

# **89 LaSalle Avenue Site**

**ERIE, NEW YORK**

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## **Periodic Review Report**

**NYSDEC Site Number: C915283**

**Prepared for:**

Legacy LaSalle LLC  
89 LaSalle Avenue Site  
Cheektowaga, New York 14225

**Prepared by:**

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**APRIL 2020**

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## **1.0 SITE OVERVIEW**

### **1.1 Site Location & Description**

The site, comprised of three (3) separate parcels, is addressed at 67 LaSalle Ave, 89 LaSalle Ave, and portions of 71 NY L&W RR (71 Cordova Ave.), and located in the City of Buffalo, County of Erie, New York and is identified as Section 79.7, Block 2 and Lots 1.1, 11, and 16.11 on the Erie County Tax Map. The site is an approximately 9.2 acre area bounded by commercial properties and LaSalle Avenue to the north, McCarthy Park to the south, Cordova Avenue to the east, and residential properties located on William Price Parkway to the west (see Site Vicinity Map, Figure 1-1). The site was remediated in accordance with Brownfield Cleanup Agreement (BCA) Site# C915283, which was executed on June 6, 2014.

### **1.2 Nature and Extent of Contamination Prior to Remediation**

Prior to site remediation under the Brownfields Cleanup Program (BCP), a Remedial Investigation (RI) was performed to characterize the nature and extent of contamination at the site. The RI activities conducted on the Site as preparation for remedial efforts included the installation of four (4) wells, the advancement of fifteen (15) borings, the excavation of nineteen (19) test pits, and the collection of four (4) surface soil samples. Generally, the RI determined that the historic use of the Site as a landfill was evident in analytical results from the initial RI identifying the widespread presence of low levels of heavy metals and Polycyclic Aromatic Hydrocarbons (PAHs) as the Constituents of Primary Concern (COPCs) in soil/fill across the Site, and specifically at several locations identified across the central portion of the Site where the COPC concentrations were elevated relative the rest of the Site. Previous investigations had been conducted on portions of the BCP Site referenced as the LaSalle Reservoir Site, which generally encompassed the southeastern half of the Site (the former Buffalo Crushed Stone quarry area).

Four (4) impacted locations identified during the initial RI were subject to a supplemental remedial investigation delineating the elevated COPC impacts detected in these areas of concern. Findings from the supplemental test pit investigation of the four impacted areas of interest confirmed that there was no evidence of significant lateral or vertical contamination surrounding the original soil boring locations. Levels of COPCs detected in the supplemental test pits indicated that concentrations of COPCs, where detected, were below site-specific soil cleanup objectives as proposed in the Final RI Report and consistent with observations of RI analytical results across the site. The heterogeneous nature of the soil/fill across the Site, and analytical results indicating widespread low-level concentrations of COPCs above the Restricted Residential SCOs throughout Site overburden, demonstrated that a source or sources of contamination found at the four original areas of concern was not present.

### 1.3 Site Remedial Program

The site was remediated in accordance with the NYSDEC-approved 89 LaSalle RI-IRM-AA Report dated January 2015.

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

- Excavation of soil/fill identified at four RI boring locations as significantly exceeding restricted residential SCOs, to a minimum depth of 5 feet or bedrock where applicable;
- Construction and maintenance of a soil cover system consisting of two feet of clean imported material, and/or impervious material (i.e, asphalt pavement, concrete sidewalks and buildings) differentiated by a demarcation layer to prevent human exposure to remaining contaminated soil/fill remaining at the site;
- Execution and recording of an Environmental Easement to restrict land use and prevent future exposure to any contamination remaining at the site.
- Development and implementation of a Site Management Plan (SMP) for long term management of remaining contamination as required by the Environmental Easement, which includes plans for: (1) Institutional and Engineering Controls, (2) monitoring, (3) maintenance and (4) reporting;

Remedial activities were completed at the site in February 2015 (hotspot soil/fill excavations), and between April and October 2015 installation of the Site's cover system was incrementally installed as the Site's development progressed through construction and final site restoration.

A total of 350 tons of contaminated soil/fill was excavated and removed from the four hotspot locations identified in the RI Report (Boring locations B-5, B-7, B-8 and B-9) and illustrated on Figure 5 in the SMP. The excavated hotspot locations were subsequently backfilled with excess soils excavated and stockpiled from other uncontaminated locations on the Site, primarily storm sewer and water line utility trenching locations. In addition, approximately 1300 tons of topsoil mixed with vegetative material was also stripped from the upper 3-6 inches of portions of the site and disposed of off-site. This material was not identified as exceeding the applicable SCOs, however it was not suitable for reuse on the Site as part of the final cover system.

After completion of the remedial work, some contamination was left in the subsurface at this site, which is hereafter referred to as "remaining contamination." A layer of geotextile fabric has been installed as a demarcation layer in those areas of the Site where two feet of clean soil cover is the component of the cover system. This geotextile was placed on top of the subgrade soil/fill prior to placement of clean soil. At other locations on the Site where the cover system consists of impervious asphalt or concrete, a layer of geotextile has also been placed between the remaining soil/fill and clean structural gravel or crushed stone fill. In areas where buildings or structures act as the final cover system, a minimum of two feet, and in most areas four feet, of clean imported material was placed prior to placement of concrete pads and the erection of structures. In the case of Building 1, clean subbase material was placed, covered with clean topsoil and seeded in the same manner as other green space on the Site, until such time the building foundations and concrete pad were poured and the topsoil and vegetative cover stripped down to the clean subbase material.

The SMP was prepared to manage remaining contamination at the site until the Environmental Easements are extinguished in accordance with ECL Article 71, Title 36. The SMP addresses the means for implementing the Institutional Controls (ICs) and Engineering Controls (ECs) that are required by the Environmental Easement for the Site.

#### **1.4 Purpose of Periodic Review Report**

This Periodic Review Report (PRR) presents information on the maintenance, monitoring and compliance activities performed at the 89 LaSalle Avenue Site No. C915283 covering the period from April 1, 2019 to March 30, 2020.

## 2.0 REMEDIAL SYSTEMS COMPLIANCE

### 2.1.1 General

Since remaining contaminated soil and groundwater exists beneath the site, Engineering Controls and Institutional Controls (EC/ICs) are required to protect human health and the environment.

Site specific SCOs were developed and approved based on 6NYCRR Part 375 Restricted Residential SCOs. These SCOs were employed as soil cleanup goals to achieve the remedial action objectives for the Site of minimizing the potential for exposure of remaining soil contaminants to humans and the environment. The SCOs established are soil concentration limits protective of human health and surface water quality. Achievement of the site specific SCOs was confirmed through verification sampling.

The selected Engineering Control implemented at the Site (following completion of remediation activities) was the construction and maintenance of a soil cover system consisting of two feet of clean imported material and/or impervious material (i.e., asphalt pavement, concrete sidewalks and buildings), differentiated by a demarcation layer to prevent human exposure to remaining contaminated soil/fill.

The approved SMP requires the implementation of a long-term monitoring plan that incorporates monitoring and maintenance of the Site cover system to identify evidence of excessive soil erosion to soil cover systems or deterioration of asphalt or concrete structures that might indicate that off-site transport of soil/fill is likely to occur or is occurring. In addition, semi-annual stormwater and sediment monitoring and analysis is performed to further assess performance of the cover system.

The results of the required monitoring activities and annual inspection are presented in Section 4 "Monitoring Plan Compliance Report".

## 3.0 INSTITUTIONAL CONTROL COMPLIANCE

### 3.1 Introduction

#### 3.1.1 General

Since remaining contaminated soil and groundwater exist beneath the Site, Engineering Controls and Institutional Controls (EC/ICs) 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 EC/ICs at the site. The EC/IC Plan is one component of the SMP and is subject to revision by NYSDEC. The goals of the ICs are to: (1) implement, maintain and monitor Engineering Control systems; (2) prevent future exposure to remaining contamination by controlling disturbances of the subsurface contamination; and, (3) limit the use and development of the Site to Restricted Residential uses only. Adherence to these Institutional Controls is required by the Environmental Easement and will be implemented under this Site Management Plan.

### 3.2 Description of Institutional Controls

The Institutional Controls are:

- Compliance with the Environmental Easements and the SMP by the Grantor and the Grantor's successors and assigns;
- All Engineering Controls must be maintained as specified in the SMP;
- All Engineering Controls on the Controlled Property must be inspected at a frequency and in a manner defined in the SMP;
- Stormwater, sediment and other environmental or public health monitoring must be performed as defined in the SMP;
- Data and information pertinent to Site Management of the Controlled Property must be reported at the frequency and in a manner defined in the SMP.

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 only be used for restricted residential use, provided that the long-term Engineering and Institutional Controls included in the SMP are employed;
- The property may not be used for a higher level of use, such as unrestricted residential use without additional remediation and amendment of the Environmental Easement, as approved by the NYSDEC;
- All future activities on the property that will disturb remaining contaminated material must be conducted in accordance with the SMP;
- The use of the groundwater underlying the property is prohibited without treatment rendering it safe for intended use;
- Vegetable gardens and farming on the property are prohibited; and,
- The site owner or remedial party will submit to NYSDEC a written statement that certifies, under penalty of perjury, that: (1) controls employed at the Controlled Property are

unchanged from the previous certification or that any changes to the controls were approved by the NYSDEC; and, (2) nothing has occurred that impairs the ability of the controls to protect public health and environment or that constitute a violation or failure to comply with the SMP. NYSDEC retains the right to access such Controlled Property at any time in order to evaluate the continued maintenance of any and all controls. This certification shall be submitted annually, or at an alternate frequency that NYSDEC may allow and will be made by an expert that the NYSDEC finds acceptable.

The Environmental Easement summarizing the site use restrictions and requirements for the Site was executed by the Department on December 14, 2015, and filed with the Erie County Clerk on December 15, 2015. A copy of the easement and proof of filing is provided in Appendix A of the SMP.

### **3.2.1 Status of ICs**

During the reporting period covered by this PRR, all ICs were in place and effective in meeting their objectives. There was no intrusive work performed on the BCP Site during the reporting period covered by this PRR.

There are no corrective measures required to ensure the effectiveness of ICs at this time based on the results of the monitoring and semi-annual inspection performed.

Stormwater and sediment samples for the current PRR period were collected on November 05, 2019 & March 30 2020, when stormwater effluent was present in sufficient quantity for sampling at the MH-1 structure. The next sampling event is tentatively scheduled for October 2020.

## 4.0 MONITORING PLAN COMPLIANCE REPORT

### 4.1 Introduction

#### 4.1.1 General

The Monitoring Plan describes the measures for evaluating the performance and effectiveness of the remedy to reduce or mitigate contamination at the Site, the soil cover system, and all affected site media identified below. The Monitoring Plan may only be revised with the approval of NYSDEC.

#### 4.1.2 Schedule

Semi-annual monitoring and inspection of the performance of the remedy and overall reduction in contamination on-site will be conducted for the first 5 years. The frequency thereafter will be determined by NYSDEC. Characterizations of the quality of stormwater and sediment generated as runoff from the Site's engineered cover system have been selected as representative Site monitoring media. Trends in contaminant levels in stormwater and sediment in the affected areas will be evaluated to determine if the remedy continues to be effective in achieving remedial goals. The monitoring and inspection program are summarized in detail in Table 4-1. The results of the monitoring performed are discussed further in Section 4.2.

**Table 4-1: Monitoring/Inspection Schedule**

\* The frequency of events will be conducted as specified until otherwise approved by NYSDEC and NYSDOH

Monitoring Program	Frequency*	Matrix	Analysis/Comments
Stormwater Discharge to City of Buffalo Storm Sewer System	Semi-annually	Stormwater runoff and sediment (when present)	TAL Metals (Method 6010C), Semi-volatile compounds (Method 8270D SIM), Total Solids [sediment only] (SM 2540)
Semi-annual Site Inspection	Semi-annually	Visually inspect entire site for cover system integrity and signs of unacceptable deterioration or other damage to cover system components that may result in exposure to contaminated soil	Prepare a detailed written description of the condition of all cover system components. Include a photographic record of inspection areas

## 4.2 Monitoring Program Results

### 4.2.1 Surface Water and Sediment Monitoring

In November 2019 & March 2020, stormwater and sediment grab samples were collected from the manhole within 6 hours of a precipitation event exceeding 0.5 inch. The samples were collected at one location, in accordance with the Legacy LaSalle C915283 Site SMP.

Stormwater and associated sediment samples were collected from the discharge of Manhole 1 (designated MH-1) located at the northwest corner of the BCP Site. MH-1 subsequently discharges to the City of Buffalo storm sewer system in LaSalle Ave.

Stormwater samples were analyzed for Semi-Volatiles and Total Metals. Sediment samples were analyzed for Semi-Volatiles, Total Metals and Total Solids. The analytical results from the November 2019 and March 2020 sampling events are summarized in Table 4-2. Table 4.2 presents sample detections compared to NYSDEC surface water standards (NYSDEC 1998), Class A Freshwater Sediment Guidance Values (Table 5) from the “*Screening and Assessment of Contaminated Sediments*”, NYSDEC, July 2014, and Part 365 Restricted Residential SCOs.

Detections above NYSDEC surface water standards for the following SVOCs were found in the November 2019 stormwater sample:

- benzo[a]anthracene (0.00004 ppm)
- benzo[b]fluoranthene (0.00003 ppm)
- benzo[k]fluoranthene (0.00001 ppm)
- chrysene (0.00002 ppm)
- Indeno[1,2,3-cd]pyrene (0.00002 ppm)
- iron (0.387ppm)

Detections above NYSDEC surface water standards for the following SVOCs were found in the March 2020 stormwater sample:

- benzo[b]fluoranthene (0.00003 ppm)
- Indeno[1,2,3-cd]pyrene (0.00002 ppm)
- iron (0.746 ppm)
- sodium (27.2 ppm)

the majority of the PAH detections were estimated values marginally above the surface water standards. No exceedances of the Class A freshwater sediment guidance values were detected in the November 2019 or March 2020 sediment samples.

A copy of the laboratory Analytical Reports for the stormwater and sediment analyses performed is attached in Appendix A.

### 4.3 Semi-Annual Site Inspection Results

Site inspections were performed on November 05, 2019 and March 30, 2020, to address the frequency of twice per year established by the SMP Monitoring Program requirements. A Site-wide inspection form was completed (Appendix B) during each inspection. The form compiles sufficient information to assess the following:

- Compliance with all ICs, including Site usage;
- General Site conditions at the time of the inspection;
- The site management activities being conducted including, where appropriate, confirmation sampling and a health and safety inspection;
- Compliance with permits and schedules included in the Operation and Maintenance Plan; and,
- Confirmation that Site records are up to date.

All areas of the Site were carefully inspected to assess the condition of surface soil, asphalt and concrete areas to determine if erosion or related deterioration is occurring that would jeopardize the integrity of soil, asphalt or concrete structures preventing the transport of soil/fill onto surrounding properties.

Photographic logs containing photos taken during the November 2019 and March 2020 inspections are provided in Appendix B.

### 4.4 Summary of Off-Site Activities During Reporting Period

No intrusive activities were performed off-site during the period covered by this PRR.

### 4.5 Conclusions and Recommendations

At the time of the semi-annual inspections, the Site was fully compliant with the institutional controls described in the SMP. All monitoring results and inspection results were acceptable with only low-level detection of limited PAHs and metals in the stormwater at the Site outfall stormwater discharge and no evidence of erosion of the soil cover or hardscape portions of the cover on the Site.

Semi-annual stormwater and sediment sampling will continue to be scheduled for future monitoring events in the October and March timeframes to be representative of stormwater discharge events from the Site.

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## 5.0 OVERALL CONCLUSIONS AND RECOMMENDATIONS

Based on the monitoring and inspection results described in Section 4 and conducted during the timeframe covered by this PRR, compliance with all relevant components of the SMP ICs was achieved. A copy of the completed and certified "Site Management Periodic Review Report Notice Institutional and Engineering Controls Certification Form" is attached in Appendix C.

The results of the stormwater and sediment sample results after four years of development and the overall condition of the site and integrity of the final soil cover system are indicative that the remedy performed under the BCP is achieving its intended goals of minimizing, to the extent feasible, exposure of remaining contamination to the environment through stormwater runoff and associated sediment erosion.

The next Semi-Annual Inspection will be performed in October of 2020. The next semi-annual SMP sampling event will be performed in September/October of 2020, contingent on stormwater availability for sampling.

## **6.0 REFERENCES**

1. Golder Associates Inc., Final Engineering Report, 89 LaSalle Ave. Site, NYSDEC Site No. C915283, December 2015.
2. Golder Associates Inc., Site Management Plan, 89 LaSalle Ave. Site, NYSDEC Site No. C915283, prepared for Legacy LaSalle LLC, December 2015.

**TABLE 4-2**

**(TABLE 4-1 IN TEXT)**

TABLE 4-2  
SUMMARY OF ANALYTICAL RESULTS FOR STORMWATER & SEDIMENT SAMPLES  
89 LASALLE AVENUE BCP SITE # C915283  
LEGACY LASALLE, LLC.  
BUFFALO, NY

Lab ID	Water Quality Standards Surface Waters and Groundwater (6 NYCRR Part 703)  (ppm)	Class A Freshwater Sediment Guidance Values*  (ppm)	Restricted Residential SCOs Table 375-6.8(b)  (ppm)	L1952404-01 Stormwater <sup>1</sup>	L1952404-02 Sediment	L2013833 Stormwater <sup>1</sup>	L2013833 Sediment
Sample ID				MH-1	MH-1	MH-1	MH-1
Sample Date				11/5/19	11/5/19	3/30/20	3/30/20
Units				(ppm)	(ppm)	(ppm)	(ppm)
<b>Semivolatile Organics (Method 8270D-SIM)</b>							
2-Methylnapthalene	NS	NS	NS	0.00003 J	ND	ND	ND
2-Methylphenol	NS	NS	NS	ND	ND	ND	ND
Acenaphthene	0.02	NS	100	ND	0.026 J	ND	0.025 J
Acenaphthylene	NS	NS	100	ND	ND	ND	ND
Anthracene	0.05	NS	100	ND	0.074 J	ND	0.071 J
Benzaldehyde	NS	NS	NS	ND	ND	ND	ND
Benzo[a]anthracene	0.000002	NS	1	0.00004 J	0.22	ND	0.2
Benzo[a]pyrene	NS	NS	1	0.00002 J	0.21	ND	0.19
Benzo[b]fluoranthene	0.000002	NS	1	0.00003 J	0.3	0.00003 J	0.25
Benzo[g,h,i]perylene	NS	NS	100	0.00002 J	0.18 J	0.00002 J	0.2
Benzo[k]fluoranthene	0.000002	NS	3.9	0.00001 J	0.073 J	ND	0.073 J
Biphenyl	NS	NS	1	ND	ND	ND	ND
Bis(2-ethylhexyl) phthalate	0.005	360	NS	0.002 J	ND	ND	0.35
Butyl benzyl phthalate	NS	NS	NS	ND	ND	ND	0.093 J
Carbazole	NS	NS	NS	ND	0.042 J	ND	0.041 J
Chrysene	0.000002	NS	3.9	0.00002 J	0.22	0.00001 J	0.25
Dibenzo(a,h)anthracene	NS	NS	0.33	ND	0.036 J	ND	0.036 J
Dibenzofuran	NS	NS	NA	ND	0.019 J	ND	ND
Di-n-butyl phthalate	0.05	NS	NS	ND	ND	ND	ND
Di-n-octyl phthalate	0.05	NS	NS	ND	ND	ND	ND
Diethyl phthalate	NS	NS	NS	ND	ND	ND	ND
Fluoranthene	0.05	NS	100	0.00004 J	0.43	0.00004 J	0.46
Fluorene	0.05	NS	100	ND	0.032 J	ND	0.027 J
Indeno[1,2,3-cd]pyrene	0.000002	NS	0.5	0.00002 J	0.15 J	0.00002 J	0.13 J
Napthalene	NS	NS	100	ND	ND	ND	ND
Phenanthrene	NS	NS	100	0.00004 J	0.29	ND	0.3
Pyrene	0.05	NS	100	0.00003 J	0.35	0.00003 J	0.37
Pentachlorophenol	0.001	NS	6.7	ND	ND	0.00032 J	ND
3-Methylphenol/4-Methylphenol	NS	NS	NS	ND	0.071 J	ND	ND
<b>Total Metals (SW 846 Series)</b>							
Aluminum	NS	NS	NS	0.358	9580	0.543	841
Antimony	0.003	NS	NS	ND	0.742 J	ND	ND
Arsenic	0.025	<10	16	0.00037 J	3.81	0.0006	2.82
Barium	NS	NS	400	0.00688	82.6	0.00964	9.14
Beryllium	0.003	NS	72	ND	0.485 J	ND	ND
Cadmium	0.003	<1	4.3	0.00081	ND	0.0001 J	ND
Calcium	NA	NS	NS	14.6	36300	10.9	147000
Chromium	0.05	<43	180	0.00074 J	13.9	0.00293	5.12
Cobalt	NS	NS	NS	0.00024 J	7.88	0.00037 J	1.23 J
Copper	0.2	<32	270	0.00208	15.8	0.0044	7.65
Iron	0.3	NS	NA	0.387	17300	0.746	4260
Lead	0.025	<36	400	0.00316	14.2	0.00383	7.74
Magnesium	NA	NS	NS	0.945	11300	0.986	12700
Manganese	0.3	NS	2000	0.01426	422	0.02104	158
Mercury	0.0007	<0.2	0.81	ND	ND	ND	ND
Nickel	0.1	<23	310	0.00092 J	16.2	0.00237	5.07
Potassium	NS	NS	NA	0.788	853	1.36	236
Selenium	NS	NS	180	ND	ND	ND	0.77 J
Silver	NS	<1	180	ND	ND	ND	ND
Sodium	20	NS	NS	1.24	78.9	27.2	202
Thalium	NS	NS	NS	ND	ND	ND	ND
Vanadium	NS	NS	NS	ND	18.9	0.00174 J	7.41
Zinc	NS	<120	10000	0.01083	58.3	0.02204	17.3

TABLE 4-2  
SUMMARY OF ANALYTICAL RESULTS FOR STORMWATER & SEDIMENT SAMPLES  
89 LASALLE AVENUE BCP SITE # C915283  
LEGACY LASALLE, LLC.  
BUFFALO, NY

Notes & Data Qualifiers:

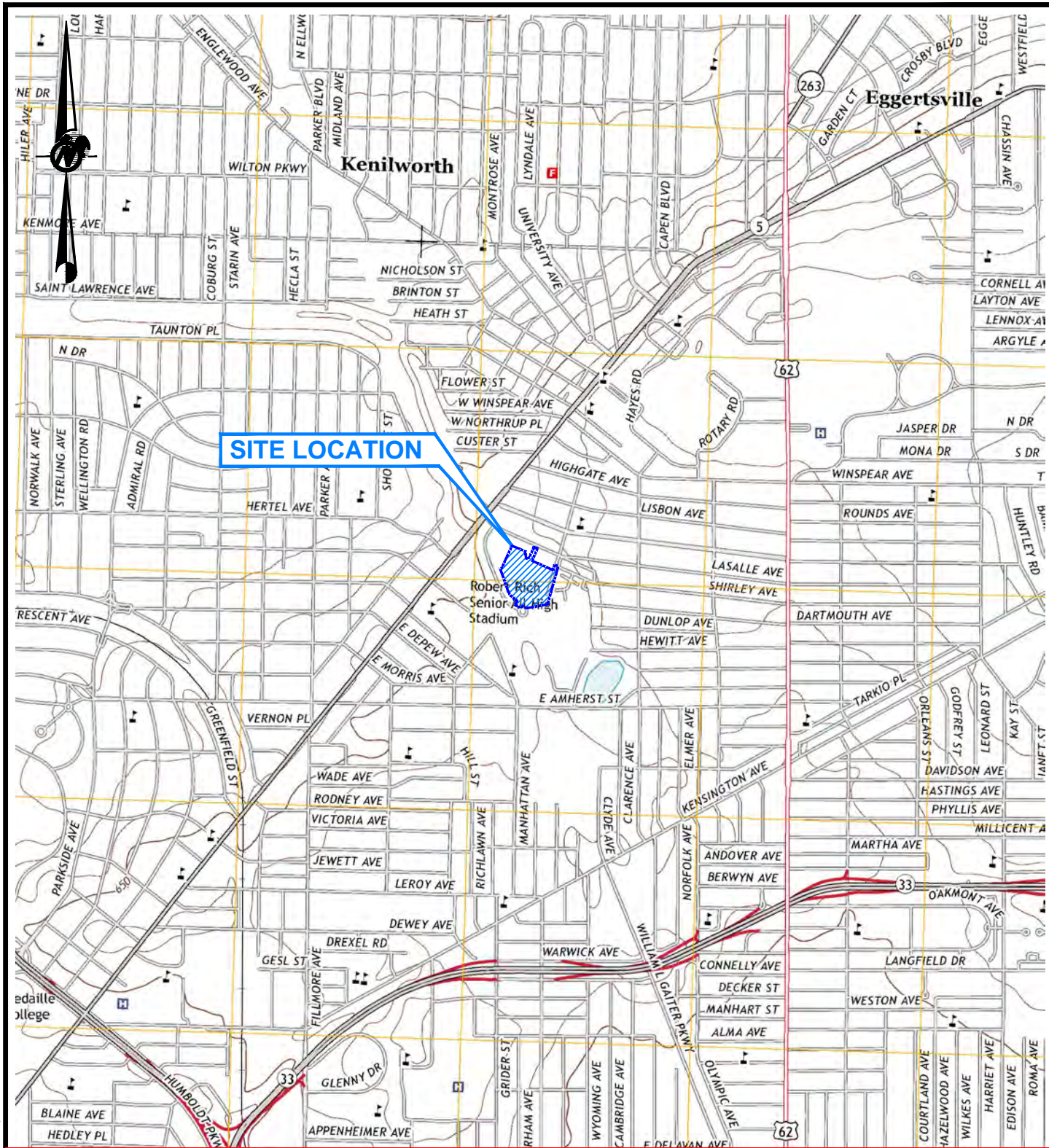
- 1 Stormwater analysis results for semi-volatiles are reported for Method 8270D-SIM  
\* Freshwater Sediment Guidance Values for Class A Sediments. "Screening & Assessment of Contaminated Sediment", NYSDEC, June 2014  
B = Analyte was detected in associated method blank.  
J = Analyte detected at a level less than the reporting limit (RL) and greater than or equal to the Method Detection Limit (MDL).  
Concentrations within this range are estimated.

Footnotes:

- 12.1 = Sample concentration exceeds NYSDEC Part 703 Water Quality Standards Surface Waters and Groundwater  
0.34 = Sample concentration exceeds NYSDEC Part 375 Restricted Residential Use Soil Cleanup Objectives (SCOs)  
44 = Sample concentration exceeds NYSDEC B10 Freshwater Sediment Guidance Value for Class A sediments  
ND = Non detectable concentration by approved analytical methods; water quality standard.  
NS = Not Specified.

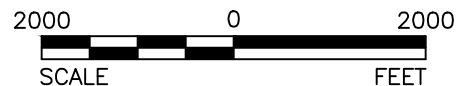
Table by: KJ  
Checked by: PTM  
Reviewed by: PTM

## FIGURES



## REFERENCE

1.) BASE FROM 7.5 MINUTE QUADRANGLE OF BUFFALO NORTHEAST, NEW YORK DATED 2013.



SCALE	AS SHOWN
DATE	5/12/15
DESIGN	JGT
CADD	JGT
CHECK	
REVIEW	

TITLE

## SITE VICINITY MAP

### 89 LASALLE AVENUE BCP SITE

### PERIODIC REVIEW REPORT

LEGACY LASALLE LLC

FIGURE

1-1

Map Document: C:\Drafting\Projects\2017\1776165 - 89 Lasalle\map documents\1776165002.mxd / Modified 5/5/2017 2:11:43 PM by LStafford / Exported 5/5/2017 2:12:03 PM by LStafford




**LEGEND**

- Sampling Location (Stormwater & Sediment)
- Parcel Boundary
- BCP Site Boundary



**REFERENCES**

ORTHOGRAPHIC MAP - , Parcel boundaries and site boundary from Golder Site Plan dated 2/27/15.

REV.	DATE	DES	REVISION DESCRIPTION	GIS	CHK	RVW
PROJECT						
SITE MANAGEMENT PLAN LEGACY LASALLE, LLC - BUFFALO, NEW YORK						
TITLE						
SITE PLAN & SAMPLING LOCATION PPR REPORT 89 LASALLE AVE SITE						
			PROJECT No.		FILE No.	
			DESIGN		SCALE: AS SHOWN	
			GIS		REV. 0	
			CHECK		FIGURE 4-1	
			REVIEW			
		---	---	5/5/2017		
		LBS				
		---	---			
		PTM				

**APPENDIX A**  
**ANALYTICAL DATA REPORTS – ALPHA ANALYTICAL**  
**NOVEMBER 2019, MARCH 2020**



## ANALYTICAL REPORT

Lab Number:	L1952404
Client:	Golder Associates Inc. 2430 North Forest Rd. Suite 100 Getzville, NY 14068
ATTN:	Patrick Martin
Phone:	(716) 204-5880
Project Name:	LEGACY 89 LASALLE BCP SITE
Project Number:	19120649
Report Date:	11/12/19

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



**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

<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>
L1952404-01	MH-1 STORMWATER	WATER	89 LASALLE AVE, BUFFALO, NY	11/05/19 10:28	11/05/19
L1952404-02	MH-1 SEDIMENT	SOIL	89 LASALLE AVE, BUFFALO, NY	11/05/19 10:20	11/05/19

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

### Case Narrative

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

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

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

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

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

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

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**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

### 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.

#### Total Metals

L1952404-02: 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:

*Melissa Sturgis* Melissa Sturgis

Title: Technical Director/Representative

Date: 11/12/19

# ORGANICS

# SEMIVOLATILES

**Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19**SAMPLE RESULTS**

Lab ID: L1952404-01  
 Client ID: MH-1 STORMWATER  
 Sample Location: 89 LASALLE AVE, BUFFALO, NY

Date Collected: 11/05/19 10:28  
 Date Received: 11/05/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 11/11/19 17:04  
 Analyst: SZ

Extraction Method: EPA 3510C  
 Extraction Date: 11/08/19 02:07

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	2.0	J	ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

**SAMPLE RESULTS**

**Lab ID:** L1952404-01  
**Client ID:** MH-1 STORMWATER  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 11/05/19 10:28  
**Date Received:** 11/05/19  
**Field Prep:** Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	59		15-120
2,4,6-Tribromophenol	89		10-120
4-Terphenyl-d14	64		41-149

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

**SAMPLE RESULTS**

**Lab ID:** L1952404-01  
**Client ID:** MH-1 STORMWATER  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 11/05/19 10:28  
**Date Received:** 11/05/19  
**Field Prep:** Not Specified

**Sample Depth:**

**Matrix:** Water  
**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 11/09/19 21:45  
**Analyst:** JJW

**Extraction Method:** EPA 3510C  
**Extraction Date:** 11/08/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	0.04	J	ug/l	0.10	0.02	1
Benzo(a)pyrene	0.02	J	ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01	1
Chrysene	0.02	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	0.04	J	ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	0.03	J	ug/l	0.10	0.02	1
Pentachlorophenol	ND		ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

**SAMPLE RESULTS**

**Lab ID:** L1952404-01  
**Client ID:** MH-1 STORMWATER  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 11/05/19 10:28  
**Date Received:** 11/05/19  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	64		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	77		23-120
2-Fluorobiphenyl	86		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	84		41-149

**Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19**SAMPLE RESULTS**

Lab ID: L1952404-02  
 Client ID: MH-1 SEDIMENT  
 Sample Location: 89 LASALLE AVE, BUFFALO, NY

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

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 11/12/19 07:10  
 Analyst: IM  
 Percent Solids: 80%

Extraction Method: EPA 3546  
 Extraction Date: 11/07/19 17:00

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	26	J	ug/kg	160	21.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	200	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	54.	1
2,4-Dinitrotoluene	ND		ug/kg	200	41.	1
2,6-Dinitrotoluene	ND		ug/kg	200	35.	1
Fluoranthene	430		ug/kg	120	23.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	31.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	20.	1
Hexachlorobutadiene	ND		ug/kg	200	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	580	180	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	26.	1
Naphthalene	ND		ug/kg	200	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	200	32.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	200	71.	1
Butyl benzyl phthalate	ND		ug/kg	200	51.	1
Di-n-butylphthalate	ND		ug/kg	200	39.	1
Di-n-octylphthalate	ND		ug/kg	200	69.	1
Diethyl phthalate	ND		ug/kg	200	19.	1
Dimethyl phthalate	ND		ug/kg	200	43.	1
Benzo(a)anthracene	220		ug/kg	120	23.	1
Benzo(a)pyrene	210		ug/kg	160	50.	1

**Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19**SAMPLE RESULTS**

Lab ID: L1952404-02  
 Client ID: MH-1 SEDIMENT  
 Sample Location: 89 LASALLE AVE, BUFFALO, NY

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

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	300		ug/kg	120	34.	1
Benzo(k)fluoranthene	73	J	ug/kg	120	33.	1
Chrysene	220		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	32.	1
Anthracene	74	J	ug/kg	120	40.	1
Benzo(ghi)perylene	180		ug/kg	160	24.	1
Fluorene	32	J	ug/kg	200	20.	1
Phenanthrene	290		ug/kg	120	25.	1
Dibenzo(a,h)anthracene	36	J	ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	150	J	ug/kg	160	28.	1
Pyrene	350		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	460	47.	1
4-Chloroaniline	ND		ug/kg	200	37.	1
2-Nitroaniline	ND		ug/kg	200	39.	1
3-Nitroaniline	ND		ug/kg	200	38.	1
4-Nitroaniline	ND		ug/kg	200	84.	1
Dibenzofuran	19	J	ug/kg	200	19.	1
2-Methylnaphthalene	ND		ug/kg	240	25.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	21.	1
Acetophenone	ND		ug/kg	200	25.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	39.	1
p-Chloro-m-cresol	ND		ug/kg	200	30.	1
2-Chlorophenol	ND		ug/kg	200	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	200	67.	1
2-Nitrophenol	ND		ug/kg	440	77.	1
4-Nitrophenol	ND		ug/kg	290	83.	1
2,4-Dinitrophenol	ND		ug/kg	980	95.	1
4,6-Dinitro-o-cresol	ND		ug/kg	530	98.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	200	31.	1
2-Methylphenol	ND		ug/kg	200	32.	1
3-Methylphenol/4-Methylphenol	71	J	ug/kg	290	32.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	39.	1
Carbazole	42	J	ug/kg	200	20.	1
Atrazine	ND		ug/kg	160	72.	1
Benzaldehyde	ND		ug/kg	270	55.	1

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

**SAMPLE RESULTS**

**Lab ID:** L1952404-02  
**Client ID:** MH-1 SEDIMENT  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 11/05/19 10:20  
**Date Received:** 11/05/19  
**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	62.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	200	41.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	50		23-120
2-Fluorobiphenyl	50		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	38		18-120

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/08/19 01:17  
**Analyst:** IM

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/07/19 17:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1305995-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/08/19 01:17  
**Analyst:** IM

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/07/19 17:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1305995-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/08/19 01:17  
**Analyst:** IM

**Extraction Method:** EPA 3546  
**Extraction Date:** 11/07/19 17:00

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1305995-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	77		25-120
Phenol-d6	75		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	61		30-120
2,4,6-Tribromophenol	90		10-136
4-Terphenyl-d14	62		18-120

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/12/19 09:01  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 11/08/19 02:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1306112-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	1.9	J	ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 11/12/19 09:01  
**Analyst:** RC

**Extraction Method:** EPA 3510C  
**Extraction Date:** 11/08/19 02:07

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1306112-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	52		10-120
Nitrobenzene-d5	57		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	61		41-149



**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 11/08/19 14:27  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 11/08/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1306114-1					
Acenaphthene	ND		ug/l	0.10	0.01
2-Chloronaphthalene	ND		ug/l	0.20	0.02
Fluoranthene	ND		ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	ND		ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	ND		ug/l	0.10	0.01
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01
Chrysene	ND		ug/l	0.10	0.01
Acenaphthylene	ND		ug/l	0.10	0.01
Anthracene	ND		ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	ND		ug/l	0.10	0.01
Phenanthrene	ND		ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	ND		ug/l	0.10	0.02
2-Methylnaphthalene	ND		ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

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

Analytical Method: 1,8270D-SIM  
 Analytical Date: 11/08/19 14:27  
 Analyst: DV

Extraction Method: EPA 3510C  
 Extraction Date: 11/08/19 02:10

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1306114-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		21-120
Phenol-d6	54		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	89		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	81		41-149

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1305995-2 WG1305995-3								
Acenaphthene	76		92		31-137	19		50
Hexachlorobenzene	85		107		40-140	23		50
Bis(2-chloroethyl)ether	68		80		40-140	16		50
2-Chloronaphthalene	80		94		40-140	16		50
3,3'-Dichlorobenzidine	54		63		40-140	15		50
2,4-Dinitrotoluene	86		110		40-132	24		50
2,6-Dinitrotoluene	88		104		40-140	17		50
Fluoranthene	75		94		40-140	22		50
4-Chlorophenyl phenyl ether	77		95		40-140	21		50
4-Bromophenyl phenyl ether	83		102		40-140	21		50
Bis(2-chloroisopropyl)ether	52		62		40-140	18		50
Bis(2-chloroethoxy)methane	72		84		40-117	15		50
Hexachlorobutadiene	73		84		40-140	14		50
Hexachlorocyclopentadiene	74		90		40-140	20		50
Hexachloroethane	65		77		40-140	17		50
Isophorone	72		87		40-140	19		50
Naphthalene	76		88		40-140	15		50
Nitrobenzene	73		88		40-140	19		50
NDPA/DPA	79		99		36-157	22		50
n-Nitrosodi-n-propylamine	71		85		32-121	18		50
Bis(2-ethylhexyl)phthalate	84		107		40-140	24		50
Butyl benzyl phthalate	78		99		40-140	24		50
Di-n-butylphthalate	74		97		40-140	27		50

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

**Project Name:** LEGACY 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L1952404

**Report Date:** 11/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1305995-2 WG1305995-3								
Di-n-octylphthalate	87		111		40-140	24		50
Diethyl phthalate	81		101		40-140	22		50
Dimethyl phthalate	79		98		40-140	21		50
Benzo(a)anthracene	80		99		40-140	21		50
Benzo(a)pyrene	84		106		40-140	23		50
Benzo(b)fluoranthene	87		107		40-140	21		50
Benzo(k)fluoranthene	84		103		40-140	20		50
Chrysene	80		98		40-140	20		50
Acenaphthylene	81		99		40-140	20		50
Anthracene	79		94		40-140	17		50
Benzo(ghi)perylene	83		95		40-140	13		50
Fluorene	80		98		40-140	20		50
Phenanthrene	74		91		40-140	21		50
Dibenzo(a,h)anthracene	81		94		40-140	15		50
Indeno(1,2,3-cd)pyrene	81		95		40-140	16		50
Pyrene	73		93		35-142	24		50
Biphenyl	82		99		37-127	19		50
4-Chloroaniline	69		82		40-140	17		50
2-Nitroaniline	88		110		47-134	22		50
3-Nitroaniline	64		76		26-129	17		50
4-Nitroaniline	77		97		41-125	23		50
Dibenzofuran	78		97		40-140	22		50
2-Methylnaphthalene	77		94		40-140	20		50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1305995-2 WG1305995-3								
1,2,4,5-Tetrachlorobenzene	82		97		40-117	17		50
Acetophenone	78		92		14-144	16		50
2,4,6-Trichlorophenol	87		109		30-130	22		50
p-Chloro-m-cresol	86		107	Q	26-103	22		50
2-Chlorophenol	79		95		25-102	18		50
2,4-Dichlorophenol	84		104		30-130	21		50
2,4-Dimethylphenol	87		106		30-130	20		50
2-Nitrophenol	80		96		30-130	18		50
4-Nitrophenol	82		94		11-114	14		50
2,4-Dinitrophenol	59		71		4-130	18		50
4,6-Dinitro-o-cresol	76		96		10-130	23		50
Pentachlorophenol	66		81		17-109	20		50
Phenol	76		92	Q	26-90	19		50
2-Methylphenol	81		96		30-130	17		50
3-Methylphenol/4-Methylphenol	89		107		30-130	18		50
2,4,5-Trichlorophenol	89		109		30-130	20		50
Carbazole	76		95		54-128	22		50
Atrazine	86		101		40-140	16		50
Benzaldehyde	73		85		40-140	15		50
Caprolactam	76		94		15-130	21		50
2,3,4,6-Tetrachlorophenol	80		101		40-140	23		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19

<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): 02 Batch: WG1305995-2 WG1305995-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	78		94		25-120
Phenol-d6	78		95		10-120
Nitrobenzene-d5	58		69		23-120
2-Fluorobiphenyl	61		73		30-120
2,4,6-Tribromophenol	90		113		10-136
4-Terphenyl-d14	59		76		18-120

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

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1306112-2 WG1306112-3								
Bis(2-chloroethyl)ether	60		66		40-140	10		30
3,3'-Dichlorobenzidine	56		63		40-140	12		30
2,4-Dinitrotoluene	70		79		48-143	12		30
2,6-Dinitrotoluene	68		76		40-140	11		30
4-Chlorophenyl phenyl ether	69		76		40-140	10		30
4-Bromophenyl phenyl ether	69		76		40-140	10		30
Bis(2-chloroisopropyl)ether	53		58		40-140	9		30
Bis(2-chloroethoxy)methane	62		69		40-140	11		30
Hexachlorocyclopentadiene	56		68		40-140	19		30
Isophorone	63		69		40-140	9		30
Nitrobenzene	63		70		40-140	11		30
NDPA/DPA	69		76		40-140	10		30
n-Nitrosodi-n-propylamine	66		74		29-132	11		30
Bis(2-ethylhexyl)phthalate	52		62		40-140	18		30
Butyl benzyl phthalate	59		65		40-140	10		30
Di-n-butylphthalate	56		63		40-140	12		30
Di-n-octylphthalate	55		62		40-140	12		30
Diethyl phthalate	68		76		40-140	11		30
Dimethyl phthalate	74		81		40-140	9		30
Biphenyl	65		73		40-140	12		30
4-Chloroaniline	41		54		40-140	27		30
2-Nitroaniline	66		74		52-143	11		30
3-Nitroaniline	50		58		25-145	15		30

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

**Project Name:** LEGACY 89 LASALLE BCP SITE

**Lab Number:** L1952404

**Project Number:** 19120649

**Report Date:** 11/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1306112-2 WG1306112-3								
4-Nitroaniline	61		67		51-143	9		30
Dibenzofuran	67		73		40-140	9		30
1,2,4,5-Tetrachlorobenzene	63		73		2-134	15		30
Acetophenone	65		73		39-129	12		30
2,4,6-Trichlorophenol	65		76		30-130	16		30
p-Chloro-m-cresol	71		79		23-97	11		30
2-Chlorophenol	62		70		27-123	12		30
2,4-Dichlorophenol	67		76		30-130	13		30
2,4-Dimethylphenol	50		53		30-130	6		30
2-Nitrophenol	64		70		30-130	9		30
4-Nitrophenol	57		63		10-80	10		30
2,4-Dinitrophenol	73		80		20-130	9		30
4,6-Dinitro-o-cresol	78		85		20-164	9		30
Phenol	53		58		12-110	9		30
2-Methylphenol	63		68		30-130	8		30
3-Methylphenol/4-Methylphenol	67		74		30-130	10		30
2,4,5-Trichlorophenol	69		78		30-130	12		30
Carbazole	68		75		55-144	10		30
Atrazine	78		88		40-140	12		30
Benzaldehyde	63		70		40-140	11		30
Caprolactam	37		41		10-130	10		30
2,3,4,6-Tetrachlorophenol	68		77		40-140	12		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19

<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): 01 Batch: WG1306112-2 WG1306112-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	55		61		21-120
Phenol-d6	49		56		10-120
Nitrobenzene-d5	49		57		23-120
2-Fluorobiphenyl	50		57		15-120
2,4,6-Tribromophenol	75		83		10-120
4-Terphenyl-d14	51		57		41-149

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

**Project Name:** LEGACY 89 LASALLE BCP SITE

**Lab Number:** L1952404

**Project Number:** 19120649

**Report Date:** 11/12/19

<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-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1306114-2 WG1306114-3								
Acenaphthene	92		82		40-140	11		40
2-Chloronaphthalene	90		78		40-140	14		40
Fluoranthene	90		81		40-140	11		40
Hexachlorobutadiene	89		77		40-140	14		40
Naphthalene	84		72		40-140	15		40
Benzo(a)anthracene	99		95		40-140	4		40
Benzo(a)pyrene	102		93		40-140	9		40
Benzo(b)fluoranthene	110		98		40-140	12		40
Benzo(k)fluoranthene	118		112		40-140	5		40
Chrysene	101		92		40-140	9		40
Acenaphthylene	87		76		40-140	13		40
Anthracene	96		87		40-140	10		40
Benzo(ghi)perylene	110		99		40-140	11		40
Fluorene	94		85		40-140	10		40
Phenanthrene	94		85		40-140	10		40
Dibenzo(a,h)anthracene	110		99		40-140	11		40
Indeno(1,2,3-cd)pyrene	111		101		40-140	9		40
Pyrene	88		79		40-140	11		40
2-Methylnaphthalene	87		75		40-140	15		40
Pentachlorophenol	65		60		40-140	8		40
Hexachlorobenzene	96		89		40-140	8		40
Hexachloroethane	80		68		40-140	16		40

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19

<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-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1306114-2 WG1306114-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	64		56		21-120
Phenol-d6	55		49		10-120
Nitrobenzene-d5	76		64		23-120
2-Fluorobiphenyl	83		73		15-120
2,4,6-Tribromophenol	81		73		10-120
4-Terphenyl-d14	73		67		41-149

## **METALS**

**Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19**SAMPLE RESULTS**

Lab ID: L1952404-01

Date Collected: 11/05/19 10:28

Client ID: MH-1 STORMWATER

Date Received: 11/05/19

Sample Location: 89 LASALLE AVE, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.358		mg/l	0.0100	0.00327	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00037	J	mg/l	0.00050	0.00016	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Barium, Total	0.00688		mg/l	0.00050	0.00017	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00081		mg/l	0.00020	0.00005	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Calcium, Total	14.6		mg/l	0.100	0.0394	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Chromium, Total	0.00074	J	mg/l	0.00100	0.00017	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00024	J	mg/l	0.00050	0.00016	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Copper, Total	0.00208		mg/l	0.00100	0.00038	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Iron, Total	0.387		mg/l	0.0500	0.0191	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Lead, Total	0.00316		mg/l	0.00100	0.00034	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Magnesium, Total	0.945		mg/l	0.0700	0.0242	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Manganese, Total	0.01426		mg/l	0.00100	0.00044	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/07/19 12:35	11/07/19 18:27	EPA 7470A	1,7470A	GD
Nickel, Total	0.00092	J	mg/l	0.00200	0.00055	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Potassium, Total	0.788		mg/l	0.100	0.0309	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Sodium, Total	1.24		mg/l	0.100	0.0293	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM
Zinc, Total	0.01083		mg/l	0.01000	0.00341	1	11/07/19 15:52	11/08/19 00:15	EPA 3005A	1,6020B	AM



**Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19**SAMPLE RESULTS**

Lab ID: L1952404-02

Date Collected: 11/05/19 10:20

Client ID: MH-1 SEDIMENT

Date Received: 11/05/19

Sample Location: 89 LASALLE AVE, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 80%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	9580		mg/kg	9.52	2.57	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Antimony, Total	0.742	J	mg/kg	4.76	0.362	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Arsenic, Total	3.81		mg/kg	0.952	0.198	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Barium, Total	82.6		mg/kg	0.952	0.166	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Beryllium, Total	0.485		mg/kg	0.476	0.031	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.952	0.093	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Calcium, Total	36300		mg/kg	9.52	3.33	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Chromium, Total	13.9		mg/kg	0.952	0.091	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Cobalt, Total	7.88		mg/kg	1.90	0.158	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Copper, Total	15.8		mg/kg	0.952	0.246	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Iron, Total	17300		mg/kg	4.76	0.859	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Lead, Total	14.2		mg/kg	4.76	0.255	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Magnesium, Total	11300		mg/kg	9.52	1.46	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Manganese, Total	422		mg/kg	0.952	0.151	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Mercury, Total	ND		mg/kg	0.085	0.056	1	11/06/19 21:43	11/07/19 16:11	EPA 7471B	1,7471B	GD
Nickel, Total	16.2		mg/kg	2.38	0.230	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Potassium, Total	853		mg/kg	238	13.7	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Selenium, Total	ND		mg/kg	1.90	0.246	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Silver, Total	ND		mg/kg	0.952	0.269	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Sodium, Total	78.9	J	mg/kg	190	3.00	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Thallium, Total	ND		mg/kg	1.90	0.300	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Vanadium, Total	18.9		mg/kg	0.952	0.193	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC
Zinc, Total	58.3		mg/kg	4.76	0.279	2	11/06/19 22:55	11/08/19 19:02	EPA 3050B	1,6010D	MC



Project Name: LEGACY 89 LASALLE BCP SITE

Lab Number: L1952404

Project Number: 19120649

Report Date: 11/12/19

## 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): 02 Batch: WG1305458-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Antimony, Total	ND		mg/kg	2.00	0.152	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Barium, Total	ND		mg/kg	0.400	0.070	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Calcium, Total	ND		mg/kg	4.00	1.40	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Chromium, Total	ND		mg/kg	0.400	0.038	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Copper, Total	ND		mg/kg	0.400	0.103	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Iron, Total	1.00	J	mg/kg	2.00	0.361	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Lead, Total	ND		mg/kg	2.00	0.107	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Manganese, Total	ND		mg/kg	0.400	0.064	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Nickel, Total	ND		mg/kg	1.00	0.097	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Potassium, Total	ND		mg/kg	100	5.76	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Selenium, Total	ND		mg/kg	0.800	0.103	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Silver, Total	ND		mg/kg	0.400	0.113	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Sodium, Total	4.58	J	mg/kg	80.0	1.26	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Thallium, Total	ND		mg/kg	0.800	0.126	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC
Zinc, Total	ND		mg/kg	2.00	0.117	1	11/06/19 22:55	11/08/19 17:42	1,6010D	MC

### Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1305489-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	11/06/19 21:43	11/07/19 14:59	1,7471B	GD



Project Name: LEGACY 89 LASALLE BCP SITE

Lab Number: L1952404

Project Number: 19120649

Report Date: 11/12/19

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1305849-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	11/07/19 12:35	11/07/19 18:16	1,7470A	GD

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1305961-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM



**Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19

### Method Blank Analysis Batch Quality Control

Vanadium, Total	ND	mg/l	0.00500	0.00157	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM
Zinc, Total	ND	mg/l	0.01000	0.00341	1	11/07/19 15:52	11/07/19 22:56	1,6020B	AM

#### Prep Information

Digestion Method: EPA 3005A

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** LEGACY 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L1952404

**Report Date:** 11/12/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1305458-2 SRM Lot Number: D105-540								
Aluminum, Total	74		-		51-149	-		
Antimony, Total	156		-		19-249	-		
Arsenic, Total	102		-		70-130	-		
Barium, Total	95		-		75-125	-		
Beryllium, Total	101		-		75-125	-		
Cadmium, Total	94		-		75-125	-		
Calcium, Total	91		-		73-127	-		
Chromium, Total	98		-		70-130	-		
Cobalt, Total	96		-		75-125	-		
Copper, Total	98		-		75-125	-		
Iron, Total	90		-		38-162	-		
Lead, Total	97		-		71-128	-		
Magnesium, Total	89		-		63-137	-		
Manganese, Total	91		-		76-124	-		
Nickel, Total	96		-		70-131	-		
Potassium, Total	89		-		60-140	-		
Selenium, Total	101		-		63-137	-		
Silver, Total	99		-		69-131	-		
Sodium, Total	93		-		37-162	-		
Thallium, Total	99		-		68-132	-		
Vanadium, Total	94		-		65-135	-		

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** LEGACY 89 LASALLE BCP SITE**Lab Number:** L1952404**Project Number:** 19120649**Report Date:** 11/12/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1305458-2 SRM Lot Number: D105-540					
Zinc, Total	98	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1305489-2 SRM Lot Number: D105-540					
Mercury, Total	91	-	60-141	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1305849-2					
Mercury, Total	87	-	80-120	-	

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

**Project Name:** LEGACY 89 LASALLE BCP SITE

**Lab Number:** L1952404

**Project Number:** 19120649

**Report Date:** 11/12/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1305961-2					
Aluminum, Total	114	-	80-120	-	
Antimony, Total	83	-	80-120	-	
Arsenic, Total	114	-	80-120	-	
Barium, Total	108	-	80-120	-	
Beryllium, Total	104	-	80-120	-	
Cadmium, Total	111	-	80-120	-	
Calcium, Total	112	-	80-120	-	
Chromium, Total	108	-	80-120	-	
Cobalt, Total	110	-	80-120	-	
Copper, Total	107	-	80-120	-	
Iron, Total	104	-	80-120	-	
Lead, Total	118	-	80-120	-	
Magnesium, Total	112	-	80-120	-	
Manganese, Total	109	-	80-120	-	
Nickel, Total	112	-	80-120	-	
Potassium, Total	108	-	80-120	-	
Selenium, Total	115	-	80-120	-	
Silver, Total	103	-	80-120	-	
Sodium, Total	108	-	80-120	-	
Thallium, Total	113	-	80-120	-	
Vanadium, Total	113	-	80-120	-	

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** LEGACY 89 LASALLE BCP SITE**Project Number:** 19120649**Lab Number:** L1952404**Report Date:** 11/12/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1305961-2					
Zinc, Total	116	-	80-120	-	

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

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

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): 02 QC Batch ID: WG1305458-3 WG1305458-4 QC Sample: L1952451-06 Client ID: MS Sample												
Aluminum, Total	5290	183	5860	311	Q	7240	1040	Q	75-125	21	Q	20
Antimony, Total	0.746J	45.8	36.5	80		42.4	90		75-125	15		20
Arsenic, Total	3.16	11	14.4	102		14.8	103		75-125	3		20
Barium, Total	48.7	183	216	91		220	91		75-125	2		20
Beryllium, Total	0.347	4.58	4.32	87		4.58	90		75-125	6		20
Cadmium, Total	ND	4.67	3.52	75		3.60	75		75-125	2		20
Calcium, Total	12800	916	13500	76		15600	298	Q	75-125	14		20
Chromium, Total	18.6	18.3	33.4	81		37.0	98		75-125	10		20
Cobalt, Total	5.22	45.8	42.1	80		44.9	85		75-125	6		20
Copper, Total	17.7	22.9	52.6	152	Q	41.3	101		75-125	24	Q	20
Iron, Total	11700	91.6	11500	0	Q	13400	1810	Q	75-125	15		20
Lead, Total	385	46.7	617	496	Q	273	0	Q	75-125	77	Q	20
Magnesium, Total	3220	916	3080	0	Q	5300	222	Q	75-125	53	Q	20
Manganese, Total	248	45.8	297	107		260	26	Q	75-125	13		20
Nickel, Total	16.7	45.8	54.6	83		59.2	91		75-125	8		20
Potassium, Total	930	916	1870	102		2180	133	Q	75-125	15		20
Selenium, Total	ND	11	10.4	94		11.0	98		75-125	6		20
Silver, Total	ND	27.5	25.3	92		26.8	95		75-125	6		20
Sodium, Total	197	916	1050	93		1090	95		75-125	4		20
Thallium, Total	ND	11	8.85	80		9.41	84		75-125	6		20
Vanadium, Total	16.5	45.8	56.2	87		63.2	100		75-125	12		20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

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): 02 QC Batch ID: WG1305458-3 WG1305458-4 QC Sample: L1952451-06 Client ID: MS Sample									
Zinc, Total	61.8	45.8	117	120	115	113	75-125	2	20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1305489-3 QC Sample: L1952316-18 Client ID: MS Sample									
Mercury, Total	0.152	0.156	0.313	104	-	-	80-120	-	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1305849-3 QC Sample: L1952090-01 Client ID: MS Sample									
Mercury, Total	ND	0.005	0.00426	85	-	-	75-125	-	20

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

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

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): 01    QC Batch ID: WG1305961-3    QC Sample: L1952396-01    Client ID: MS Sample									
Aluminum, Total	7.29	2	11.7	220	Q	-	75-125	-	20
Antimony, Total	ND	0.5	0.3734	75		-	75-125	-	20
Arsenic, Total	0.00138	0.12	0.1394	115		-	75-125	-	20
Barium, Total	0.1390	2	1.868	86		-	75-125	-	20
Beryllium, Total	0.00025J	0.05	0.04115	82		-	75-125	-	20
Cadmium, Total	ND	0.051	0.04589	90		-	75-125	-	20
Calcium, Total	33.0	10	46.1	131	Q	-	75-125	-	20
Chromium, Total	0.01658	0.2	0.1918	88		-	75-125	-	20
Cobalt, Total	0.00554	0.5	0.4394	87		-	75-125	-	20
Copper, Total	0.02988	0.25	0.2413	84		-	75-125	-	20
Iron, Total	10.5	1	11.6	110		-	75-125	-	20
Lead, Total	0.00439	0.51	0.6242	122		-	75-125	-	20
Magnesium, Total	6.35	10	19.1	128	Q	-	75-125	-	20
Manganese, Total	0.2339	0.5	0.6775	89		-	75-125	-	20
Nickel, Total	0.01365	0.5	0.4562	88		-	75-125	-	20
Potassium, Total	10.5	10	21.8	113		-	75-125	-	20
Selenium, Total	0.00374J	0.12	0.156	130	Q	-	75-125	-	20
Silver, Total	ND	0.05	0.04134	83		-	75-125	-	20
Sodium, Total	25.6	10	38.7	131	Q	-	75-125	-	20
Thallium, Total	ND	0.12	0.1381	115		-	75-125	-	20
Vanadium, Total	0.01778	0.5	0.4605	88		-	75-125	-	20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** LEGACY 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L1952404

**Report Date:** 11/12/19

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): 01 QC Batch ID: WG1305961-3 QC Sample: L1952396-01 Client ID: MS Sample									
Zinc, Total	0.02377	0.5	0.5032	96	-	-	75-125	-	20

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

## Lab Duplicate Analysis

*Batch Quality Control*

**Lab Number:** L1952404  
**Report Date:** 11/12/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1305489-4 QC Sample: L1952316-18 Client ID: DUP Sample						
Mercury, Total	0.152	0.130	mg/kg	16		20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1305849-4 QC Sample: L1952090-01 Client ID: DUP Sample						
Mercury, Total	ND	ND	mg/l	NC		20

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

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

**Lab Number:** L1952404  
**Report Date:** 11/12/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1305961-4 QC Sample: L1952396-01 Client ID: DUP Sample					
Aluminum, Total	7.29	7.67	mg/l	5	20
Antimony, Total	ND	ND	mg/l	NC	20
Arsenic, Total	0.00138	0.00141	mg/l	2	20
Barium, Total	0.1390	0.1479	mg/l	6	20
Beryllium, Total	0.00025J	0.00024J	mg/l	NC	20
Cadmium, Total	ND	0.00008J	mg/l	NC	20
Calcium, Total	33.0	34.2	mg/l	4	20
Chromium, Total	0.01658	0.01750	mg/l	5	20
Cobalt, Total	0.00554	0.00551	mg/l	1	20
Copper, Total	0.02988	0.03113	mg/l	4	20
Iron, Total	10.5	11.1	mg/l	6	20
Lead, Total	0.00439	0.00447	mg/l	2	20
Magnesium, Total	6.35	6.62	mg/l	4	20
Manganese, Total	0.2339	0.2492	mg/l	6	20
Nickel, Total	0.01365	0.01486	mg/l	8	20
Potassium, Total	10.5	10.4	mg/l	1	20
Selenium, Total	0.00374J	0.00423J	mg/l	NC	20
Silver, Total	ND	ND	mg/l	NC	20
Sodium, Total	25.6	26.6	mg/l	4	20

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** LEGACY 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L1952404

**Report Date:** 11/12/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1305961-4 QC Sample: L1952396-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/l	NC	20
Vanadium, Total	0.01778	0.01769	mg/l	1	20
Zinc, Total	0.02377	0.02522	mg/l	6	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

**SAMPLE RESULTS**

**Lab ID:** L1952404-02  
**Client ID:** MH-1 SEDIMENT  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 11/05/19 10:20  
**Date Received:** 11/05/19  
**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	80.2		%	0.100	NA	1	-	11/06/19 14:31	121,2540G	RI



**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

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

**Lab Number:** L1952404  
**Report Date:** 11/12/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1305355-1 QC Sample: L1952418-05 Client ID: DUP Sample						
Solids, Total	88.5	88.4	%	0		20

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Serial\_No:**11121914:07  
**Lab Number:** L1952404  
**Report Date:** 11/12/19

**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

**Cooler Information**

Cooler	Custody Seal
A	Absent

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1952404-01A	Plastic 250ml HNO3 preserved	A	<2	<2	3.0	Y	Absent		TL-6020T(180),SE-6020T(180),BA-6020T(180),FE-6020T(180),CR-6020T(180),K-6020T(180),CA-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),NA-6020T(180),PB-6020T(180),BE-6020T(180),MN-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),HG-T(28),AL-6020T(180),AG-6020T(180),MG-6020T(180),CD-6020T(180),CO-6020T(180)
L1952404-01B	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1952404-01C	Amber 250ml unpreserved	A	7	7	3.0	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1952404-02A	Plastic 2oz unpreserved for TS	A	NA		3.0	Y	Absent		TS(7)
L1952404-02B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		3.0	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),TL-TI(180),NI-TI(180),ZN-TI(180),SE-TI(180),CU-TI(180),SB-TI(180),PB-TI(180),CO-TI(180),V-TI(180),MG-TI(180),HG-T(28),FE-TI(180),MN-TI(180),CA-TI(180),K-TI(180),NA-TI(180),CD-TI(180)
L1952404-02C	Glass 120ml/4oz unpreserved	A	NA		3.0	Y	Absent		NYTCL-8270(14)

**Project Name:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

## 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:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

- 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 acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedances 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:** LEGACY 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L1952404  
**Report Date:** 11/12/19

## 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.

## LIMITATION OF LIABILITIES

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

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



**Alpha Analytical, Inc.**

ID No.:17873

Facility: **Company-wide**

Revision 15

Department: **Quality Assurance**

Published Date: 8/15/2019 9:53:42 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

**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.

21952404

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.)



## ANALYTICAL REPORT

Lab Number:	L2013833
Client:	Golder Associates Inc. 2430 North Forest Rd. Suite 100 Getzville, NY 14068
ATTN:	Patrick Martin
Phone:	(716) 204-5880
Project Name:	89 LASALLE BCP SITE
Project Number:	19120649
Report Date:	04/06/20

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

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

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**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Matrix</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>	<b>Receive Date</b>
L2013833-01	MH-1-STORMWATER	WATER	89 LASALLE AVE, BUFFALO, NY	03/30/20 13:15	03/30/20
L2013833-02	MH-1-SEDIMENT	SOIL	89 LASALLE AVE, BUFFALO, NY	03/30/20 13:20	03/30/20

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Case Narrative

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

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

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

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

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

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

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**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Case Narrative (continued)

#### Report Submission


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

#### Total Metals

L2013833-02: 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: 04/06/20

# ORGANICS

# SEMIVOLATILES

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**SAMPLE RESULTS**

Lab ID: L2013833-01  
 Client ID: MH-1-STORMWATER  
 Sample Location: 89 LASALLE AVE, BUFFALO, NY

Date Collected: 03/30/20 13:15  
 Date Received: 03/30/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 04/06/20 15:14  
 Analyst: WR

Extraction Method: EPA 3510C  
 Extraction Date: 04/01/20 15:29

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6	1
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2	1
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50	1
Hexachlorocyclopentadiene	ND		ug/l	20	0.69	1
Isophorone	ND		ug/l	5.0	1.2	1
Nitrobenzene	ND		ug/l	2.0	0.77	1
NDPA/DPA	ND		ug/l	2.0	0.42	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.2	1
Di-n-butylphthalate	ND		ug/l	5.0	0.39	1
Di-n-octylphthalate	ND		ug/l	5.0	1.3	1
Diethyl phthalate	ND		ug/l	5.0	0.38	1
Dimethyl phthalate	ND		ug/l	5.0	1.8	1
Biphenyl	ND		ug/l	2.0	0.46	1
4-Chloroaniline	ND		ug/l	5.0	1.1	1
2-Nitroaniline	ND		ug/l	5.0	0.50	1
3-Nitroaniline	ND		ug/l	5.0	0.81	1
4-Nitroaniline	ND		ug/l	5.0	0.80	1
Dibenzofuran	ND		ug/l	2.0	0.50	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44	1
Acetophenone	ND		ug/l	5.0	0.53	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61	1

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**SAMPLE RESULTS****Lab ID:** L2013833-01**Date Collected:** 03/30/20 13:15**Client ID:** MH-1-STORMWATER**Date Received:** 03/30/20**Sample Location:** 89 LASALLE AVE, BUFFALO, NY**Field Prep:** Not Specified**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
p-Chloro-m-cresol	ND		ug/l	2.0	0.35	1
2-Chlorophenol	ND		ug/l	2.0	0.48	1
2,4-Dichlorophenol	ND		ug/l	5.0	0.41	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.8	1
2-Nitrophenol	ND		ug/l	10	0.85	1
4-Nitrophenol	ND		ug/l	10	0.67	1
2,4-Dinitrophenol	ND		ug/l	20	6.6	1
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8	1
Phenol	ND		ug/l	5.0	0.57	1
2-Methylphenol	ND		ug/l	5.0	0.49	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77	1
Carbazole	ND		ug/l	2.0	0.49	1
Atrazine	ND		ug/l	10	0.76	1
Benzaldehyde	ND		ug/l	5.0	0.53	1
Caprolactam	ND		ug/l	10	3.3	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		21-120
Phenol-d6	56		10-120
Nitrobenzene-d5	64		23-120
2-Fluorobiphenyl	62		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	77		41-149

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**SAMPLE RESULTS**

Lab ID: L2013833-01  
 Client ID: MH-1-STORMWATER  
 Sample Location: 89 LASALLE AVE, BUFFALO, NY

Date Collected: 03/30/20 13:15  
 Date Received: 03/30/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/02/20 19:07  
 Analyst: DV

Extraction Method: EPA 3510C  
 Extraction Date: 04/01/20 15:32

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.01	1
2-Chloronaphthalene	ND		ug/l	0.20	0.02	1
Fluoranthene	0.04	J	ug/l	0.10	0.02	1
Hexachlorobutadiene	ND		ug/l	0.50	0.05	1
Naphthalene	ND		ug/l	0.10	0.05	1
Benzo(a)anthracene	ND		ug/l	0.10	0.02	1
Benzo(a)pyrene	ND		ug/l	0.10	0.02	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.10	0.01	1
Benzo(k)fluoranthene	ND		ug/l	0.10	0.01	1
Chrysene	0.01	J	ug/l	0.10	0.01	1
Acenaphthylene	ND		ug/l	0.10	0.01	1
Anthracene	ND		ug/l	0.10	0.01	1
Benzo(ghi)perylene	0.02	J	ug/l	0.10	0.01	1
Fluorene	ND		ug/l	0.10	0.01	1
Phenanthrene	ND		ug/l	0.10	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01	1
Indeno(1,2,3-cd)pyrene	0.02	J	ug/l	0.10	0.01	1
Pyrene	0.03	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.32	J	ug/l	0.80	0.01	1
Hexachlorobenzene	ND		ug/l	0.80	0.01	1
Hexachloroethane	ND		ug/l	0.80	0.06	1

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

**Lab ID:** L2013833-01  
**Client ID:** MH-1-STORMWATER  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 03/30/20 13:15  
**Date Received:** 03/30/20  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		21-120
Phenol-d6	58		10-120
Nitrobenzene-d5	93		23-120
2-Fluorobiphenyl	91		15-120
2,4,6-Tribromophenol	92		10-120
4-Terphenyl-d14	111		41-149

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**SAMPLE RESULTS**

Lab ID: L2013833-02  
 Client ID: MH-1-SEDIMENT  
 Sample Location: 89 LASALLE AVE, BUFFALO, NY

Date Collected: 03/30/20 13:20  
 Date Received: 03/30/20  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 04/06/20 09:26  
 Analyst: SZ  
 Percent Solids: 83%

Extraction Method: EPA 3546  
 Extraction Date: 04/05/20 15:35

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	25	J	ug/kg	160	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	26.	1
2-Chloronaphthalene	ND		ug/kg	200	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	200	52.	1
2,4-Dinitrotoluene	ND		ug/kg	200	39.	1
2,6-Dinitrotoluene	ND		ug/kg	200	34.	1
Fluoranthene	460		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	200	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	200	30.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	240	33.	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	25.	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	350		ug/kg	200	68.	1
Butyl benzyl phthalate	93	J	ug/kg	200	49.	1
Di-n-butylphthalate	ND		ug/kg	200	37.	1
Di-n-octylphthalate	ND		ug/kg	200	66.	1
Diethyl phthalate	ND		ug/kg	200	18.	1
Dimethyl phthalate	ND		ug/kg	200	41.	1
Benzo(a)anthracene	200		ug/kg	120	22.	1
Benzo(a)pyrene	190		ug/kg	160	48.	1

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**SAMPLE RESULTS**

**Lab ID:** L2013833-02  
**Client ID:** MH-1-SEDIMENT  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 03/30/20 13:20  
**Date Received:** 03/30/20  
**Field Prep:** Not Specified

**Sample Depth:**

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	250		ug/kg	120	33.	1
Benzo(k)fluoranthene	73	J	ug/kg	120	31.	1
Chrysene	250		ug/kg	120	20.	1
Acenaphthylene	ND		ug/kg	160	30.	1
Anthracene	71	J	ug/kg	120	38.	1
Benzo(ghi)perylene	200		ug/kg	160	23.	1
Fluorene	27	J	ug/kg	200	19.	1
Phenanthrene	300		ug/kg	120	24.	1
Dibenzo(a,h)anthracene	36	J	ug/kg	120	23.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	160	27.	1
Pyrene	370		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	450	45.	1
4-Chloroaniline	ND		ug/kg	200	36.	1
2-Nitroaniline	ND		ug/kg	200	38.	1
3-Nitroaniline	ND		ug/kg	200	37.	1
4-Nitroaniline	ND		ug/kg	200	81.	1
Dibenzofuran	ND		ug/kg	200	18.	1
2-Methylnaphthalene	ND		ug/kg	240	24.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	200	20.	1
Acetophenone	ND		ug/kg	200	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	200	29.	1
2-Chlorophenol	ND		ug/kg	200	23.	1
2,4-Dichlorophenol	ND		ug/kg	180	31.	1
2,4-Dimethylphenol	ND		ug/kg	200	65.	1
2-Nitrophenol	ND		ug/kg	420	74.	1
4-Nitrophenol	ND		ug/kg	270	80.	1
2,4-Dinitrophenol	ND		ug/kg	940	91.	1
4,6-Dinitro-o-cresol	ND		ug/kg	510	94.	1
Pentachlorophenol	ND		ug/kg	160	43.	1
Phenol	ND		ug/kg	200	30.	1
2-Methylphenol	ND		ug/kg	200	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	31.	1
2,4,5-Trichlorophenol	ND		ug/kg	200	38.	1
Carbazole	41	J	ug/kg	200	19.	1
Atrazine	ND		ug/kg	160	68.	1
Benzaldehyde	ND		ug/kg	260	53.	1

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

**Lab ID:** L2013833-02  
**Client ID:** MH-1-SEDIMENT  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 03/30/20 13:20  
**Date Received:** 03/30/20  
**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

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	66		25-120
Phenol-d6	67		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	51		30-120
2,4,6-Tribromophenol	58		10-136
4-Terphenyl-d14	31		18-120

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/03/20 20:15  
**Analyst:** EK

**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/01/20 15:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1357328-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.50
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.6
2,4-Dinitrotoluene	ND		ug/l	5.0	1.2
2,6-Dinitrotoluene	ND		ug/l	5.0	0.93
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.49
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.38
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.53
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.50
Hexachlorocyclopentadiene	ND		ug/l	20	0.69
Isophorone	ND		ug/l	5.0	1.2
Nitrobenzene	ND		ug/l	2.0	0.77
NDPA/DPA	ND		ug/l	2.0	0.42
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.64
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	1.5
Butyl benzyl phthalate	ND		ug/l	5.0	1.2
Di-n-butylphthalate	ND		ug/l	5.0	0.39
Di-n-octylphthalate	ND		ug/l	5.0	1.3
Diethyl phthalate	ND		ug/l	5.0	0.38
Dimethyl phthalate	ND		ug/l	5.0	1.8
Biphenyl	ND		ug/l	2.0	0.46
4-Chloroaniline	ND		ug/l	5.0	1.1
2-Nitroaniline	ND		ug/l	5.0	0.50
3-Nitroaniline	ND		ug/l	5.0	0.81
4-Nitroaniline	ND		ug/l	5.0	0.80
Dibenzofuran	ND		ug/l	2.0	0.50
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.44
Acetophenone	ND		ug/l	5.0	0.53
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.61
p-Chloro-m-cresol	ND		ug/l	2.0	0.35

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/03/20 20:15  
**Analyst:** EK

**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/01/20 15:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1357328-1					
2-Chlorophenol	ND		ug/l	2.0	0.48
2,4-Dichlorophenol	ND		ug/l	5.0	0.41
2,4-Dimethylphenol	ND		ug/l	5.0	1.8
2-Nitrophenol	ND		ug/l	10	0.85
4-Nitrophenol	ND		ug/l	10	0.67
2,4-Dinitrophenol	ND		ug/l	20	6.6
4,6-Dinitro-o-cresol	ND		ug/l	10	1.8
Phenol	ND		ug/l	5.0	0.57
2-Methylphenol	ND		ug/l	5.0	0.49
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	0.48
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.77
Carbazole	ND		ug/l	2.0	0.49
Atrazine	ND		ug/l	10	0.76
Benzaldehyde	ND		ug/l	5.0	0.53
Caprolactam	ND		ug/l	10	3.3
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.84

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		21-120
Phenol-d6	43		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	51		15-120
2,4,6-Tribromophenol	44		10-120
4-Terphenyl-d14	69		41-149



**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 04/02/20 11:49  
**Analyst:** DV

**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/01/20 15:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1357329-1					
Acenaphthene	0.04	J	ug/l	0.10	0.01
2-Chloronaphthalene	0.05	J	ug/l	0.20	0.02
Fluoranthene	0.03	J	ug/l	0.10	0.02
Hexachlorobutadiene	ND		ug/l	0.50	0.05
Naphthalene	ND		ug/l	0.10	0.05
Benzo(a)anthracene	0.02	J	ug/l	0.10	0.02
Benzo(a)pyrene	ND		ug/l	0.10	0.02
Benzo(b)fluoranthene	0.02	J	ug/l	0.10	0.01
Benzo(k)fluoranthene	0.01	J	ug/l	0.10	0.01
Chrysene	0.02	J	ug/l	0.10	0.01
Acenaphthylene	0.02	J	ug/l	0.10	0.01
Anthracene	0.03	J	ug/l	0.10	0.01
Benzo(ghi)perylene	ND		ug/l	0.10	0.01
Fluorene	0.04	J	ug/l	0.10	0.01
Phenanthrene	0.04	J	ug/l	0.10	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.10	0.01
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.10	0.01
Pyrene	0.03	J	ug/l	0.10	0.02
2-Methylnaphthalene	0.04	J	ug/l	0.10	0.02
Pentachlorophenol	ND		ug/l	0.80	0.01
Hexachlorobenzene	ND		ug/l	0.80	0.01
Hexachloroethane	ND		ug/l	0.80	0.06

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

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

Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/02/20 11:49  
 Analyst: DV

Extraction Method: EPA 3510C  
 Extraction Date: 04/01/20 15:32

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1357329-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	51		21-120
Phenol-d6	44		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	66		10-120
4-Terphenyl-d14	99		41-149

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/06/20 08:18  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 04/05/20 15:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1358419-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/06/20 08:18  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 04/05/20 15:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1358419-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	16.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	430	79.
Pentachlorophenol	ND		ug/kg	130	36.

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/06/20 08:18  
**Analyst:** SZ

**Extraction Method:** EPA 3546  
**Extraction Date:** 04/05/20 15:35

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1358419-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	84		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	76		10-136
4-Terphenyl-d14	83		18-120

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1357328-2 WG1357328-3								
Bis(2-chloroethyl)ether	76		71		40-140	7		30
3,3'-Dichlorobenzidine	54		54		40-140	0		30
2,4-Dinitrotoluene	79		78		48-143	1		30
2,6-Dinitrotoluene	77		78		40-140	1		30
4-Chlorophenyl phenyl ether	74		72		40-140	3		30
4-Bromophenyl phenyl ether	79		78		40-140	1		30
Bis(2-chloroisopropyl)ether	61		59		40-140	3		30
Bis(2-chloroethoxy)methane	79		79		40-140	0		30
Hexachlorocyclopentadiene	61		65		40-140	6		30
Isophorone	84		81		40-140	4		30
Nitrobenzene	83		78		40-140	6		30
NDPA/DPA	75		73		40-140	3		30
n-Nitrosodi-n-propylamine	94		91		29-132	3		30
Bis(2-ethylhexyl)phthalate	86		85		40-140	1		30
Butyl benzyl phthalate	78		79		40-140	1		30
Di-n-butylphthalate	83		80		40-140	4		30
Di-n-octylphthalate	80		83		40-140	4		30
Diethyl phthalate	84		86		40-140	2		30
Dimethyl phthalate	80		76		40-140	5		30
Biphenyl	74		71		40-140	4		30
4-Chloroaniline	61		67		40-140	9		30
2-Nitroaniline	75		71		52-143	5		30
3-Nitroaniline	67		62		25-145	8		30

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1357328-2 WG1357328-3								
4-Nitroaniline	66		59		51-143	11		30
Dibenzofuran	71		69		40-140	3		30
1,2,4,5-Tetrachlorobenzene	74		71		2-134	4		30
Acetophenone	75		71		39-129	5		30
2,4,6-Trichlorophenol	79		72		30-130	9		30
p-Chloro-m-cresol	92		84		23-97	9		30
2-Chlorophenol	69		67		27-123	3		30
2,4-Dichlorophenol	73		70		30-130	4		30
2,4-Dimethylphenol	47		44		30-130	7		30
2-Nitrophenol	69		66		30-130	4		30
4-Nitrophenol	84	Q	84	Q	10-80	0		30
2,4-Dinitrophenol	83		79		20-130	5		30
4,6-Dinitro-o-cresol	77		78		20-164	1		30
Phenol	59		56		12-110	5		30
2-Methylphenol	71		64		30-130	10		30
3-Methylphenol/4-Methylphenol	74		67		30-130	10		30
2,4,5-Trichlorophenol	74		71		30-130	4		30
Carbazole	71		68		55-144	4		30
Atrazine	114		117		40-140	3		30
Benzaldehyde	70		67		40-140	4		30
Caprolactam	35		34		10-130	3		30
2,3,4,6-Tetrachlorophenol	76		74		40-140	3		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG1357328-2 WG1357328-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	67		64		21-120
Phenol-d6	62		54		10-120
Nitrobenzene-d5	65		66		23-120
2-Fluorobiphenyl	60		55		15-120
2,4,6-Tribromophenol	69		65		10-120
4-Terphenyl-d14	64		65		41-149

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

**Project Name:** 89 LASALLE BCP SITE

**Lab Number:** L2013833

**Project Number:** 19120649

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

<b>Parameter</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>%Recovery Limits</b>	<b>RPD</b>	<b>Qual</b>	<b>RPD Limits</b>
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1357329-2 WG1357329-3								
Acenaphthene	69		69		40-140	0		40
2-Chloronaphthalene	67		64		40-140	5		40
Fluoranthene	78		89		40-140	13		40
Hexachlorobutadiene	58		44		40-140	27		40
Naphthalene	62		53		40-140	16		40
Benzo(a)anthracene	76		88		40-140	15		40
Benzo(a)pyrene	80		92		40-140	14		40
Benzo(b)fluoranthene	83		95		40-140	13		40
Benzo(k)fluoranthene	80		91		40-140	13		40
Chrysene	79		87		40-140	10		40
Acenaphthylene	66		68		40-140	3		40
Anthracene	72		80		40-140	11		40
Benzo(ghi)perylene	75		85		40-140	13		40
Fluorene	72		78		40-140	8		40
Phenanthrene	71		80		40-140	12		40
Dibenzo(a,h)anthracene	78		89		40-140	13		40
Indeno(1,2,3-cd)pyrene	79		92		40-140	15		40
Pyrene	76		87		40-140	13		40
2-Methylnaphthalene	66		59		40-140	11		40
Pentachlorophenol	60		69		40-140	14		40
Hexachlorobenzene	74		78		40-140	5		40
Hexachloroethane	58		44		40-140	27		40

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01 Batch: WG1357329-2 WG1357329-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	56		47		21-120
Phenol-d6	49		44		10-120
Nitrobenzene-d5	71		61		23-120
2-Fluorobiphenyl	70		68		15-120
2,4,6-Tribromophenol	83		94		10-120
4-Terphenyl-d14	97		110		41-149

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1358419-2 WG1358419-3								
Acenaphthene	66		80		31-137	19		50
Hexachlorobenzene	64		78		40-140	20		50
Bis(2-chloroethyl)ether	66		77		40-140	15		50
2-Chloronaphthalene	62		75		40-140	19		50
3,3'-Dichlorobenzidine	56		65		40-140	15		50
2,4-Dinitrotoluene	69		85		40-132	21		50
2,6-Dinitrotoluene	67		83		40-140	21		50
Fluoranthene	70		83		40-140	17		50
4-Chlorophenyl phenyl ether	62		76		40-140	20		50
4-Bromophenyl phenyl ether	63		76		40-140	19		50
Bis(2-chloroisopropyl)ether	82		95		40-140	15		50
Bis(2-chloroethoxy)methane	70		83		40-117	17		50
Hexachlorobutadiene	56		68		40-140	19		50
Hexachlorocyclopentadiene	53		65		40-140	20		50
Hexachloroethane	63		71		40-140	12		50
Isophorone	74		88		40-140	17		50
Naphthalene	64		77		40-140	18		50
Nitrobenzene	69		86		40-140	22		50
NDPA/DPA	68		81		36-157	17		50
n-Nitrosodi-n-propylamine	74		91		32-121	21		50
Bis(2-ethylhexyl)phthalate	87		99		40-140	13		50
Butyl benzyl phthalate	80		95		40-140	17		50
Di-n-butylphthalate	80		94		40-140	16		50

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1358419-2 WG1358419-3								
Di-n-octylphthalate	84		99		40-140	16		50
Diethyl phthalate	70		85		40-140	19		50
Dimethyl phthalate	65		80		40-140	21		50
Benzo(a)anthracene	70		82		40-140	16		50
Benzo(a)pyrene	67		80		40-140	18		50
Benzo(b)fluoranthene	70		81		40-140	15		50
Benzo(k)fluoranthene	64		78		40-140	20		50
Chrysene	67		80		40-140	18		50
Acenaphthylene	66		80		40-140	19		50
Anthracene	71		84		40-140	17		50
Benzo(ghi)perylene	65		76		40-140	16		50
Fluorene	67		81		40-140	19		50
Phenanthrene	68		80		40-140	16		50
Dibenzo(a,h)anthracene	68		78		40-140	14		50
Indeno(1,2,3-cd)pyrene	65		77		40-140	17		50
Pyrene	70		83		35-142	17		50
Biphenyl	68		81		37-127	17		50
4-Chloroaniline	55		68		40-140	21		50
2-Nitroaniline	69		84		47-134	20		50
3-Nitroaniline	64		73		26-129	13		50
4-Nitroaniline	67		81		41-125	19		50
Dibenzofuran	66		81		40-140	20		50
2-Methylnaphthalene	64		78		40-140	20		50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1358419-2 WG1358419-3								
1,2,4,5-Tetrachlorobenzene	64		78		40-117	20		50
Acetophenone	63		77		14-144	20		50
2,4,6-Trichlorophenol	64		78		30-130	20		50
p-Chloro-m-cresol	75		91		26-103	19		50
2-Chlorophenol	69		82		25-102	17		50
2,4-Dichlorophenol	68		81		30-130	17		50
2,4-Dimethylphenol	73		84		30-130	14		50
2-Nitrophenol	66		78		30-130	17		50
4-Nitrophenol	82		98		11-114	18		50
2,4-Dinitrophenol	62		71		4-130	14		50
4,6-Dinitro-o-cresol	71		85		10-130	18		50
Pentachlorophenol	59		70		17-109	17		50
Phenol	70		85		26-90	19		50
2-Methylphenol	74		87		30-130	16		50
3-Methylphenol/4-Methylphenol	72		86		30-130	18		50
2,4,5-Trichlorophenol	65		78		30-130	18		50
Carbazole	72		85		54-128	17		50
Atrazine	78		94		40-140	19		50
Benzaldehyde	58		70		40-140	19		50
Caprolactam	77		91		15-130	17		50
2,3,4,6-Tetrachlorophenol	65		77		40-140	17		50

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Lab Number:** L2013833

**Project Number:** 19120649

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02 Batch: WG1358419-2 WG1358419-3

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	73		85		25-120
Phenol-d6	74		88		10-120
Nitrobenzene-d5	73		85		23-120
2-Fluorobiphenyl	64		76		30-120
2,4,6-Tribromophenol	68		84		10-136
4-Terphenyl-d14	70		84		18-120

## METALS

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**SAMPLE RESULTS**

Lab ID: L2013833-01

Date Collected: 03/30/20 13:15

Client ID: MH-1-STORMWATER

Date Received: 03/30/20

Sample Location: 89 LASALLE AVE, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	0.543		mg/l	0.0100	0.00327	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Arsenic, Total	0.00060		mg/l	0.00050	0.00016	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Barium, Total	0.00964		mg/l	0.00050	0.00017	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Cadmium, Total	0.00010	J	mg/l	0.00020	0.00005	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Calcium, Total	10.9		mg/l	0.100	0.0394	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Chromium, Total	0.00293		mg/l	0.00100	0.00017	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Cobalt, Total	0.00037	J	mg/l	0.00050	0.00016	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Copper, Total	0.00440		mg/l	0.00100	0.00038	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Iron, Total	0.746		mg/l	0.0500	0.0191	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Lead, Total	0.00383		mg/l	0.00100	0.00034	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Magnesium, Total	0.986		mg/l	0.0700	0.0242	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Manganese, Total	0.02104		mg/l	0.00100	0.00044	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Mercury, Total	ND		mg/l	0.00020	0.00009	1	03/31/20 18:36	04/01/20 13:05	EPA 7470A	1,7470A	GD
Nickel, Total	0.00237		mg/l	0.00200	0.00055	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Potassium, Total	1.36		mg/l	0.100	0.0309	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Sodium, Total	27.2		mg/l	0.100	0.0293	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Vanadium, Total	0.00174	J	mg/l	0.00500	0.00157	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM
Zinc, Total	0.02204		mg/l	0.01000	0.00341	1	03/31/20 18:32	04/01/20 11:45	EPA 3005A	1,6020B	AM



**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**SAMPLE RESULTS**

Lab ID: L2013833-02

Date Collected: 03/30/20 13:20

Client ID: MH-1-SEDIMENT

Date Received: 03/30/20

Sample Location: 89 LASALLE AVE, BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	841		mg/kg	9.27	2.50	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Antimony, Total	ND		mg/kg	4.64	0.352	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Arsenic, Total	2.82		mg/kg	0.927	0.193	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Barium, Total	9.14		mg/kg	0.927	0.161	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.464	0.031	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.927	0.091	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Calcium, Total	147000		mg/kg	9.27	3.25	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Chromium, Total	5.12		mg/kg	0.927	0.089	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Cobalt, Total	1.23	J	mg/kg	1.85	0.154	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Copper, Total	7.65		mg/kg	0.927	0.239	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Iron, Total	4260		mg/kg	4.64	0.838	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Lead, Total	7.74		mg/kg	4.64	0.248	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Magnesium, Total	12700		mg/kg	9.27	1.43	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Manganese, Total	158		mg/kg	0.927	0.147	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Mercury, Total	ND		mg/kg	0.086	0.056	1	03/31/20 22:30	04/01/20 18:45	EPA 7471B	1,7471B	GD
Nickel, Total	5.07		mg/kg	2.32	0.224	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Potassium, Total	236		mg/kg	232	13.4	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Selenium, Total	0.770	J	mg/kg	1.85	0.239	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Silver, Total	ND		mg/kg	0.927	0.262	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Sodium, Total	202		mg/kg	185	2.92	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Thallium, Total	ND		mg/kg	1.85	0.292	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Vanadium, Total	7.41		mg/kg	0.927	0.188	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC
Zinc, Total	17.3		mg/kg	4.64	0.272	2	03/31/20 22:06	04/02/20 17:52	EPA 3050B	1,6010D	LC



Project Name: 89 LASALLE BCP SITE

Lab Number: L2013833

Project Number: 19120649

Report Date: 04/06/20

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1356843-1										
Aluminum, Total	ND		mg/l	0.0100	0.00327	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Antimony, Total	ND		mg/l	0.00400	0.00042	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Arsenic, Total	ND		mg/l	0.00050	0.00016	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Barium, Total	ND		mg/l	0.00050	0.00017	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Beryllium, Total	ND		mg/l	0.00050	0.00010	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Cadmium, Total	ND		mg/l	0.00020	0.00005	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Calcium, Total	ND		mg/l	0.100	0.0394	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Chromium, Total	ND		mg/l	0.00100	0.00017	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Cobalt, Total	ND		mg/l	0.00050	0.00016	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Copper, Total	ND		mg/l	0.00100	0.00038	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Iron, Total	ND		mg/l	0.0500	0.0191	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Lead, Total	ND		mg/l	0.00100	0.00034	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Magnesium, Total	ND		mg/l	0.0700	0.0242	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Manganese, Total	ND		mg/l	0.00100	0.00044	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Nickel, Total	ND		mg/l	0.00200	0.00055	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Potassium, Total	ND		mg/l	0.100	0.0309	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Selenium, Total	ND		mg/l	0.00500	0.00173	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Silver, Total	ND		mg/l	0.00040	0.00016	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Sodium, Total	ND		mg/l	0.100	0.0293	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Thallium, Total	ND		mg/l	0.00050	0.00014	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Vanadium, Total	ND		mg/l	0.00500	0.00157	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM
Zinc, Total	ND		mg/l	0.01000	0.00341	1	03/31/20 18:32	04/01/20 10:42	1,6020B	AM

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01 Batch: WG1356844-1										
Mercury, Total	ND		mg/l	0.00020	0.00009	1	03/31/20 18:36	04/01/20 12:38	1,7470A	GD



Project Name: 89 LASALLE BCP SITE

Lab Number: L2013833

Project Number: 19120649

Report Date: 04/06/20

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1356916-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Antimony, Total	ND		mg/kg	2.00	0.152	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Arsenic, Total	ND		mg/kg	0.400	0.083	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Barium, Total	ND		mg/kg	0.400	0.070	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Beryllium, Total	ND		mg/kg	0.200	0.013	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Cadmium, Total	ND		mg/kg	0.400	0.039	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Calcium, Total	ND		mg/kg	4.00	1.40	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Chromium, Total	0.048	J	mg/kg	0.400	0.038	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Cobalt, Total	ND		mg/kg	0.800	0.066	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Copper, Total	0.264	J	mg/kg	0.400	0.103	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Iron, Total	0.512	J	mg/kg	2.00	0.361	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Lead, Total	ND		mg/kg	2.00	0.107	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Magnesium, Total	ND		mg/kg	4.00	0.616	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Manganese, Total	ND		mg/kg	0.400	0.064	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Nickel, Total	0.256	J	mg/kg	1.00	0.097	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Potassium, Total	ND		mg/kg	100	5.76	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Selenium, Total	0.376	J	mg/kg	0.800	0.103	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Silver, Total	ND		mg/kg	0.400	0.113	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Sodium, Total	3.35	J	mg/kg	80.0	1.26	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Thallium, Total	ND		mg/kg	0.800	0.126	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Vanadium, Total	ND		mg/kg	0.400	0.081	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC
Zinc, Total	ND		mg/kg	2.00	0.117	1	03/31/20 22:06	04/02/20 15:50	1,6010D	LC

### Prep Information

Digestion Method: EPA 3050B



Project Name: 89 LASALLE BCP SITE

Lab Number: L2013833

Project Number: 19120649

Report Date: 04/06/20

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1356920-1										
Mercury, Total	ND		mg/kg	0.083	0.054	1	03/31/20 22:30	04/01/20 17:46	1,7471B	GD

### Prep Information

Digestion Method: EPA 7471B

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1356843-2								
Aluminum, Total	103		-		80-120	-		
Antimony, Total	88		-		80-120	-		
Arsenic, Total	100		-		80-120	-		
Barium, Total	103		-		80-120	-		
Beryllium, Total	106		-		80-120	-		
Cadmium, Total	107		-		80-120	-		
Calcium, Total	104		-		80-120	-		
Chromium, Total	101		-		80-120	-		
Cobalt, Total	102		-		80-120	-		
Copper, Total	96		-		80-120	-		
Iron, Total	104		-		80-120	-		
Lead, Total	106		-		80-120	-		
Magnesium, Total	107		-		80-120	-		
Manganese, Total	97		-		80-120	-		
Nickel, Total	103		-		80-120	-		
Potassium, Total	99		-		80-120	-		
Selenium, Total	105		-		80-120	-		
Silver, Total	105		-		80-120	-		
Sodium, Total	100		-		80-120	-		
Thallium, Total	97		-		80-120	-		
Vanadium, Total	102		-		80-120	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1356843-2					
Zinc, Total	110	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1356844-2					
Mercury, Total	107	-	80-120	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1356916-2 SRM Lot Number: D105-540					
Aluminum, Total	54	-	51-149	-	
Antimony, Total	154	-	19-249	-	
Arsenic, Total	107	-	70-130	-	
Barium, Total	85	-	75-125	-	
Beryllium, Total	91	-	75-125	-	
Cadmium, Total	95	-	75-125	-	
Calcium, Total	79	-	73-127	-	
Chromium, Total	88	-	70-130	-	
Cobalt, Total	99	-	75-125	-	
Copper, Total	91	-	75-125	-	
Iron, Total	70	-	38-162	-	
Lead, Total	100	-	71-128	-	
Magnesium, Total	76	-	63-137	-	
Manganese, Total	80	-	76-124	-	
Nickel, Total	98	-	70-131	-	
Potassium, Total	72	-	60-140	-	
Selenium, Total	100	-	63-137	-	
Silver, Total	89	-	69-131	-	
Sodium, Total	94	-	37-162	-	
Thallium, Total	99	-	68-132	-	
Vanadium, Total	87	-	65-135	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1356916-2 SRM Lot Number: D105-540					
Zinc, Total	98	-	70-130	-	
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1356920-2 SRM Lot Number: D105-540					
Mercury, Total	79	-	60-141	-	

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1356843-3 QC Sample: L2013859-01 Client ID: MS Sample												
Aluminum, Total	0.0781	2	2.17	104		-	-		75-125	-		20
Antimony, Total	0.00048J	0.5	0.4772	95		-	-		75-125	-		20
Arsenic, Total	ND	0.12	0.1167	97		-	-		75-125	-		20
Barium, Total	0.04141	2	2.144	105		-	-		75-125	-		20
Beryllium, Total	ND	0.05	0.05528	110		-	-		75-125	-		20
Cadmium, Total	ND	0.051	0.05561	109		-	-		75-125	-		20
Calcium, Total	14.9	10	24.8	99		-	-		75-125	-		20
Chromium, Total	0.00248	0.2	0.2028	100		-	-		75-125	-		20
Cobalt, Total	0.00047J	0.5	0.4950	99		-	-		75-125	-		20
Copper, Total	0.00092J	0.25	0.2388	96		-	-		75-125	-		20
Iron, Total	0.102	1	1.16	106		-	-		75-125	-		20
Lead, Total	0.00037J	0.51	0.5434	106		-	-		75-125	-		20
Magnesium, Total	5.03	10	15.8	108		-	-		75-125	-		20
Manganese, Total	0.04826	0.5	0.5673	104		-	-		75-125	-		20
Nickel, Total	0.00194J	0.5	0.5154	103		-	-		75-125	-		20
Potassium, Total	1.49	10	11.4	99		-	-		75-125	-		20
Selenium, Total	ND	0.12	0.144	120		-	-		75-125	-		20
Silver, Total	ND	0.05	0.05370	107		-	-		75-125	-		20
Sodium, Total	35.4	10	44.9	95		-	-		75-125	-		20
Thallium, Total	ND	0.12	0.1205	100		-	-		75-125	-		20
Vanadium, Total	ND	0.5	0.5054	101		-	-		75-125	-		20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01			QC Batch ID: WG1356843-3		QC Sample: L2013859-01		Client ID: MS Sample		
Zinc, Total	ND	0.5	0.5533	111	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 01			QC Batch ID: WG1356844-3		QC Sample: L2013811-01		Client ID: MS Sample		
Mercury, Total	ND	0.005	0.00530	106	-	-	75-125	-	20

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

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1356916-3 QC Sample: L2012735-01 Client ID: MS Sample									
Aluminum, Total	4310	208	5920	776	Q	-	75-125	-	20
Antimony, Total	0.764J	51.9	51.2	99		-	75-125	-	20
Arsenic, Total	3.12	12.4	16.8	110		-	75-125	-	20
Barium, Total	44.0	208	264	106		-	75-125	-	20
Beryllium, Total	0.165J	5.19	5.53	106		-	75-125	-	20
Cadmium, Total	4.96	5.29	11.2	118		-	75-125	-	20
Calcium, Total	6670	1040	7930	121		-	75-125	-	20
Chromium, Total	17.4	20.8	42.6	121		-	75-125	-	20
Cobalt, Total	4.49	51.9	56.4	100		-	75-125	-	20
Copper, Total	44.4	25.9	66.1	84		-	75-125	-	20
Iron, Total	9100	104	9560	443	Q	-	75-125	-	20
Lead, Total	82.1	52.9	139	108		-	75-125	-	20
Magnesium, Total	3450	1040	4770	127	Q	-	75-125	-	20
Manganese, Total	88.2	51.9	136	92		-	75-125	-	20
Nickel, Total	11.0	51.9	62.9	100		-	75-125	-	20
Potassium, Total	327	1040	1430	106		-	75-125	-	20
Selenium, Total	ND	12.4	13.3	107		-	75-125	-	20
Silver, Total	ND	31.1	31.1	100		-	75-125	-	20
Sodium, Total	345	1040	1450	106		-	75-125	-	20
Thallium, Total	ND	12.4	12.5	100		-	75-125	-	20
Vanadium, Total	26.3	51.9	81.9	107		-	75-125	-	20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02		QC Batch ID: WG1356916-3		QC Sample: L2012735-01		Client ID: MS Sample			
Zinc, Total	102	51.9	145	83	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 02		QC Batch ID: WG1356920-3		QC Sample: L2012735-01		Client ID: MS Sample			
Mercury, Total	ND	0.19	0.242	127	Q	-	80-120	-	20

# Lab Duplicate Analysis

Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1356843-4 QC Sample: L2013859-01 Client ID: DUP Sample						
Aluminum, Total	0.0781	0.0806	mg/l	3		20
Antimony, Total	0.00048J	0.00091J	mg/l	NC		20
Arsenic, Total	ND	ND	mg/l	NC		20
Barium, Total	0.04141	0.04090	mg/l	1		20
Beryllium, Total	ND	ND	mg/l	NC		20
Cadmium, Total	ND	ND	mg/l	NC		20
Chromium, Total	0.00248	0.00257	mg/l	3		20
Cobalt, Total	0.00047J	0.00052	mg/l	NC		20
Copper, Total	0.00092J	0.00075J	mg/l	NC		20
Iron, Total	0.102	0.112	mg/l	9		20
Lead, Total	0.00037J	0.00041J	mg/l	NC		20
Manganese, Total	0.04826	0.05065	mg/l	5		20
Nickel, Total	0.00194J	0.00242	mg/l	NC		20
Potassium, Total	1.49	1.48	mg/l	1		20
Selenium, Total	ND	ND	mg/l	NC		20
Silver, Total	ND	ND	mg/l	NC		20
Sodium, Total	35.4	35.7	mg/l	1		20
Thallium, Total	ND	0.00027J	mg/l	NC		20
Vanadium, Total	ND	ND	mg/l	NC		20

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1356843-4 QC Sample: L2013859-01 Client ID: DUP Sample					
Zinc, Total	ND	ND	mg/l	NC	20
Total Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1356844-4 QC Sample: L2013811-01 Client ID: DUP Sample					
Mercury, Total	ND	ND	mg/l	NC	20

# Lab Duplicate Analysis

Batch Quality Control

Project Name: 89 LASALLE BCP SITE

Project Number: 19120649

Lab Number: L2013833

Report Date: 04/06/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1356916-4 QC Sample: L2012735-01 Client ID: DUP Sample					
Aluminum, Total	4310	4300	mg/kg	0	20
Antimony, Total	0.764J	0.848J	mg/kg	NC	20
Arsenic, Total	3.12	3.13	mg/kg	0	20
Barium, Total	44.0	44.0	mg/kg	0	20
Beryllium, Total	0.165J	0.174J	mg/kg	NC	20
Cadmium, Total	4.96	4.60	mg/kg	8	20
Calcium, Total	6670	38100	mg/kg	140	Q 20
Chromium, Total	17.4	19.9	mg/kg	13	20
Cobalt, Total	4.49	4.33	mg/kg	4	20
Copper, Total	44.4	206	mg/kg	129	Q 20
Iron, Total	9100	10000	mg/kg	9	20
Lead, Total	82.1	94.2	mg/kg	14	20
Magnesium, Total	3450	19800	mg/kg	141	Q 20
Manganese, Total	88.2	238	mg/kg	92	Q 20
Nickel, Total	11.0	10.7	mg/kg	3	20
Potassium, Total	327	415	mg/kg	24	Q 20
Selenium, Total	ND	0.623J	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	345	330	mg/kg	4	20

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 19120649

**Lab Number:** L2013833

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

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1356916-4 QC Sample: L2012735-01 Client ID: DUP Sample					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	26.3	22.1	mg/kg	17	20
Zinc, Total	102	94.4	mg/kg	8	20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1356920-4 QC Sample: L2012735-01 Client ID: DUP Sample					
Mercury, Total	ND	0.159	mg/kg	NC	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

**SAMPLE RESULTS**

**Lab ID:** L2013833-02  
**Client ID:** MH-1-SEDIMENT  
**Sample Location:** 89 LASALLE AVE, BUFFALO, NY

**Date Collected:** 03/30/20 13:20  
**Date Received:** 03/30/20  
**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	83.0		%	0.100	NA	1	-	03/31/20 08:58	121,2540G	PR



**Lab Duplicate Analysis**  
*Batch Quality Control***Project Name:** 89 LASALLE BCP SITE**Project Number:** 19120649**Lab Number:** L2013833**Report Date:** 04/06/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1356715-1 QC Sample: L2013817-04 Client ID: DUP Sample						
Solids, Total	78.9	81.6	%	3		20

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L2013833**Project Number:** 19120649**Report Date:** 04/06/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

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

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2013833-01A	Plastic 250ml HNO3 preserved	A	<2	<2	2.8	Y	Absent		BA-6020T(180),SE-6020T(180),TL-6020T(180),FE-6020T(180),NI-6020T(180),CA-6020T(180),CR-6020T(180),K-6020T(180),CU-6020T(180),NA-6020T(180),ZN-6020T(180),PB-6020T(180),MN-6020T(180),BE-6020T(180),V-6020T(180),AS-6020T(180),SB-6020T(180),HG-T(28),AL-6020T(180),CD-6020T(180),MG-6020T(180),AG-6020T(180),CO-6020T(180)
L2013833-01B	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2013833-01C	Amber 250ml unpreserved	A	7	7	2.8	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L2013833-02A	Plastic 2oz unpreserved for TS	A	NA		2.8	Y	Absent		TS(7)
L2013833-02B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.8	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),SE-TI(180),CU-TI(180),PB-TI(180),ZN-TI(180),SB-TI(180),CO-TI(180),V-TI(180),HG-T(28),MG-TI(180),MN-TI(180),FE-TI(180),CD-TI(180),K-TI(180),CA-TI(180),NA-TI(180)
L2013833-02C	Glass 120ml/4oz unpreserved	A	NA		2.8	Y	Absent		NYTCL-8270(14)

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

## GLOSSARY

### Acronyms

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

### Footnotes

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

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

### Terms

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

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

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

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

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

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

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

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

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

### Data Qualifiers

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

**Report Format:** DU Report with 'J' Qualifiers



**Project Name:** 89 LASALLE BCP SITE  
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**Data Qualifiers**

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

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

Report Format: DU Report with 'J' Qualifiers

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**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 19120649

**Lab Number:** L2013833  
**Report Date:** 04/06/20

## REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

## LIMITATION OF LIABILITIES

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

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



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

Revision 16

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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.**EPA TO-12** Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

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

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




**APPENDIX B**  
**SEMI-ANNUAL SITE INSPECTION FORM & PHOTO LOG DOCUMENTATION**

**89 LaSalle Avenue**  
**BUFFALO, NEW YORK**  
**Site Management Plan**

NYSDEC Site Number: C915283

**SEMI-ANNUAL INSPECTION FORM**

*NOV. 5, 2019*

Inspection Item Description	Frequency	Comments	Corrective Action (If Required)
Site Cover Systems:  - Soil Cover  - Asphalt Paved Areas  - Concrete Sidewalks and other concrete structures  - Other (if applicable)  <b>Document specific locations and nature of condition issue if any observed.</b>	Semi-Annually	SOIL COVER SYSTEMS ARE IN EXCELLENT CONDITION - BLDG 1 CONSTRUCTION COMPLETED & RESTORATION FINISHED  EXCELLENT - ALL PAVING COMPLETED W/ TOP COAT  EXCELLENT CONDITION  FORMER BLOCK BLDG. FRONTING LASALLE AVE (USED DURING CONSTRUCTION) HAS BEEN DEMOLISHED. COMPACTED CRUSHED STONE HAS BEEN PLACED (SEE PHOTO 106)	N/A 
Stormwater – Manhole Discharge Sampling Location General Condition	Semi-Annually	COMPLETED @ MH-1 ON 11/5/19 AFTER > 0.5" RAINFALL EVENT	N/A
Excavation Work Locations – General Conditions	Per Occurrence	NO ACTIVE INTRUSIVE WORK AT SITE	N/A

*Patricia J. Munter*  
*11/5/19*

**PROJECT TITLE: SITE MANAGEMENT PLAN: 89 LA SALLE AVE SITE – PRR SITE INSPECTION****PHOTO 1**

**Description:** Former location of block service building on LaSalle Ave (demolished). Looking northeast

11/5/19

**PHOTO 2**

**Description:** Northwest corner of Building 1. Looking east-southeast

11/5/19



**PHOTO 3**

**Description:** West side of Building 1. Looking east-northeast

11/5/19

**PHOTO 4**

**Description:** South of Building 1 access road. Looking east

11/5/19



**PHOTO 5**

**Description:** Access road and parking area between Buildings 4 and 5. Looking northeast

11/5/19

**PHOTO 6**

**Description:** Vegetated soil cover south of Building 5. Looking northeast

11/5/19



**PHOTO 7**

**Description:** Building 2 courtyard area, stabilized. Looking northeast

11/5/19

**PHOTO 8**

**Description:** Access road and parking areas east of Building 2. Looking southeast

11/5/19



**PHOTO 9**

**Description:** Access road and parking areas north of Building 2. Looking east

11/5/19

**PHOTO 10**

**Description:** Traffic circle at main entrance. Looking northwest

11/5/19



**89 LaSalle Avenue**  
**BUFFALO, NEW YORK**  
**Site Management Plan**

NYSDEC Site Number: C915283

**SEMI-ANNUAL INSPECTION FORM**

3/30/20

Inspection Item Description	Frequency	Comments	Corrective Action (If Required)
Site Cover Systems: <ul style="list-style-type: none"> <li>- Soil Cover</li> <li>- Asphalt Paved Areas</li> <li>- Concrete Sidewalks and other concrete structures</li> <li>- Other (if applicable)</li> </ul>	Semi-Annually	<p>→ EXCELLENT CONDITION BIOG 1 COMPLETE &amp; FULLY VEGETATED</p> <p>→ EXCELLENT CONDITION</p> <p>→ EXCELLENT CONDITION</p>	N/A
Document specific locations and nature of condition issue if any observed.			
Stormwater – Manhole Discharge Sampling Location General Condition	Semi-Annually	COMPLETED 2 MH-1 ON 3/30/20 AFTER 0.5" RAINFALL EVENT	N/A
Excavation Work Locations – General Conditions	Per Occurrence	NO ACTIVE EXCAVATIONS OR SOIL DISTURBANCE	N/A

*Patricia J. Martin*  
3/30/20

**PROJECT TITLE: SITE MANAGEMENT PLAN: 89 LA SALLE AVE SITE – PRR SITE INSPECTION****PHOTO 1**

**Description:** Former location of block service building on LaSalle Ave (demolished). Looking northeast

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3/30/20

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**Description:** Traffic circle at main entrance. Looking northwest

3/30/20



## **APPENDIX C**

**SITE C915283 SITE MANAGEMENT PLAN PERIODIC REVIEW REPORT – 2019/2020  
ICS-ECS CERTIFICATION FORM**



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



**Site No.** C915283

**Site Details**

**Box 1**

**Site Name** 89 LaSalle Avenue Site

Site Address: 89 LaSalle Avenue      Zip Code: 14212  
City/Town: Buffalo  
County: Erie  
Site Acreage: 9.230

Reporting Period: March 30, 2019 to March 30, 2020

- |  | YES                                 | NO                                  |
|--|-------------------------------------|-------------------------------------|
| 1. Is the information above correct?   | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| If NO, include handwritten above or on a separate sheet.   |                                     |                                     |
| 2. Has some or all of the site property been sold, subdivided, merged, or undergone a tax map amendment during this Reporting Period?                              | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| 4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?                      | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| <b>If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.</b> |                                     |                                     |
| 5. Is the site currently undergoing development?   | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**Box 2**

- |   | YES                                 | NO                       |
|---|-------------------------------------|--------------------------|
| 6. Is the current site use consistent with the use(s) listed below?<br>Restricted-Residential, Commercial, and Industrial | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 7. Are all ICs/ECs in place and functioning as designed?  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**IF THE ANSWER TO EITHER QUESTION 6 OR 7 IS NO, sign and date below and  
DO NOT COMPLETE THE REST OF THIS FORM. Otherwise continue.**

**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

		<b>Box 2A</b>	
		<b>YES</b>	<b>NO</b>
8. Has any new information revealed that assumptions made in the Qualitative Exposure Assessment regarding offsite contamination are no longer valid?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>If you answered YES to question 8, include documentation or evidence that documentation has been previously submitted with this certification form.</b>			
9. Are the assumptions in the Qualitative Exposure Assessment still valid? (The Qualitative Exposure Assessment must be certified every five years)		<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>If you answered NO to question 9, the Periodic Review Report must include an updated Qualitative Exposure Assessment based on the new assumptions.</b>			
<b>SITE NO. C915283</b>		<b>Box 3</b>	
<b>Description of Institutional Controls</b>			

<u>Parcel</u>	<u>Owner</u>	<u>Institutional Control</u>
<b>79.70-2-11</b>	Legacy LaSalle, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
1. Prohibition of groundwater use. 2. Land use restricted to Restricted Residential, Commercial or Industrial purposes. 3. Soil Management for any future intrusive work.		
<b>79.70-2-17.1</b>	Legacy LaSalle, LLC	Landuse Restriction Ground Water Use Restriction Soil Management Plan Monitoring Plan Site Management Plan IC/EC Plan
1. Prohibition of groundwater use. 2. Land use restricted to Restricted Residential, Commercial or Industrial purposes. 3. Soil Management for any future intrusive work.		
<b>79.70-2-18</b>	Legacy LaSalle, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
1. Prohibition of groundwater use. 2. Land use restricted to Restricted Residential, Commercial or Industrial purposes. 3. Soil Management for any future intrusive work.		
<b>portion of 79.70-2-16.11</b>	Legacy LaSalle, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
		Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
1. Prohibition of groundwater use. 2. Land use restricted to Restricted Residential, Commercial or Industrial purposes. 3. Soil Management for any future intrusive work.		
<b>portion of 79.70-2-17.2</b>	Legacy LaSalle, LLC	Ground Water Use Restriction Soil Management Plan Landuse Restriction Monitoring Plan Site Management Plan IC/EC Plan
1. Prohibition of groundwater use. 2. Land use restricted to Restricted Residential, Commercial or Industrial purposes.		

**Description of Engineering Controls**

<u>Parcel</u>	<u>Engineering Control</u>
<b>79.70-2-11</b>	Cover System 1. Monitoring and maintenance of the cover system. 2. Semi-annual storm water and sediment monitoring.
<b>79.70-2-17.1</b>	Cover System 1. Monitoring and maintenance of the cover system. 2. Semi-annual storm water and sediment monitoring.
<b>79.70-2-18</b>	Cover System 1. Monitoring and maintenance of the cover system. 2. Semi-annual storm water and sediment monitoring.
<b>portion of 79.70-2-16.11</b>	Cover System Cover System 1. Monitoring and maintenance of the cover system. 2. Semi-annual storm water and sediment monitoring.
<b>portion of 79.70-2-17.2</b>	Cover System 1. Monitoring and maintenance of the cover system. 2. Semi-annual storm water and sediment monitoring.

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

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

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

YES NO

X

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

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

YES NO

X

**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. C915283

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 PATRICK J. MARTIN at 2430 N. FOREST RD., GETZVILLE, NY  
print name print business address

am certifying as OWNER (Owner or Remedial Party)

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

Patrick J. Martin  
Signature of Owner, Remedial Party, or Designated Representative  
Rendering Certification

4/17/20  
Date

IC/EC CERTIFICATIONS

Box 7

Professional Engineer Signature

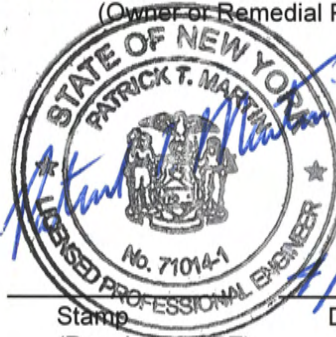
I certify that all information in Boxes 4 and 5 are true. I understand that a false statement made herein is punishable as a Class "A" misdemeanor, pursuant to Section 210.45 of the Penal Law.

I PATRICK T. MARTIN at 2430 N. FOREST RD., GETZVILLE, NY  
print name print business address

am certifying as a Professional Engineer for the OWNER  
(Owner or Remedial Party)

Patrick T. Martin

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



Stamp  
(Required for PE)

Date

