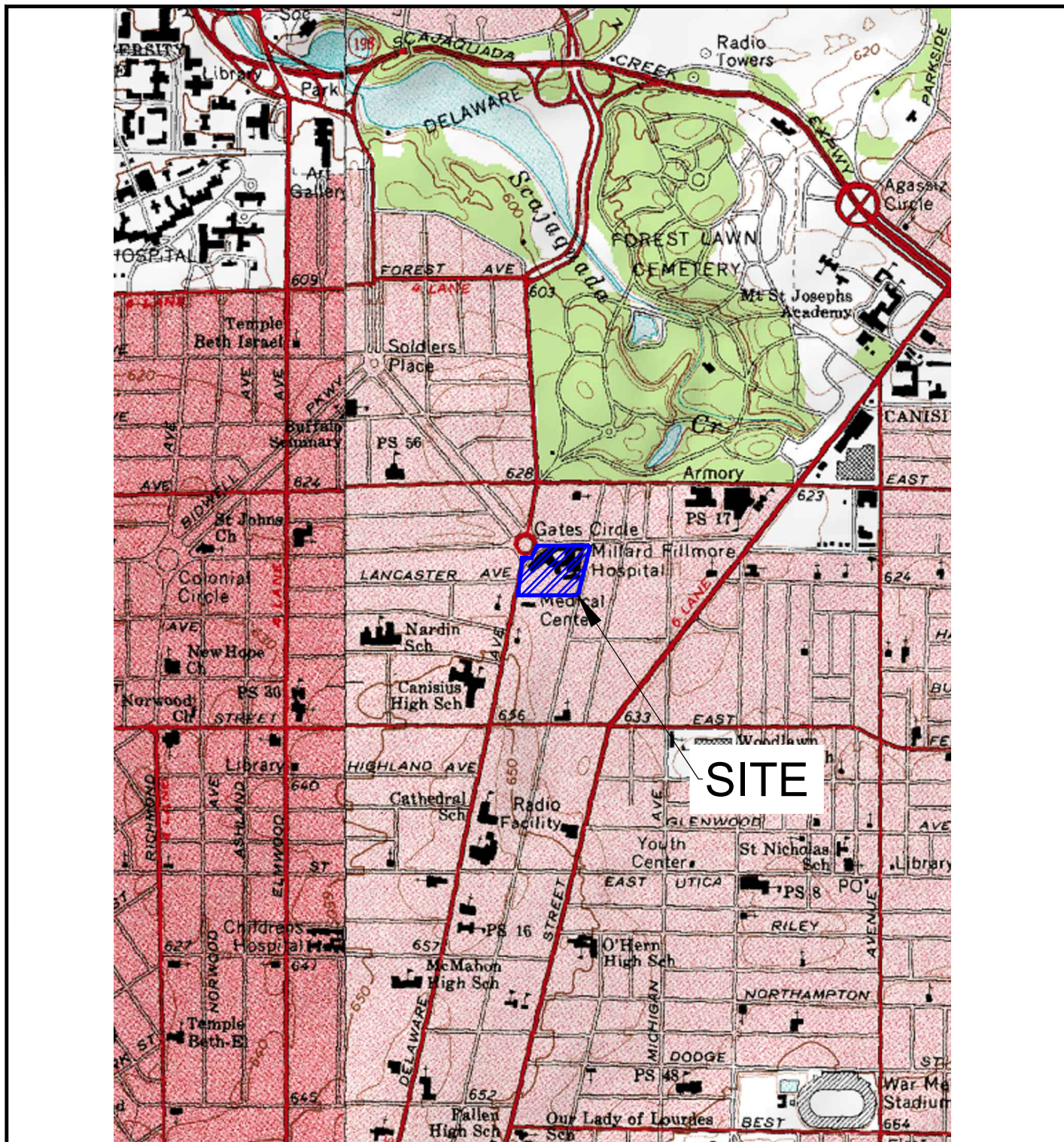
## 7.0 REFERENCES

1. New York State Department of Environmental Conservation. *DER-10; Technical Guidance for Site Investigation and Remediation*. May 2010.
2. *Remedial Investigation/ Alternatives Analysis Report, 3 Gates Circle Site, BCP Site No. C915272, Buffalo, New York*, dated February 2015, revised May 2015, prepared by Benchmark Environmental Engineering & Science, PLLC.
3. *Site Management Plan, 3 Gates Circle Site, Erie County, Buffalo, New York, NYSDEC Site No. C915272*, dated November 2015, revised January 2021, prepared by Benchmark Environmental Engineering & Science, PLLC.
4. *3 Gates Circle BCP Site (C915272), Interim Remedial Measure Work Plan*, dated January 29, 2015, prepared by Benchmark Environmental Engineering & Science, PLLC.
5. *Remedial Investigation/ Alternative Analysis Report & Decision Document, 3 Gates Circle, Site ID No. C915272, Buffalo, Erie County*, dated May 28, 2015, prepared by New York State Department of Environmental Conservation.
6. *Final Engineering Report, 3 Gates Circle Site, BCP Site No. C915272, Buffalo, New York*, dated November 2015, prepared by Benchmark Environmental Engineering and Science, PLLC.

## FIGURES



FIGURE 1



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

PROJECT NO.: 0309-014-001

DATE: APRIL 2021

DRAFTED BY: CMC/RFL

## SITE LOCATION AND VICINITY MAP

### PERIODIC REVIEW REPORT

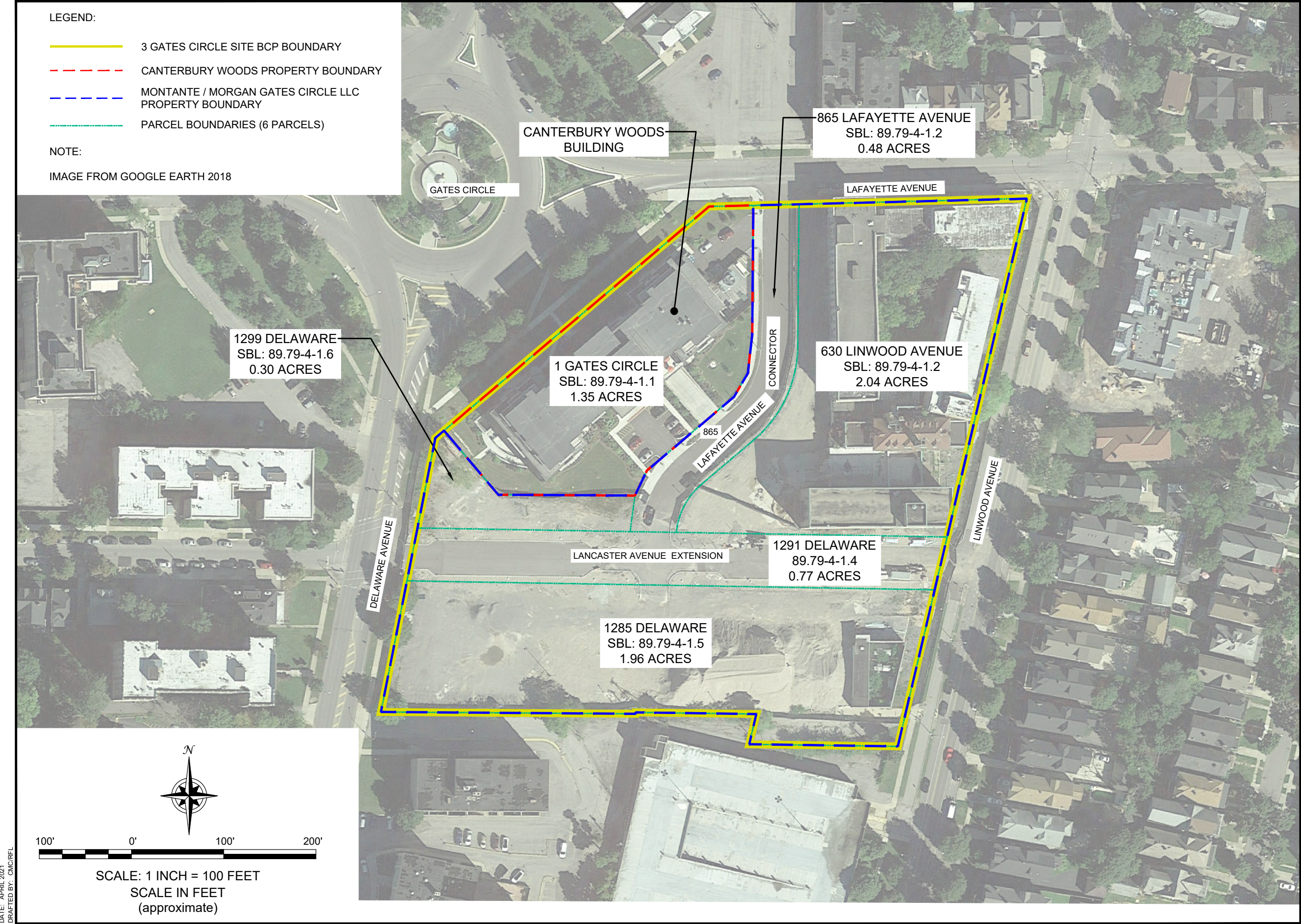
3 GATES CIRCLE SITE  
BCP SITE NO. C915272  
BUFFALO, NEW YORK

PREPARED FOR

MONTANTE / MORGAN GATES CIRCLE LLC AND EPISCOPAL CHURCH HOME AND AFFILIATES LIFE CARE COMMUNITY, INC.

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**FIGURE 2**

**SITE PLAN**

**PERIODIC REVIEW REPORT**

3 GATES CIRCLE SITE  
BCP SITE NO. C915272  
BUFFALO, NEW YORK

PREPARED FOR  
MONTANTE / MORGAN GATES CIRCLE LLC AND EPISCOPAL CHURCH HOME AND AFFILIATES LIFE CARE COMMUNITY, INC.

JOB NO.: 0309-014-001

**TURNKEY**  
ENVIRONMENTAL  
RESTORATION, LLC

**BENCHMARK**  
ENVIRONMENTAL  
ENGINEERING &  
SCIENCE, PLLC

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

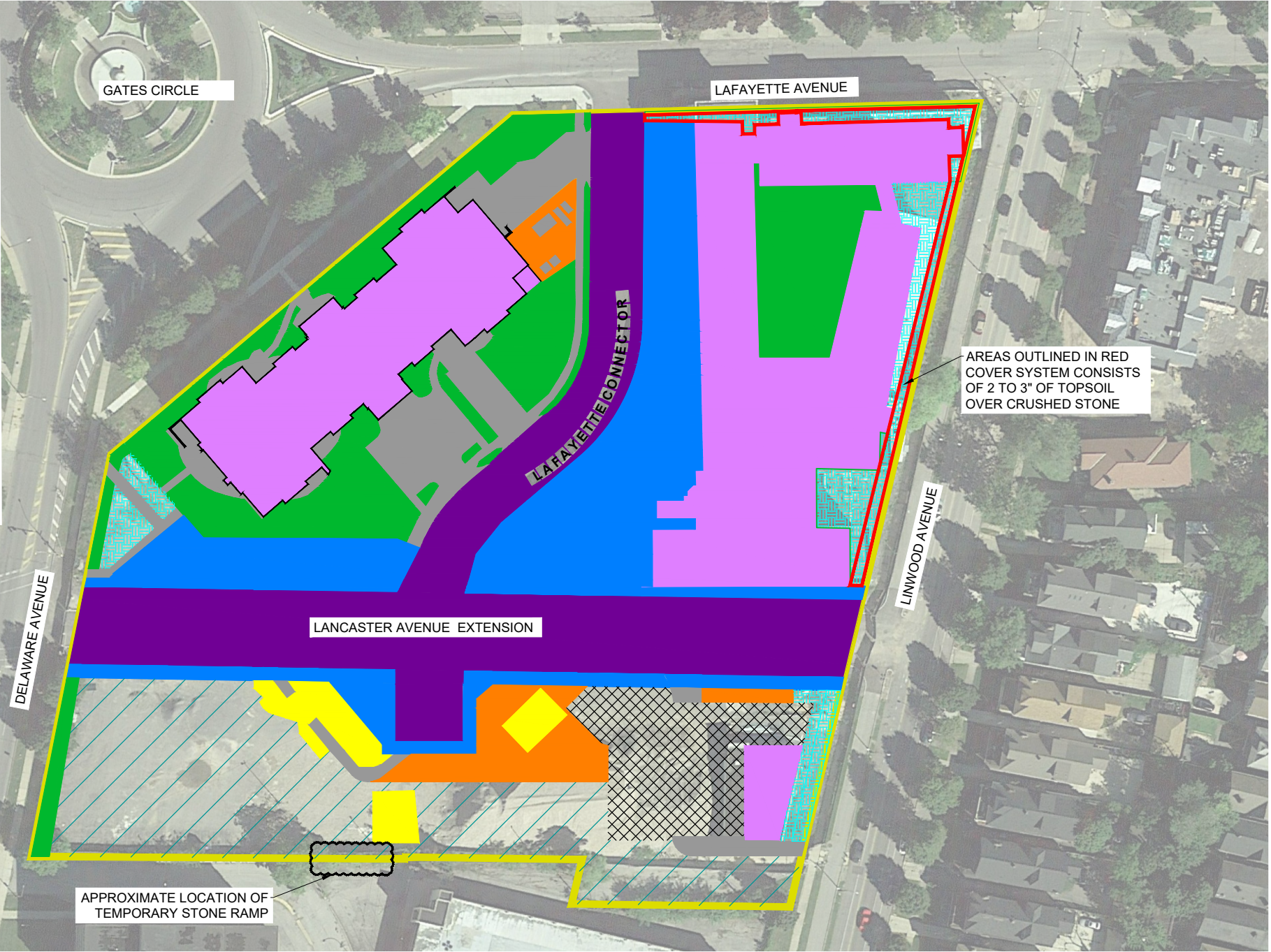
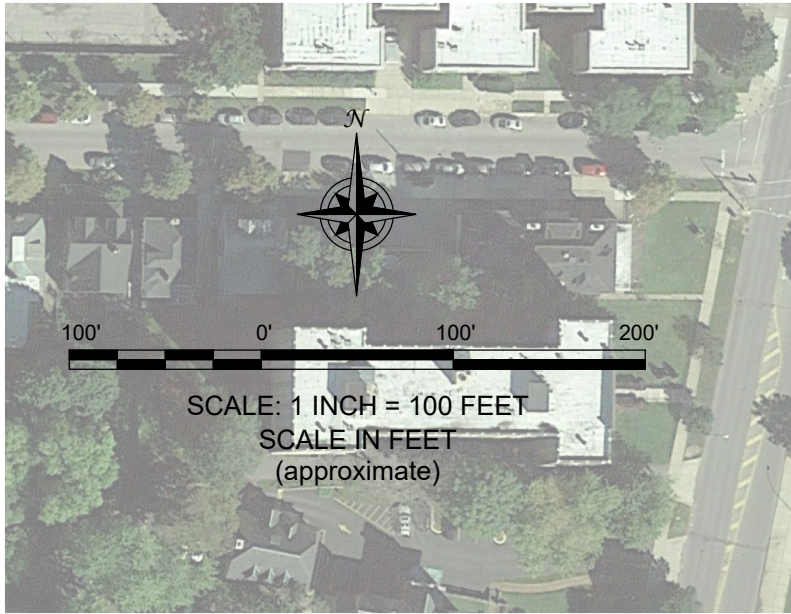
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DATE: APRIL 2021  
DRAFTED BY: CMCR/RL



LEGEND:

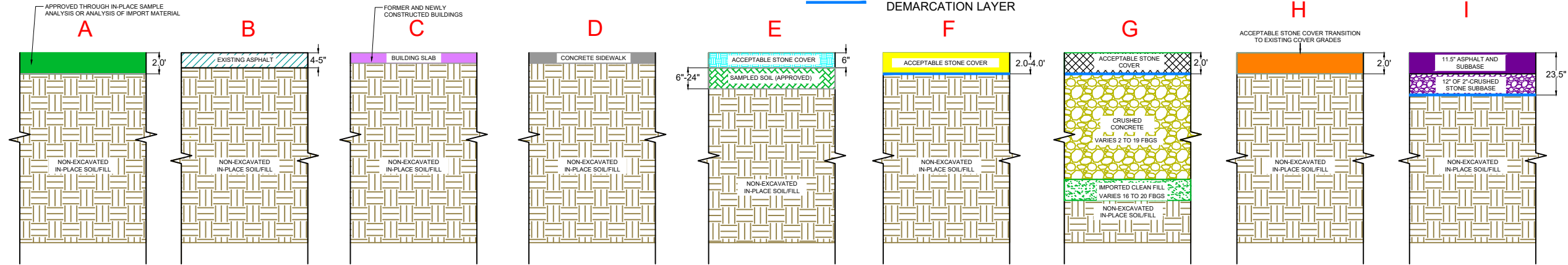
- PROPERTY BOUNDARY
- COVER SYSTEM A
- COVER SYSTEM B
- COVER SYSTEM C
- COVER SYSTEM D
- COVER SYSTEM E
- COVER SYSTEM F
- COVER SYSTEM G
- COVER SYSTEM H
- COVER SYSTEM I
- PORTION OF SITE UNDERGOING REDEVELOPMENT FINAL COVER NOT ESTABLISHED



COVER SYSTEM DETAILS:

LEGEND:

DEMARCATION LAYER



SITE COVER SYSTEM

PERIODIC REVIEW REPORT

3 GATES CIRCLE SITE  
BCP SITE NO. C915272  
BUFFALO, NEW YORK  
PREPARED FOR

**BENCHMARK**  
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JOB NO.: 0309-014-001

MONTANTE / MORGAN GATES CIRCLE LLC AND EPISCOPAL CHURCH HOME AND AFFILIATES LIFE CARE COMMUNITY, INC.

FIGURE 3

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# APPENDIX A

## INSTITUTIONAL & ENGINEERING CONTROLS CERTIFICATION FORMS





**Box 2A**

YES

NO

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

☐

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

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

☐

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

**SITE NO. C915272****Box 3****Description of Institutional Controls**

ParcelOwnerInstitutional Control**89.79-4-1.1**

Episcopal Church Home &amp; Affiliates Life

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Site Management Plan  
O&M Plan  
IC/EC Plan

1. Prohibition of use of groundwater.
2. Land use restriction for Restricted Residential, Commercial or Industrial use.
3. Soil Management or Excavation Work Plan for any future intrusive work.

**89.79-4-1.2**

Montante/Morgan 865 Lafayette LLC

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

O&M Plan

1. Prohibition of use of groundwater.
2. Land use restriction for Restricted Residential, Commercial or Industrial use.
3. Soil Management or Excavation Work Plan for any future intrusive work.

**89.79-4-1.3**

Montante/ Morgan 630 Linwood LLC

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Site Management Plan  
O&M Plan  
IC/EC Plan

1. Prohibition of use of groundwater.
2. Land use restriction for Restricted Residential, Commercial or Industrial use.
3. Soil Management or Excavation Work Plan for any future intrusive work.

**89.79-4-1.4**

Montante/Morgan 1291 Delaware LLC

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Site Management Plan  
O&M Plan  
IC/EC Plan

1. Prohibition of use of groundwater.
2. Land use restriction for Restricted Residential, Commercial or Industrial use.
3. Soil Management or Excavation Work Plan for any future intrusive work.

**89.79-4-1.5**

Montante/Morgan 1285 Delaware LLC

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Site Management Plan  
O&M Plan  
IC/EC Plan

1. Prohibition of use of groundwater.
2. Land use restriction for Restricted Residential, Commercial or Industrial use.
3. Soil Management or Excavation Work Plan for any future intrusive work.

**89.79-4-1.6**

Montante/Morgan 1299 Delaware LLC

Ground Water Use Restriction  
Soil Management Plan  
Landuse Restriction  
Site Management Plan  
O&M Plan

1. Prohibition of use of groundwater.
2. Land use restriction for Restricted Residential, Commercial or Industrial use.
3. Soil Management or Excavation Work Plan for any future intrusive work.

**Box 4****Description of Engineering Controls**

<u>Parcel</u>	<u>Engineering Control</u>
<b>89.79-4-1.1</b>	Cover System 1. Monitoring and maintenance of the cover system.
<b>89.79-4-1.2</b>	Cover System 1. Monitoring and maintenance of the cover system.
<b>89.79-4-1.3</b>	Cover System 1. Monitoring and maintenance of the cover system.
<b>89.79-4-1.4</b>	Cover System 1. Monitoring and maintenance of the cover system.
<b>89.79-4-1.5</b>	Cover System 1. Monitoring and maintenance of the cover system.
<b>89.79-4-1.6</b>	Cover System 1. Monitoring and maintenance of the cover system.

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

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

- a) the Periodic Review report and all attachments were prepared under the direction of, and reviewed by, the party making the Engineering Control certification;
- b) to the best of my knowledge and belief, the work and conclusions described in this certification are in accordance with the requirements of the site remedial program, and generally accepted engineering practices; and the information presented is accurate and complete.

YES NO

☒ ☐

2. For each Engineering control listed in Box 4, I certify by checking "YES" below that all of the following statements are true:

- (a) The Engineering Control(s) employed at this site is unchanged since the date that the Control was put in-place, or was last approved by the Department;
- (b) nothing has occurred that would impair the ability of such Control, to protect public health and the environment;
- (c) access to the site will continue to be provided to the Department, to evaluate the remedy, including access to evaluate the continued maintenance of this Control;
- (d) nothing has occurred that would constitute a violation or failure to comply with the Site Management Plan for this Control; and
- (e) if a financial assurance mechanism is required by the oversight document for the site, the mechanism remains valid and sufficient for its intended purpose established in the document.

YES NO

☒ ☐

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

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

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

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. C915272

Box 6

**SITE OWNER OR DESIGNATED REPRESENTATIVE SIGNATURE**

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

I CHRISTIAN CAMPOS at 2760 KENMORE AVENUE  
print name TONAWANDA, NY 14150  
print business address

am certifying as MONTANTE/MORGAN GATES CIRCLE LLC (Owner or Remedial Party)

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

  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

5/7/2021  
Date



## EC CERTIFICATIONS

Box 7

### Qualified Environmental Professional Signature

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

I Christopher Baron at 2558 Hamburg Turnpike, Buffalo, NY 14218  
print name print business address

am certifying as a Qualified Environmental Professional for the Montante/Morgan Gates Circle  
(Owner or Remedial Party)

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

Stamp  
(Required for PE)

5/7/21  
Date

## APPENDIX B

### PHOTOGRAPHIC LOG

## SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: East end of Lancaster Avenue Extension, looking east.

Photo 2: West end of Lancaster Avenue Extension, looking east.

Photo 3: Southeast side of Canterbury Woods looking north along Lafayette Connector.

Photo 4: West side of Canterbury Woods, looking south along Delaware Avenue.

## SITE PHOTOGRAPHS

**Photo 5:**



**Photo 6:**



**Photo 7:**



**Photo 8:**



Photo 5: Soil cover system along southwest corner of Canterbury Woods looking southeast.

Photo 6: Asphalt parking lot in southwestern corner of the Site, looking west.

Photo 7: Vegetation on topsoil placed over stoner along Linwood Avenue, looking south.

Photo 8: Canterbury Woods along Lafayette Avenue, looking west towards Gates Circle.

## APPENDIX C

### TOPSOIL IMPORT DOCUMENTATION



**From:** [Kuczka, Megan E \(DEC\)](#)  
**To:** [Chris Z. Boron](#); [Walia, Jaspal \(DEC\)](#)  
**Cc:** [Bill Van Cott](#)  
**Subject:** Re: 3 Gates Circle Topsoil Import Request  
**Date:** Friday, July 17, 2020 3:52:43 PM  
**Attachments:** [image001.png](#)

---

Chris,

The only thing I am noticing is there are slightly elevated levels of acetone above restricted residential levels. All other analytes are acceptable. Therefore, the soil can be acceptable for use onsite.

Sincerely,

**Megan Kuczka**

Environmental Program Specialist 1, Division of Environmental Remediation

**New York State Department of Environmental Conservation**

270 Michigan Avenue, Buffalo, NY 14203

P: (716) 851-7220 | F: (716) 851-7226 | [Megan.Kuczka@dec.ny.gov](mailto:Megan.Kuczka@dec.ny.gov)

[www.dec.ny.gov](http://www.dec.ny.gov) |  |  | 



---

**From:** Kuczka, Megan E (DEC) <[Megan.Kuczka@dec.ny.gov](mailto:Megan.Kuczka@dec.ny.gov)>

**Sent:** Thursday, July 16, 2020 4:36 PM

**To:** Chris Z. Boron <[cboron@bm-tk.com](mailto:cboron@bm-tk.com)>; Walia, Jaspal (DEC) <[jaspal.walia@dec.ny.gov](mailto:jaspal.walia@dec.ny.gov)>

**Cc:** Bill Van Cott <[bvancott@montante.com](mailto:bvancott@montante.com)>

**Subject:** Re: 3 Gates Circle Topsoil Import Request

Chris,

The Import Request form has been received. I will review and respond back with any questions.

Sincerely,


**Megan Kuczka**

Environmental Program Specialist 1, Division of Environmental Remediation

**New York State Department of Environmental Conservation**

270 Michigan Avenue, Buffalo, NY 14203

P: (716) 851-7220 | F: (716) 851-7226 | [Megan.Kuczka@dec.ny.gov](mailto:Megan.Kuczka@dec.ny.gov)

[www.dec.ny.gov](http://www.dec.ny.gov) |  |  | 



---

**From:** Chris Z. Boron <cboron@bm-tk.com>

**Sent:** Thursday, July 16, 2020 4:30 PM

**To:** Kuczka, Megan E (DEC) <Megan.Kuczka@dec.ny.gov>; Walia, Jaspal (DEC) <jaspal.walia@dec.ny.gov>

**Cc:** Bill Van Cott <bvancott@montante.com>

**Subject:** 3 Gates Circle Topsoil Import Request

**ATTENTION: This email came from an external source. Do not open attachments or click on links from unknown senders or unexpected emails.**

Hello Megan and Jaspal,

I have attached a Material Import Request for Topsoil into Gates Circle for a source on Ransom Road in Lancaster, NY.

Please let me know if you have any questions.

Have a good evening.

Regards,

**Christopher Boron, P.G.**

*Sr. Project Manager*



Strong Advocates | Effective Solutions | Integrated Implementation

2558 Hamburg Turnpike, Suite 300, Buffalo, NY 14218

Phone: (716) 856-0599, Cell Phone: (716) 864-2726

[www.benchmarkturnkey.com](http://www.benchmarkturnkey.com)

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*Professional Opinions: Views expressed in this message may only be relied upon as professional opinion if and when provided by principals of the Companies to authorized representatives of the organization with which we have an active client-engineer relationship*



**NEW YORK STATE  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**



**Request to Import/Reuse Fill or Soil**

\*This form is based on the information required by DER-10, Section 5.4(e). Use of this form is not a substitute for reading the applicable Technical Guidance document.\*

**SECTION 1 – SITE BACKGROUND**

The allowable site use is:

Have Ecological Resources been identified?

Is this soil originating from the site?

How many cubic yards of soil will be imported/reused?

If greater than 1000 cubic yards will be imported, enter volume to be imported:

**SECTION 2 – MATERIAL OTHER THAN SOIL**

Is the material to be imported gravel, rock or stone?

Does it contain less than 10%, by weight, material that would pass a size 80 sieve?

Is this virgin material from a permitted mine or quarry?

Is this material recycled concrete or brick from a DEC registered processing facility?

**SECTION 3 - SAMPLING**

Provide a brief description of the number and type of samples collected in the space below:

In accordance with NYSDEC DER-10, three (3) discrete VOC samples and one (1) composite sample (SVOCs, metals, PCBs, pesticides, 1,4-dioxane, and PFAS) were collected and analyzed to assess an approximate 200 cubic yard stockpile of topsoil. Analytical Report is attached to this request form.

*Example Text: 5 discrete samples were collected and analyzed for VOCs. 2 composite samples were collected and analyzed for SVOCs, Inorganics & PCBs/Pesticides.*

*If the material meets requirements of DER-10 section 5.5 (other material), no chemical testing needed.*



### SECTION 3 CONT'D - SAMPLING

Provide a brief written summary of the sampling results or attach evaluation tables (compare to DER-10, Appendix 5):

All results below DER-10, Appendix 5 listed values for Residential Use Sites, and Emergent Contaminant results are below the Departments guidelines.

3 Gates Circle Site is a Track 4 Restricted Residential Use Site.

---

*Example Text: Arsenic was detected up to 17 ppm in 1 (of 5) samples; the allowable level is 16 ppm.*

*If Ecological Resources have been identified use the "If Ecological Resources are Present" column in Appendix 5.*

### SECTION 4 – SOURCE OF FILL

Name of person providing fill and relationship to the source:

Lorenz Construction - none.

Location where fill was obtained:

1200 Ransom Road, Lancaster, NY

Identification of any state or local approvals as a fill source:

NA

If no approvals are available, provide a brief history of the use of the property that is the fill source:

Rural site - the topsoil is from earthwork for neighboring horse farm corral.

Provide a list of supporting documentation included with this request:

Laboratory Analytical Data Package L1936722

The information provided on this form is accurate and complete.

  
\_\_\_\_\_  
Signature

7/16/2020  
\_\_\_\_\_

Date

**Christopher Boron**  
\_\_\_\_\_

Print Name

As agent for Montante Construction, LLC
--

Benchmark Environmental Engineering and Science, PLLC  
\_\_\_\_\_

Firm



## ANALYTICAL REPORT

Lab Number:	L1936722
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Nate Munley
Phone:	(716) 225-3314
Project Name:	MAIN AND BALCOM BCP SITE
Project Number:	B0239-016-001
Report Date:	08/26/19

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

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

---

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



**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L1936722-01	RANSOM TOPSOIL - GRAB 1	SOIL	1661 MAIN STREET BUFFALO NY	08/14/19 11:50	08/14/19
L1936722-02	RANSOM TOPSOIL - GRAB 2	SOIL	1661 MAIN STREET BUFFALO NY	08/14/19 11:55	08/14/19
L1936722-03	RANSOM TOPSOIL - GRAB 3	SOIL	1661 MAIN STREET BUFFALO NY	08/14/19 12:00	08/14/19
L1936722-04	RANSOM TOPSOIL - COMP 1	SOIL	1661 MAIN STREET BUFFALO NY	08/14/19 12:05	08/14/19

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

### Case Narrative

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

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

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

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

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

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

---

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

### Case Narrative (continued)

#### Report Submission

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

#### Sample Receipt

The Client ID, sample location and project name were specified by the client.

#### Volatile Organics

L1936722-01, -02, and -03: 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.

#### Perfluorinated Alkyl Acids by Isotope Dilution

L1936722-04: Extracted Internal Standard recoveries were outside the acceptance criteria for individual analytes. Please refer to the surrogate section of the report for details.

WG1276078-2: The continuing calibration standard had the response for M2-6:2 FTS and M2-8:2 FTS outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

WG1274605-7: The continuing calibration standard had the response for 8:2FTS (49%) outside the acceptance criteria for the method. This value represents less than 10% of all compounds; therefore, the calibration was accepted.

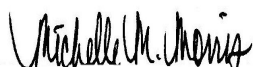
WG1274605-7: The continuing calibration standard had the response for M2-6:2FTS and M2-8:2FTS outside the acceptance criteria for the method. The associated target analytes were within acceptance criteria; therefore, no further action was taken.

#### Total Metals

L1936722-04: The sample has elevated detection limits for all elements, with the exception of mercury, due to the dilution required by matrix interferences encountered during analysis.

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

Authorized Signature:

 Michelle M. Morris

Title: Technical Director/Representative

Date: 08/26/19

# ORGANICS



# **VOLATILES**

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-01  
 Client ID: RANSOM TOPSOIL - GRAB 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 11:50  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 08/20/19 19:04  
 Analyst: MV  
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	1.8		ug/kg	1.2	0.66	1
Ethylbenzene	0.32	J	ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.55	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.18	1

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

**Lab ID:** L1936722-01  
**Client ID:** RANSOM TOPSOIL - GRAB 1  
**Sample Location:** 1661 MAIN STREET BUFFALO NY

**Date Collected:** 08/14/19 11:50  
**Date Received:** 08/14/19  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.25	1
p/m-Xylene	1.5	J	ug/kg	2.4	0.69	1
o-Xylene	0.64	J	ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	76		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
Methyl Acetate	ND		ug/kg	4.9	1.2	1
Cyclohexane	ND		ug/kg	12	0.67	1
1,4-Dioxane	ND		ug/kg	98	43.	1
Freon-113	ND		ug/kg	4.9	0.85	1
Methyl cyclohexane	ND		ug/kg	4.9	0.74	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	114		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	100		70-130

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-02  
 Client ID: RANSOM TOPSOIL - GRAB 2  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 11:55  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 08/20/19 19:31  
 Analyst: MV  
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.1	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.33	1
Tetrachloroethene	ND		ug/kg	0.61	0.24	1
Chlorobenzene	ND		ug/kg	0.61	0.16	1
Trichlorofluoromethane	ND		ug/kg	4.9	0.85	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.32	1
1,1,1-Trichloroethane	ND		ug/kg	0.61	0.20	1
Bromodichloromethane	ND		ug/kg	0.61	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.34	1
cis-1,3-Dichloropropene	ND		ug/kg	0.61	0.19	1
Bromoform	ND		ug/kg	4.9	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.61	0.20	1
Benzene	ND		ug/kg	0.61	0.20	1
Toluene	1.5		ug/kg	1.2	0.67	1
Ethylbenzene	0.26	J	ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.9	1.1	1
Bromomethane	ND		ug/kg	2.4	0.71	1
Vinyl chloride	ND		ug/kg	1.2	0.41	1
Chloroethane	ND		ug/kg	2.4	0.56	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.17	1
Trichloroethene	ND		ug/kg	0.61	0.17	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.18	1

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-02  
 Client ID: RANSOM TOPSOIL - GRAB 2  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 11:55  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.25	1
p/m-Xylene	1.1	J	ug/kg	2.4	0.69	1
o-Xylene	0.52	J	ug/kg	1.2	0.36	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.22	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	120		ug/kg	12	5.9	1
Carbon disulfide	ND		ug/kg	12	5.6	1
2-Butanone	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.6	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.7	1.2	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.40	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
Methyl Acetate	ND		ug/kg	4.9	1.2	1
Cyclohexane	ND		ug/kg	12	0.67	1
1,4-Dioxane	ND		ug/kg	98	43.	1
Freon-113	ND		ug/kg	4.9	0.85	1
Methyl cyclohexane	ND		ug/kg	4.9	0.74	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	117		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	104		70-130

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-03  
 Client ID: RANSOM TOPSOIL - GRAB 3  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:00  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8260C  
 Analytical Date: 08/20/19 19:58  
 Analyst: MV  
 Percent Solids: 81%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	6.0	2.8	1
1,1-Dichloroethane	ND		ug/kg	1.2	0.18	1
Chloroform	ND		ug/kg	1.8	0.17	1
Carbon tetrachloride	ND		ug/kg	1.2	0.28	1
1,2-Dichloropropane	ND		ug/kg	1.2	0.15	1
Dibromochloromethane	ND		ug/kg	1.2	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.2	0.32	1
Tetrachloroethene	ND		ug/kg	0.60	0.24	1
Chlorobenzene	ND		ug/kg	0.60	0.15	1
Trichlorofluoromethane	ND		ug/kg	4.8	0.84	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.31	1
1,1,1-Trichloroethane	ND		ug/kg	0.60	0.20	1
Bromodichloromethane	ND		ug/kg	0.60	0.13	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.33	1
cis-1,3-Dichloropropene	ND		ug/kg	0.60	0.19	1
Bromoform	ND		ug/kg	4.8	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.60	0.20	1
Benzene	ND		ug/kg	0.60	0.20	1
Toluene	0.99	J	ug/kg	1.2	0.66	1
Ethylbenzene	0.18	J	ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	4.8	1.1	1
Bromomethane	ND		ug/kg	2.4	0.70	1
Vinyl chloride	ND		ug/kg	1.2	0.40	1
Chloroethane	ND		ug/kg	2.4	0.54	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.16	1
Trichloroethene	ND		ug/kg	0.60	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	2.4	0.17	1

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

**Lab ID:** L1936722-03  
**Client ID:** RANSOM TOPSOIL - GRAB 3  
**Sample Location:** 1661 MAIN STREET BUFFALO NY

**Date Collected:** 08/14/19 12:00  
**Date Received:** 08/14/19  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,3-Dichlorobenzene	ND		ug/kg	2.4	0.18	1
1,4-Dichlorobenzene	ND		ug/kg	2.4	0.21	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.24	1
p/m-Xylene	0.81	J	ug/kg	2.4	0.68	1
o-Xylene	0.38	J	ug/kg	1.2	0.35	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.21	1
Styrene	ND		ug/kg	1.2	0.24	1
Dichlorodifluoromethane	ND		ug/kg	12	1.1	1
Acetone	33		ug/kg	12	5.8	1
Carbon disulfide	ND		ug/kg	12	5.5	1
2-Butanone	ND		ug/kg	12	2.7	1
4-Methyl-2-pentanone	ND		ug/kg	12	1.5	1
2-Hexanone	ND		ug/kg	12	1.4	1
Bromochloromethane	ND		ug/kg	2.4	0.25	1
1,2-Dibromoethane	ND		ug/kg	1.2	0.34	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.6	1.2	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	2.4	0.39	1
1,2,4-Trichlorobenzene	ND		ug/kg	2.4	0.33	1
Methyl Acetate	ND		ug/kg	4.8	1.1	1
Cyclohexane	ND		ug/kg	12	0.66	1
1,4-Dioxane	ND		ug/kg	96	42.	1
Freon-113	ND		ug/kg	4.8	0.84	1
Methyl cyclohexane	ND		ug/kg	4.8	0.73	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	118		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	103		70-130



**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

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

Analytical Method: 1,8260C  
 Analytical Date: 08/20/19 18:36  
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1274865-5					
Methylene chloride	ND		ug/kg	5.0	2.3
1,1-Dichloroethane	ND		ug/kg	1.0	0.14
Chloroform	ND		ug/kg	1.5	0.14
Carbon tetrachloride	ND		ug/kg	1.0	0.23
1,2-Dichloropropane	ND		ug/kg	1.0	0.12
Dibromochloromethane	ND		ug/kg	1.0	0.14
1,1,2-Trichloroethane	ND		ug/kg	1.0	0.27
Tetrachloroethene	ND		ug/kg	0.50	0.20
Chlorobenzene	ND		ug/kg	0.50	0.13
Trichlorofluoromethane	ND		ug/kg	4.0	0.70
1,2-Dichloroethane	ND		ug/kg	1.0	0.26
1,1,1-Trichloroethane	ND		ug/kg	0.50	0.17
Bromodichloromethane	ND		ug/kg	0.50	0.11
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.27
cis-1,3-Dichloropropene	ND		ug/kg	0.50	0.16
Bromoform	ND		ug/kg	4.0	0.25
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	0.17
Benzene	ND		ug/kg	0.50	0.17
Toluene	ND		ug/kg	1.0	0.54
Ethylbenzene	ND		ug/kg	1.0	0.14
Chloromethane	ND		ug/kg	4.0	0.93
Bromomethane	ND		ug/kg	2.0	0.58
Vinyl chloride	ND		ug/kg	1.0	0.34
Chloroethane	ND		ug/kg	2.0	0.45
1,1-Dichloroethene	ND		ug/kg	1.0	0.24
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.14
Trichloroethene	ND		ug/kg	0.50	0.14
1,2-Dichlorobenzene	ND		ug/kg	2.0	0.14
1,3-Dichlorobenzene	ND		ug/kg	2.0	0.15

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C  
 Analytical Date: 08/20/19 18:36  
 Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1274865-5					
1,4-Dichlorobenzene	ND		ug/kg	2.0	0.17
Methyl tert butyl ether	ND		ug/kg	2.0	0.20
p/m-Xylene	ND		ug/kg	2.0	0.56
o-Xylene	ND		ug/kg	1.0	0.29
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.18
Styrene	ND		ug/kg	1.0	0.20
Dichlorodifluoromethane	ND		ug/kg	10	0.92
Acetone	ND		ug/kg	10	4.8
Carbon disulfide	ND		ug/kg	10	4.6
2-Butanone	ND		ug/kg	10	2.2
4-Methyl-2-pentanone	ND		ug/kg	10	1.3
2-Hexanone	ND		ug/kg	10	1.2
Bromochloromethane	ND		ug/kg	2.0	0.20
1,2-Dibromoethane	ND		ug/kg	1.0	0.28
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	1.0
Isopropylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	0.32
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	0.27
Methyl Acetate	ND		ug/kg	4.0	0.95
Cyclohexane	ND		ug/kg	10	0.54
1,4-Dioxane	ND		ug/kg	80	35.
Freon-113	ND		ug/kg	4.0	0.69
Methyl cyclohexane	ND		ug/kg	4.0	0.60

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

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

Analytical Method: 1,8260C  
Analytical Date: 08/20/19 18:36  
Analyst: AD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG1274865-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	116		70-130
Toluene-d8	111		70-130
4-Bromofluorobenzene	111		70-130
Dibromofluoromethane	102		70-130

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

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1274865-3 WG1274865-4								
Methylene chloride	91		90		70-130	1		30
1,1-Dichloroethane	100		98		70-130	2		30
Chloroform	98		97		70-130	1		30
Carbon tetrachloride	105		104		70-130	1		30
1,2-Dichloropropane	98		97		70-130	1		30
Dibromochloromethane	113		114		70-130	1		30
1,1,2-Trichloroethane	113		114		70-130	1		30
Tetrachloroethene	119		117		70-130	2		30
Chlorobenzene	107		107		70-130	0		30
Trichlorofluoromethane	80		78		70-139	3		30
1,2-Dichloroethane	112		110		70-130	2		30
1,1,1-Trichloroethane	107		104		70-130	3		30
Bromodichloromethane	103		103		70-130	0		30
trans-1,3-Dichloropropene	117		120		70-130	3		30
cis-1,3-Dichloropropene	104		103		70-130	1		30
Bromoform	116		118		70-130	2		30
1,1,2,2-Tetrachloroethane	111		111		70-130	0		30
Benzene	96		95		70-130	1		30
Toluene	112		111		70-130	1		30
Ethylbenzene	114		114		70-130	0		30
Chloromethane	100		96		52-130	4		30
Bromomethane	84		86		57-147	2		30
Vinyl chloride	97		94		67-130	3		30

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1274865-3 WG1274865-4								
Chloroethane	81		79		50-151	3		30
1,1-Dichloroethene	102		105		65-135	3		30
trans-1,2-Dichloroethene	98		96		70-130	2		30
Trichloroethene	102		101		70-130	1		30
1,2-Dichlorobenzene	116		115		70-130	1		30
1,3-Dichlorobenzene	115		115		70-130	0		30
1,4-Dichlorobenzene	113		115		70-130	2		30
Methyl tert butyl ether	100		99		66-130	1		30
p/m-Xylene	115		114		70-130	1		30
o-Xylene	114		115		70-130	1		30
cis-1,2-Dichloroethene	97		96		70-130	1		30
Styrene	113		113		70-130	0		30
Dichlorodifluoromethane	95		93		30-146	2		30
Acetone	107		102		54-140	5		30
Carbon disulfide	94		92		59-130	2		30
2-Butanone	96		99		70-130	3		30
4-Methyl-2-pentanone	109		111		70-130	2		30
2-Hexanone	107		109		70-130	2		30
Bromochloromethane	96		96		70-130	0		30
1,2-Dibromoethane	115		114		70-130	1		30
1,2-Dibromo-3-chloropropane	103		103		68-130	0		30
Isopropylbenzene	121		120		70-130	1		30
1,2,3-Trichlorobenzene	119		117		70-130	2		30



## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG1274865-3 WG1274865-4								
1,2,4-Trichlorobenzene	120		118		70-130	2		30
Methyl Acetate	101		99		51-146	2		30
Cyclohexane	106		103		59-142	3		30
1,4-Dioxane	101		98		65-136	3		30
Freon-113	100		99		50-139	1		30
Methyl cyclohexane	98		96		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	112		113		70-130
Toluene-d8	110		111		70-130
4-Bromofluorobenzene	110		110		70-130
Dibromofluoromethane	102		101		70-130

# SEMIVOLATILES

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04  
 Client ID: RANSOM TOPSOIL - COMP 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:05  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 08/22/19 03:43  
 Analyst: SZ  
 Percent Solids: 84%

Extraction Method: EPA 3546  
 Extraction Date: 08/21/19 09:06

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	23	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	ND		ug/kg	120	22.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04  
 Client ID: RANSOM TOPSOIL - COMP 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:05  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	ND		ug/kg	120	33.	1
Benzo(k)fluoranthene	ND		ug/kg	120	32.	1
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	28.	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	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

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04  
 Client ID: RANSOM TOPSOIL - COMP 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:05  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Caprolactam	ND		ug/kg	200	60.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	40.	1
1,4-Dioxane	ND		ug/kg	30	9.1	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	77		10-120
Nitrobenzene-d5	60		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	89		10-136
4-Terphenyl-d14	66		18-120



**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04  
 Client ID: RANSOM TOPSOIL - COMP 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:05  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 122,537(M)  
 Analytical Date: 08/21/19 23:46  
 Analyst: AJ  
 Percent Solids: 84%

Extraction Method: EPA 537(M)  
 Extraction Date: 08/19/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						
Perfluorobutanoic Acid (PFBA)	0.101	J	ug/kg	1.05	0.024	1
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.05	0.048	1
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.05	0.041	1
Perfluorohexanoic Acid (PFHxA)	0.096	J	ug/kg	1.05	0.055	1
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.05	0.047	1
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.05	0.064	1
Perfluorooctanoic Acid (PFOA)	0.159	J	ug/kg	1.05	0.044	1
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.05	0.189	1
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.05	0.144	1
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.05	0.079	1
Perfluorooctanesulfonic Acid (PFOS)	0.259	J	ug/kg	1.05	0.137	1
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.05	0.071	1
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.05	0.302	1
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.05	0.212	1
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.05	0.049	1
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.05	0.161	1
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.05	0.103	1
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.05	0.089	1
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.05	0.074	1
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.05	0.215	1
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.05	0.057	1
PFOA/PFOS, Total	0.418	J	ug/kg	1.05	0.044	1

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04  
 Client ID: RANSOM TOPSOIL - COMP 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:05  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab						

Surrogate (Extracted Internal Standard)	% Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	83		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	93		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	87		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	82		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	86		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	100		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	81		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	48		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	80		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	97		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	89		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	43		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	43	Q	45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	88		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	3		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	40	Q	42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	91		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	55		26-160

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

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

**Analytical Method:** 122,537(M)  
**Analytical Date:** 08/21/19 04:23  
**Analyst:** AJ

**Extraction Method:** EPA 537(M)  
**Extraction Date:** 08/19/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 04 Batch: WG1273984-1					
Perfluorobutanoic Acid (PFBA)	0.092	J	ug/kg	1.00	0.023
Perfluoropentanoic Acid (PFPeA)	ND		ug/kg	1.00	0.046
Perfluorobutanesulfonic Acid (PFBS)	ND		ug/kg	1.00	0.039
Perfluorohexanoic Acid (PFHxA)	ND		ug/kg	1.00	0.053
Perfluoroheptanoic Acid (PFHpA)	ND		ug/kg	1.00	0.045
Perfluorohexanesulfonic Acid (PFHxS)	ND		ug/kg	1.00	0.061
Perfluorooctanoic Acid (PFOA)	ND		ug/kg	1.00	0.042
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	ND		ug/kg	1.00	0.180
Perfluoroheptanesulfonic Acid (PFHpS)	ND		ug/kg	1.00	0.136
Perfluorononanoic Acid (PFNA)	ND		ug/kg	1.00	0.075
Perfluorooctanesulfonic Acid (PFOS)	ND		ug/kg	1.00	0.130
Perfluorodecanoic Acid (PFDA)	ND		ug/kg	1.00	0.067
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	ND		ug/kg	1.00	0.287
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	ND		ug/kg	1.00	0.202
Perfluoroundecanoic Acid (PFUnA)	ND		ug/kg	1.00	0.047
Perfluorodecanesulfonic Acid (PFDS)	ND		ug/kg	1.00	0.153
Perfluorooctanesulfonamide (FOSA)	ND		ug/kg	1.00	0.098
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	ND		ug/kg	1.00	0.085
Perfluorododecanoic Acid (PFDoA)	ND		ug/kg	1.00	0.070
Perfluorotridecanoic Acid (PFTrDA)	ND		ug/kg	1.00	0.204
Perfluorotetradecanoic Acid (PFTA)	ND		ug/kg	1.00	0.054
PFOA/PFOS, Total	ND		ug/kg	1.00	0.042

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

**Method Blank Analysis  
Batch Quality Control**

**Analytical Method:** 122,537(M)  
**Analytical Date:** 08/21/19 04:23  
**Analyst:** AJ

**Extraction Method:** EPA 537(M)  
**Extraction Date:** 08/19/19 09:28

Parameter	Result	Qualifier	Units	RL	MDL
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab for sample(s): 04 Batch: WG1273984-1					

Surrogate (Extracted Internal Standard)	%Recovery	Qualifier	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	95		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	106		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	103		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	96		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	101		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	95		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	84		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	97		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	83		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	101		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	80		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	100		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	104		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	11		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	86		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	103		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	99		26-160

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 08/21/19 01:23  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 08/20/19 13:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1274554-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	99	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	99	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	37	J	ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	99	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	99	28.

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 08/21/19 01:23  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 08/20/19 13:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1274554-1					
Benzo(k)fluoranthene	ND		ug/kg	99	26.
Chrysene	ND		ug/kg	99	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	99	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	99	20.
Dibenzo(a,h)anthracene	ND		ug/kg	99	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	99	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	99	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	360	62.
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	790	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.



**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 08/21/19 01:23  
**Analyst:** RC

**Extraction Method:** EPA 3546  
**Extraction Date:** 08/20/19 13:14

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG1274554-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	58.
Benzaldehyde	ND		ug/kg	220	45.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.
1,4-Dioxane	ND		ug/kg	25	7.6

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	82		25-120
Phenol-d6	96		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	91		10-136
4-Terphenyl-d14	85		18-120

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

**Project Name:** MAIN AND BALCOM BCP SITE

**Lab Number:** L1936722

**Project Number:** B0239-016-001

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 04 Batch: WG1273984-2 WG1273984-3								
Perfluorobutanoic Acid (PFBA)	108		107		71-135	1		30
Perfluoropentanoic Acid (PFPeA)	108		107		69-132	1		30
Perfluorobutanesulfonic Acid (PFBS)	109		109		72-128	0		30
Perfluorohexanoic Acid (PFHxA)	108		108		70-132	0		30
Perfluoroheptanoic Acid (PFHpA)	108		108		71-131	0		30
Perfluorohexanesulfonic Acid (PFHxS)	106		105		67-130	1		30
Perfluorooctanoic Acid (PFOA)	107		105		69-133	2		30
1H,1H,2H,2H-Perfluorooctanesulfonic Acid (6:2FTS)	128		115		64-140	11		30
Perfluoroheptanesulfonic Acid (PFHpS)	115		111		70-132	4		30
Perfluorononanoic Acid (PFNA)	108		103		72-129	5		30
Perfluorooctanesulfonic Acid (PFOS)	113		114		68-136	1		30
Perfluorodecanoic Acid (PFDA)	109		108		69-133	1		30
1H,1H,2H,2H-Perfluorodecanesulfonic Acid (8:2FTS)	91		108		65-137	17		30
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA)	108		132		63-144	20		30
Perfluoroundecanoic Acid (PFUnA)	104		105		64-136	1		30
Perfluorodecanesulfonic Acid (PFDS)	119		125		59-134	5		30
Perfluorooctanesulfonamide (FOSA)	112		93		67-137	19		30
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA)	107		109		61-139	2		30
Perfluorododecanoic Acid (PFDoA)	110		108		69-135	2		30
Perfluorotridecanoic Acid (PFTTrDA)	103		100		66-139	3		30
Perfluorotetradecanoic Acid (PFTA)	116		114		69-133	2		30

## Lab Control Sample Analysis

### Batch Quality Control

Project Name: MAIN AND BALCOM BCP SITE

Lab Number: L1936722

Project Number: B0239-016-001

Report Date: 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Perfluorinated Alkyl Acids by Isotope Dilution - Mansfield Lab Associated sample(s): 04 Batch: WG1273984-2 WG1273984-3								

Surrogate (Extracted Internal Standard)	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Perfluoro[13C4]Butanoic Acid (MPFBA)	83		83		60-153
Perfluoro[13C5]Pentanoic Acid (M5PFPEA)	87		87		65-182
Perfluoro[2,3,4-13C3]Butanesulfonic Acid (M3PFBS)	82		80		70-151
Perfluoro[1,2,3,4,6-13C5]Hexanoic Acid (M5PFHxA)	81		81		61-147
Perfluoro[1,2,3,4-13C4]Heptanoic Acid (M4PFHpA)	80		80		62-149
Perfluoro[1,2,3-13C3]Hexanesulfonic Acid (M3PFHxS)	91		91		63-166
Perfluoro[13C8]Octanoic Acid (M8PFOA)	86		85		62-152
1H,1H,2H,2H-Perfluoro[1,2-13C2]Octanesulfonic Acid (M2-6:2FTS)	37		35		32-182
Perfluoro[13C9]Nonanoic Acid (M9PFNA)	89		89		61-154
Perfluoro[13C8]Octanesulfonic Acid (M8PFOS)	88		86		65-151
Perfluoro[1,2,3,4,5,6-13C6]Decanoic Acid (M6PFDA)	88		84		65-150
1H,1H,2H,2H-Perfluoro[1,2-13C2]Decanesulfonic Acid (M2-8:2FTS)	44		43		25-186
N-Deuteriomethylperfluoro-1-octanesulfonamidoacetic Acid (d3-NMeFOSAA)	72		65		45-137
Perfluoro[1,2,3,4,5,6,7-13C7]Undecanoic Acid (M7-PFUDA)	86		81		64-158
Perfluoro[13C8]Octanesulfonamide (M8FOSA)	6		4		1-125
N-Deuterioethylperfluoro-1-octanesulfonamidoacetic Acid (d5-NEtFOSAA)	66		61		42-136
Perfluoro[1,2-13C2]Dodecanoic Acid (MPFDOA)	78		78		56-148
Perfluoro[1,2-13C2]Tetradecanoic Acid (M2PFTEDA)	66		63		26-160

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1274554-2 WG1274554-3								
Acenaphthene	76		71		31-137	7		50
Hexachlorobenzene	95		75		40-140	24		50
Bis(2-chloroethyl)ether	80		76		40-140	5		50
2-Chloronaphthalene	62		72		40-140	15		50
3,3'-Dichlorobenzidine	65		64		40-140	2		50
2,4-Dinitrotoluene	92		87		40-132	6		50
2,6-Dinitrotoluene	75		87		40-140	15		50
Fluoranthene	85		77		40-140	10		50
4-Chlorophenyl phenyl ether	88		73		40-140	19		50
4-Bromophenyl phenyl ether	94		77		40-140	20		50
Bis(2-chloroisopropyl)ether	64		59		40-140	8		50
Bis(2-chloroethoxy)methane	83		80		40-117	4		50
Hexachlorobutadiene	74		73		40-140	1		50
Hexachlorocyclopentadiene	57		70		40-140	20		50
Hexachloroethane	80		78		40-140	3		50
Isophorone	83		83		40-140	0		50
Naphthalene	68		72		40-140	6		50
Nitrobenzene	79		78		40-140	1		50
NDPA/DPA	95		78		36-157	20		50
n-Nitrosodi-n-propylamine	86		78		32-121	10		50
Bis(2-ethylhexyl)phthalate	94		88		40-140	7		50
Butyl benzyl phthalate	102		90		40-140	13		50
Di-n-butylphthalate	99		92		40-140	7		50

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1274554-2 WG1274554-3								
Di-n-octylphthalate	103		99		40-140	4		50
Diethyl phthalate	95		78		40-140	20		50
Dimethyl phthalate	70		79		40-140	12		50
Benzo(a)anthracene	80		77		40-140	4		50
Benzo(a)pyrene	76		75		40-140	1		50
Benzo(b)fluoranthene	70		80		40-140	13		50
Benzo(k)fluoranthene	84		73		40-140	14		50
Chrysene	77		73		40-140	5		50
Acenaphthylene	66		76		40-140	14		50
Anthracene	83		78		40-140	6		50
Benzo(ghi)perylene	81		78		40-140	4		50
Fluorene	97		77		40-140	23		50
Phenanthrene	78		73		40-140	7		50
Dibenzo(a,h)anthracene	85		82		40-140	4		50
Indeno(1,2,3-cd)pyrene	87		78		40-140	11		50
Pyrene	83		74		35-142	11		50
Biphenyl	69		80		37-127	15		50
4-Chloroaniline	58		56		40-140	4		50
2-Nitroaniline	74		88		47-134	17		50
3-Nitroaniline	74		69		26-129	7		50
4-Nitroaniline	97		78		41-125	22		50
Dibenzofuran	80		75		40-140	6		50
2-Methylnaphthalene	63		74		40-140	16		50

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

**Project Name:** MAIN AND BALCOM BCP SITE

**Lab Number:** L1936722

**Project Number:** B0239-016-001

**Report Date:** 08/26/19

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1274554-2 WG1274554-3								
1,2,4,5-Tetrachlorobenzene	65		77		40-117	17		50
Acetophenone	86		82		14-144	5		50
2,4,6-Trichlorophenol	68		81		30-130	17		50
p-Chloro-m-cresol	73		88		26-103	19		50
2-Chlorophenol	84		80		25-102	5		50
2,4-Dichlorophenol	87		74		30-130	16		50
2,4-Dimethylphenol	86		82		30-130	5		50
2-Nitrophenol	86		86		30-130	0		50
4-Nitrophenol	90		85		11-114	6		50
2,4-Dinitrophenol	62		68		4-130	9		50
4,6-Dinitro-o-cresol	109		96		10-130	13		50
Pentachlorophenol	90		78		17-109	14		50
Phenol	82		75		26-90	9		50
2-Methylphenol	88		85		30-130	3		50
3-Methylphenol/4-Methylphenol	86		81		30-130	6		50
2,4,5-Trichlorophenol	71		84		30-130	17		50
Carbazole	83		79		54-128	5		50
Atrazine	111		88		40-140	23		50
Benzaldehyde	93		75		40-140	21		50
Caprolactam	84		81		15-130	4		50
2,3,4,6-Tetrachlorophenol	87		78		40-140	11		50
1,4-Dioxane	68		65		40-140	5		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG1274554-2 WG1274554-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	78		67		25-120
Phenol-d6	81		74		10-120
Nitrobenzene-d5	79		75		23-120
2-Fluorobiphenyl	57		68		30-120
2,4,6-Tribromophenol	91		75		10-136
4-Terphenyl-d14	79		69		18-120



# PCBS

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04  
 Client ID: RANSOM TOPSOIL - COMP 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:05  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8082A  
 Analytical Date: 08/24/19 00:52  
 Analyst: HT  
 Percent Solids: 84%

Extraction Method: EPA 3546  
 Extraction Date: 08/20/19 20:03  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 08/21/19  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 08/21/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	38.2	3.40	1	A
Aroclor 1221	ND		ug/kg	38.2	3.83	1	A
Aroclor 1232	ND		ug/kg	38.2	8.10	1	A
Aroclor 1242	ND		ug/kg	38.2	5.15	1	A
Aroclor 1248	ND		ug/kg	38.2	5.74	1	A
Aroclor 1254	ND		ug/kg	38.2	4.18	1	A
Aroclor 1260	ND		ug/kg	38.2	7.06	1	A
Aroclor 1262	ND		ug/kg	38.2	4.86	1	A
Aroclor 1268	ND		ug/kg	38.2	3.96	1	A
PCBs, Total	ND		ug/kg	38.2	3.40	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	67		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	60		30-150	B
Decachlorobiphenyl	53		30-150	B

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

### Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A  
 Analytical Date: 08/20/19 12:01  
 Analyst: JM

Extraction Method: EPA 3546  
 Extraction Date: 08/20/19 03:39  
 Cleanup Method: EPA 3665A  
 Cleanup Date: 08/20/19  
 Cleanup Method: EPA 3660B  
 Cleanup Date: 08/20/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 04 Batch: WG1274328-1						
Aroclor 1016	ND		ug/kg	32.7	2.90	A
Aroclor 1221	ND		ug/kg	32.7	3.28	A
Aroclor 1232	ND		ug/kg	32.7	6.93	A
Aroclor 1242	ND		ug/kg	32.7	4.41	A
Aroclor 1248	ND		ug/kg	32.7	4.90	A
Aroclor 1254	ND		ug/kg	32.7	3.58	A
Aroclor 1260	ND		ug/kg	32.7	6.04	A
Aroclor 1262	ND		ug/kg	32.7	4.15	A
Aroclor 1268	ND		ug/kg	32.7	3.39	A
PCBs, Total	ND		ug/kg	32.7	2.90	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	85		30-150	B

# Lab Control Sample Analysis

## Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 04 Batch: WG1274328-2 WG1274328-3									
Aroclor 1016	77		74		40-140	4		50	A
Aroclor 1260	76		75		40-140	1		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	76		73		30-150	A
Decachlorobiphenyl	79		78		30-150	A
2,4,5,6-Tetrachloro-m-xylene	83		77		30-150	B
Decachlorobiphenyl	91		89		30-150	B

# PESTICIDES

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04  
 Client ID: RANSOM TOPSOIL - COMP 1  
 Sample Location: 1661 MAIN STREET BUFFALO NY

Date Collected: 08/14/19 12:05  
 Date Received: 08/14/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8081B  
 Analytical Date: 08/23/19 11:40  
 Analyst: BM  
 Percent Solids: 84%

Extraction Method: EPA 3546  
 Extraction Date: 08/21/19 00:41  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/23/19

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							
Delta-BHC	ND		ug/kg	1.81	0.355	1	A
Lindane	ND		ug/kg	0.755	0.337	1	A
Alpha-BHC	ND		ug/kg	0.755	0.214	1	A
Beta-BHC	ND		ug/kg	1.81	0.687	1	A
Heptachlor	ND		ug/kg	0.906	0.406	1	A
Aldrin	ND		ug/kg	1.81	0.638	1	A
Heptachlor epoxide	ND		ug/kg	3.40	1.02	1	A
Endrin	ND		ug/kg	0.755	0.310	1	A
Endrin aldehyde	ND		ug/kg	2.26	0.793	1	A
Endrin ketone	ND		ug/kg	1.81	0.466	1	A
Dieldrin	ND		ug/kg	1.13	0.566	1	A
4,4'-DDE	ND		ug/kg	1.81	0.419	1	A
4,4'-DDD	ND		ug/kg	1.81	0.646	1	A
4,4'-DDT	ND		ug/kg	3.40	1.46	1	A
Endosulfan I	ND		ug/kg	1.81	0.428	1	A
Endosulfan II	ND		ug/kg	1.81	0.605	1	A
Endosulfan sulfate	ND		ug/kg	0.755	0.359	1	A
Methoxychlor	ND		ug/kg	3.40	1.06	1	A
Toxaphene	ND		ug/kg	34.0	9.51	1	A
cis-Chlordane	ND		ug/kg	2.26	0.631	1	A
trans-Chlordane	ND		ug/kg	2.26	0.598	1	A
Chlordane	ND		ug/kg	14.7	6.00	1	A

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04

Date Collected: 08/14/19 12:05

Client ID: RANSOM TOPSOIL - COMP 1

Date Received: 08/14/19

Sample Location: 1661 MAIN STREET BUFFALO NY

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Organochlorine Pesticides by GC - Westborough Lab							

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	94		30-150	B
Decachlorobiphenyl	102		30-150	B
2,4,5,6-Tetrachloro-m-xylene	98		30-150	A
Decachlorobiphenyl	83		30-150	A



**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8081B  
**Analytical Date:** 08/22/19 17:51  
**Analyst:** BM

**Extraction Method:** EPA 3546  
**Extraction Date:** 08/20/19 13:46  
**Cleanup Method:** EPA 3620B  
**Cleanup Date:** 08/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 04 Batch: WG1274577-1						
Delta-BHC	ND		ug/kg	1.52	0.297	A
Lindane	ND		ug/kg	0.633	0.283	A
Alpha-BHC	ND		ug/kg	0.633	0.180	A
Beta-BHC	ND		ug/kg	1.52	0.576	A
Heptachlor	ND		ug/kg	0.759	0.340	A
Aldrin	ND		ug/kg	1.52	0.535	A
Heptachlor epoxide	ND		ug/kg	2.85	0.854	A
Endrin	ND		ug/kg	0.633	0.259	A
Endrin aldehyde	ND		ug/kg	1.90	0.664	A
Endrin ketone	ND		ug/kg	1.52	0.391	A
Dieldrin	ND		ug/kg	0.949	0.475	A
4,4'-DDE	ND		ug/kg	1.52	0.351	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	0.633	0.301	A
Methoxychlor	ND		ug/kg	2.85	0.886	A
Toxaphene	ND		ug/kg	28.5	7.97	A
cis-Chlordane	ND		ug/kg	1.90	0.529	A
trans-Chlordane	ND		ug/kg	1.90	0.501	A
Chlordane	ND		ug/kg	12.3	5.03	A

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

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

Analytical Method: 1,8081B  
 Analytical Date: 08/22/19 17:51  
 Analyst: BM

Extraction Method: EPA 3546  
 Extraction Date: 08/20/19 13:46  
 Cleanup Method: EPA 3620B  
 Cleanup Date: 08/22/19

Parameter	Result	Qualifier	Units	RL	MDL	Column
Organochlorine Pesticides by GC - Westborough Lab for sample(s): 04 Batch: WG1274577-1						

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	109		30-150	B
Decachlorobiphenyl	84		30-150	B
2,4,5,6-Tetrachloro-m-xylene	124		30-150	A
Decachlorobiphenyl	101		30-150	A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04 Batch: WG1274577-2 WG1274577-3									
Delta-BHC	138		134		30-150	3		30	A
Lindane	130		123		30-150	6		30	A
Alpha-BHC	146		141		30-150	3		30	A
Beta-BHC	129		126		30-150	2		30	A
Heptachlor	131		126		30-150	4		30	A
Aldrin	132		133		30-150	1		30	A
Heptachlor epoxide	129		130		30-150	1		30	A
Endrin	128		130		30-150	2		30	A
Endrin aldehyde	82		92		30-150	11		30	A
Endrin ketone	117		122		30-150	4		30	A
Dieldrin	131		133		30-150	2		30	A
4,4'-DDE	132		137		30-150	4		30	A
4,4'-DDD	129		133		30-150	3		30	A
4,4'-DDT	122		120		30-150	2		30	A
Endosulfan I	116		119		30-150	3		30	A
Endosulfan II	122		123		30-150	1		30	A
Endosulfan sulfate	106		109		30-150	3		30	A
Methoxychlor	104		107		30-150	3		30	A
cis-Chlordane	109		116		30-150	6		30	A
trans-Chlordane	113		108		30-150	5		30	A

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
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Organochlorine Pesticides by GC - Westborough Lab Associated sample(s): 04 Batch: WG1274577-2 WG1274577-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>	<b>Column</b>
2,4,5,6-Tetrachloro-m-xylene	120		116		30-150	B
Decachlorobiphenyl	87		94		30-150	B
2,4,5,6-Tetrachloro-m-xylene	136		130		30-150	A
Decachlorobiphenyl	103		106		30-150	A

## METALS

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**SAMPLE RESULTS**

Lab ID: L1936722-04

Date Collected: 08/14/19 12:05

Client ID: RANSOM TOPSOIL - COMP 1

Date Received: 08/14/19

Sample Location: 1661 MAIN STREET BUFFALO NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 84%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9860		mg/kg	9.38	2.53	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Antimony, Total	0.610	J	mg/kg	4.69	0.356	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Arsenic, Total	3.06		mg/kg	0.938	0.195	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Barium, Total	77.7		mg/kg	0.938	0.163	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Beryllium, Total	0.459	J	mg/kg	0.469	0.031	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.938	0.092	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Calcium, Total	4990		mg/kg	9.38	3.28	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Chromium, Total	36.1		mg/kg	0.938	0.090	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Cobalt, Total	4.98		mg/kg	1.88	0.156	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Copper, Total	10.4		mg/kg	0.938	0.242	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Iron, Total	15800		mg/kg	4.69	0.847	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Lead, Total	20.1		mg/kg	4.69	0.251	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Magnesium, Total	3310		mg/kg	9.38	1.44	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Manganese, Total	286		mg/kg	0.938	0.149	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Mercury, Total	0.058	J	mg/kg	0.075	0.049	1	08/21/19 04:30	08/21/19 11:36	EPA 7471B	1,7471B	GD
Nickel, Total	15.2		mg/kg	2.34	0.227	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Potassium, Total	485		mg/kg	234	13.5	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Selenium, Total	ND		mg/kg	1.88	0.242	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	0.938	0.265	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Sodium, Total	40.8	J	mg/kg	188	2.95	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	1.88	0.295	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Vanadium, Total	19.8		mg/kg	0.938	0.190	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB
Zinc, Total	67.8		mg/kg	4.69	0.275	2	08/19/19 21:00	08/20/19 20:39	EPA 3050B	1,6010D	AB



Project Name: MAIN AND BALCOM BCP SITE

Lab Number: L1936722

Project Number: B0239-016-001

Report Date: 08/26/19

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 04 Batch: WG1274217-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Iron, Total	ND		mg/kg	2.00	0.361	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Potassium, Total	ND		mg/kg	100	5.76	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Sodium, Total	3.90	J	mg/kg	80.0	1.26	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Vanadium, Total	ND		mg/kg	0.400	0.081	1	08/19/19 21:00	08/20/19 19:44	1,6010D	AB
Zinc, Total	ND		mg/kg	2.00	0.117	1	08/19/19 21:00	08/20/19 19:44	1,6010D	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): 04 Batch: WG1274822-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	08/21/19 04:30	08/21/19 10:29	1,7471B	GD





**Project Name:** MAIN AND BALCOM BCP SITE

**Lab Number:** L1936722

**Project Number:** B0239-016-001

**Report Date:** 08/26/19

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

### **Prep Information**

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Digestion Method: EPA 7471B

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04 Batch: WG1274217-2 SRM Lot Number: D105-540								
Aluminum, Total	70		-		51-149	-		
Antimony, Total	165		-		19-249	-		
Arsenic, Total	105		-		70-130	-		
Barium, Total	96		-		75-125	-		
Beryllium, Total	100		-		75-125	-		
Cadmium, Total	97		-		75-125	-		
Calcium, Total	92		-		73-127	-		
Chromium, Total	97		-		70-130	-		
Cobalt, Total	97		-		75-125	-		
Copper, Total	100		-		75-125	-		
Iron, Total	95		-		38-162	-		
Lead, Total	95		-		71-128	-		
Magnesium, Total	87		-		63-137	-		
Manganese, Total	92		-		76-124	-		
Nickel, Total	98		-		70-131	-		
Potassium, Total	84		-		60-140	-		
Selenium, Total	100		-		63-137	-		
Silver, Total	97		-		69-131	-		
Sodium, Total	103		-		37-162	-		
Thallium, Total	94		-		68-132	-		
Vanadium, Total	98		-		65-135	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04 Batch: WG1274217-2 SRM Lot Number: D105-540					
Zinc, Total	100	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 04 Batch: WG1274822-2 SRM Lot Number: D105-540					
Mercury, Total	106	-	60-141	-	

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04 QC Batch ID: WG1274217-3 QC Sample: L1935936-01 Client ID: MS Sample												
Aluminum, Total	661	161	1240	360	Q	-	-		75-125	-		20
Antimony, Total	ND	40.2	42.2	105		-	-		75-125	-		20
Arsenic, Total	0.332J	9.64	10.7	111		-	-		75-125	-		20
Barium, Total	0.966	161	169	104		-	-		75-125	-		20
Beryllium, Total	0.029J	4.02	4.46	111		-	-		75-125	-		20
Cadmium, Total	ND	4.1	4.27	104		-	-		75-125	-		20
Calcium, Total	35.2	803	872	104		-	-		75-125	-		20
Chromium, Total	3.15	16.1	21.5	114		-	-		75-125	-		20
Cobalt, Total	0.209J	40.2	40.3	100		-	-		75-125	-		20
Copper, Total	0.696	20.1	21.2	102		-	-		75-125	-		20
Iron, Total	991	80.3	1790	994	Q	-	-		75-125	-		20
Lead, Total	0.606J	41	42.0	102		-	-		75-125	-		20
Magnesium, Total	31.0	803	883	106		-	-		75-125	-		20
Manganese, Total	3.96	40.2	46.5	106		-	-		75-125	-		20
Nickel, Total	0.618J	40.2	40.7	101		-	-		75-125	-		20
Potassium, Total	42.9J	803	920	114		-	-		75-125	-		20
Selenium, Total	ND	9.64	9.79	102		-	-		75-125	-		20
Silver, Total	ND	24.1	25.4	105		-	-		75-125	-		20
Sodium, Total	41.2J	803	879	109		-	-		75-125	-		20
Thallium, Total	ND	9.64	9.11	94		-	-		75-125	-		20
Vanadium, Total	3.34	40.2	48.3	112		-	-		75-125	-		20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

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): 04 QC Batch ID: WG1274217-3 QC Sample: L1935936-01 Client ID: MS Sample									
Zinc, Total	1.31J	40.2	44.6	111	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 04 QC Batch ID: WG1274822-3 WG1274822-4 QC Sample: L1936709-03 Client ID: MS Sample									
Mercury, Total	0.061J	0.132	0.154	117	0.163	123	Q 80-120	6	20
Total Metals - Mansfield Lab Associated sample(s): 04 QC Batch ID: WG1274822-5 WG1274822-6 QC Sample: L1936709-04 Client ID: MS Sample									
Mercury, Total	0.073	0.135	0.226	113	0.208	100	80-120	8	20

**Lab Duplicate Analysis**  
*Batch Quality Control***Project Name:** MAIN AND BALCOM BCP SITE**Project Number:** B0239-016-001**Lab Number:** L1936722**Report Date:** 08/26/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 04 QC Batch ID: WG1274217-4 QC Sample: L1935936-01 Client ID: DUP Sample						
Lead, Total	0.606J	0.887J	mg/kg	NC		20

# **INORGANICS & MISCELLANEOUS**



**Project Name:** MAIN AND BALCOM BCP SITE**Project Number:** B0239-016-001**Lab Number:** L1936722**Report Date:** 08/26/19**SAMPLE RESULTS****Lab ID:** L1936722-01**Client ID:** RANSOM TOPSOIL - GRAB 1**Sample Location:** 1661 MAIN STREET BUFFALO NY**Date Collected:** 08/14/19 11:50**Date Received:** 08/14/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.9		%	0.100	NA	1	-	08/15/19 13:44	121,2540G	RI



**Project Name:** MAIN AND BALCOM BCP SITE**Project Number:** B0239-016-001**Lab Number:** L1936722**Report Date:** 08/26/19**SAMPLE RESULTS****Lab ID:** L1936722-02**Client ID:** RANSOM TOPSOIL - GRAB 2**Sample Location:** 1661 MAIN STREET BUFFALO NY**Date Collected:** 08/14/19 11:55**Date Received:** 08/14/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.2		%	0.100	NA	1	-	08/15/19 13:44	121,2540G	RI



**Project Name:** MAIN AND BALCOM BCP SITE**Project Number:** B0239-016-001**Lab Number:** L1936722**Report Date:** 08/26/19**SAMPLE RESULTS****Lab ID:** L1936722-03**Client ID:** RANSOM TOPSOIL - GRAB 3**Sample Location:** 1661 MAIN STREET BUFFALO NY**Date Collected:** 08/14/19 12:00**Date Received:** 08/14/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	81.2		%	0.100	NA	1	-	08/15/19 13:44	121,2540G	RI



**Project Name:** MAIN AND BALCOM BCP SITE**Project Number:** B0239-016-001**Lab Number:** L1936722**Report Date:** 08/26/19**SAMPLE RESULTS****Lab ID:** L1936722-04**Client ID:** RANSOM TOPSOIL - COMP 1**Sample Location:** 1661 MAIN STREET BUFFALO NY**Date Collected:** 08/14/19 12:05**Date Received:** 08/14/19**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.1		%	0.100	NA	1	-	08/15/19 13:29	121,2540G	RI



# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** MAIN AND BALCOM BCP SITE

**Project Number:** B0239-016-001

**Lab Number:** L1936722

**Report Date:** 08/26/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 04 QC Batch ID: WG1272787-1 QC Sample: L1936464-13 Client ID: DUP Sample						
Solids, Total	82.1	83.9	%	2		20
General Chemistry - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG1272818-1 QC Sample: L1936621-01 Client ID: DUP Sample						
Solids, Total	90.6	90.0	%	1		20

**Project Name:** MAIN AND BALCOM BCP SITE**Lab Number:** L1936722**Project Number:** B0239-016-001**Report Date:** 08/26/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

<b>Cooler</b>	<b>Custody Seal</b>
A	Absent

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1936722-01A	Glass 120ml/4oz unpreserved	A	NA		3.3	Y	Absent		NYTCL-8260-R2(14),TS(7)
L1936722-01X	Vial MeOH preserved split	A	NA		3.3	Y	Absent		NYTCL-8260-R2(14)
L1936722-01Y	Vial Water preserved split	A	NA		3.3	Y	Absent	20-AUG-19 05:05	NYTCL-8260-R2(14)
L1936722-01Z	Vial Water preserved split	A	NA		3.3	Y	Absent	20-AUG-19 05:05	NYTCL-8260-R2(14)
L1936722-02A	Glass 120ml/4oz unpreserved	A	NA		3.3	Y	Absent		NYTCL-8260-R2(14),TS(7)
L1936722-02X	Vial MeOH preserved split	A	NA		3.3	Y	Absent		NYTCL-8260-R2(14)
L1936722-02Y	Vial Water preserved split	A	NA		3.3	Y	Absent	20-AUG-19 05:05	NYTCL-8260-R2(14)
L1936722-02Z	Vial Water preserved split	A	NA		3.3	Y	Absent	20-AUG-19 05:05	NYTCL-8260-R2(14)
L1936722-03A	Glass 120ml/4oz unpreserved	A	NA		3.3	Y	Absent		NYTCL-8260-R2(14),TS(7)
L1936722-03X	Vial MeOH preserved split	A	NA		3.3	Y	Absent		NYTCL-8260-R2(14)
L1936722-03Y	Vial Water preserved split	A	NA		3.3	Y	Absent	20-AUG-19 05:05	NYTCL-8260-R2(14)
L1936722-03Z	Vial Water preserved split	A	NA		3.3	Y	Absent	20-AUG-19 05:05	NYTCL-8260-R2(14)
L1936722-04A	Plastic 2oz unpreserved for TS	A	NA		3.3	Y	Absent		TS(7)
L1936722-04B	Glass 120ml/4oz unpreserved	A	NA		3.3	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)
L1936722-04C	Glass 250ml/8oz unpreserved	A	NA		3.3	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L1936722-04D	Plastic 8oz unpreserved	A	NA		3.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1936722-04E	Plastic 8oz unpreserved	A	NA		3.3	Y	Absent		A2-NY-537-ISOTOPE(28)
L1936722-04F	Glass 250ml/8oz unpreserved	A	NA		3.3	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)
L1936722-04S	Glass 120ml/4oz unpreserved	A	NA		3.3	Y	Absent		NYTCL-8270(14),NYTCL-8081(14),NYTCL-8082(14)

**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

## GLOSSARY

### Acronyms

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

### Footnotes

Report Format: DU Report with 'J' Qualifiers



**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

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

### Terms

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

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

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

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

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

**PFAS Total:** With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

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

### Data Qualifiers

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

Report Format: DU Report with 'J' Qualifiers





**Project Name:** MAIN AND BALCOM BCP SITE  
**Project Number:** B0239-016-001

**Lab Number:** L1936722  
**Report Date:** 08/26/19

## 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.
- 122 Determination of Selected Perfluorinated Alkyl Acids in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS). EPA Method 537, EPA/600/R-08/092. Version 1.1, September 2009.

## LIMITATION OF LIABILITIES

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

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



**Alpha Analytical, Inc.**Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

Revision 15

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**Certification Information**

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

**Westborough Facility****EPA 624/624.1:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO<sub>2</sub>, NO<sub>3</sub>.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,


3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

**Biological Tissue Matrix:** EPA 3050B

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

**Westborough Facility:****Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1 Hg.****EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1 Hg.****SM2340B**

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

 <b>NEW YORK CHAIN OF CUSTODY</b> Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		<b>Service Centers</b> Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page _____ of _____		Date Rec'd in Lab <b>8/15/19</b>		ALPHA Job # <b>L1936722</b>														
		<b>Project Information</b> Project Name: <b>TOPSOIL REUSE</b> Project Location: <b>1150 RANSOM RD</b> Project # <b>B0239-016-001</b> (Use Project name as Project #) <input type="checkbox"/>		<b>Deliverables</b> <input type="checkbox"/> ASP-A <input type="checkbox"/> ASP-B <input type="checkbox"/> EQUIS (1 File) <input type="checkbox"/> EQUIS (4 File) <input type="checkbox"/> Other		<b>Billing Information</b> <input checked="" type="checkbox"/> Same as Client Info PO # _____																
		<b>Client Information</b> Client: <b>BENCHMARK ENV SCI</b> Address: <b>2555 HAMBURG TRPK</b> <b>BUFFALO, NY 14218</b> Phone: <b>716-856-0529</b> Fax: _____ Email: <b>nmunley@turnkeyllc.com</b>		<b>Regulatory Requirement</b> <input type="checkbox"/> NY TOGS <input type="checkbox"/> NY Part 375 <input type="checkbox"/> AWQ Standards <input type="checkbox"/> NY CP-51 <input type="checkbox"/> NY Restricted Use <input type="checkbox"/> Other <input type="checkbox"/> NY Unrestricted Use <input type="checkbox"/> NYC Sewer Discharge		<b>Disposal Site Information</b> Please identify below location of applicable disposal facilities. Disposal Facility: <input type="checkbox"/> NJ <input checked="" type="checkbox"/> NY <input type="checkbox"/> Other: _____																
<b>Turn-Around Time</b> Standard <input checked="" type="checkbox"/> Due Date: _____ Rush (only if pre approved) <input type="checkbox"/> # of Days: _____		<b>ANALYSIS</b>		<b>Sample Filtration</b> <input type="checkbox"/> Done <input type="checkbox"/> Lab to do Preservation <input type="checkbox"/> Lab to do (Please Specify below)		Total Bottles																
These samples have been previously analyzed by Alpha <input type="checkbox"/>		Other project specific requirements/comments: _____		Please specify Metals or TAL. _____																		
ALPHA Lab ID (Lab Use Only)		Sample ID		Collection			Sample Matrix		Sampler's Initials		TEL VOC		TEL SVOC		TAL METALS		PCB		PESTICIDES		PFAS	
				Date Time																		
Preservative Code: A = None B = HCl C = HNO <sub>3</sub> D = H <sub>2</sub> SO <sub>4</sub> E = NaOH F = MeOH G = NaHSO <sub>4</sub> H = Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub> K/E = Zn Ac/NaOH O = Other		Container Code P = Plastic A = Amber Glass V = Vial G = Glass B = Bacteria Cup C = Cube O = Other E = Encore D = BOD Bottle		Westboro: Certification No: MA935 Mansfield: Certification No: MA015		Container Type		Preservative														
Form No: 01-25 HC (rev. 30-Sept-2013)		Relinquished By: <b>Chad M Roberts</b> <b>Jim AL AAL</b>		Date/Time <b>8/14/19 14:53</b> <b>8/14/19 17:30</b>		Received By: <b>Jim AL AAL</b> <b>[Signature]</b>		Date/Time <b>8/14/19 16:15</b> <b>8/15/19 01:30</b>		Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)												