

# **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 2019**

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(April 2019)

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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, 2018 to March 30, 2019.

During the reporting period of this PRR, intrusive activities were performed on the BCP Site related to the final development of the Site, i.e., the construction of Building 1. The semi-annual sampling and inspection typically conducted in late fall each year was not completed in the Fall of 2018. Due to lack of a qualifying rain event in the first three months of 2019, the spring stormwater and sediment sampling event was postponed and occurred on April 15, 2019, to be included for submission with this report.

## 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. Intrusive work was performed on the BCP Site during the reporting period covered by this PRR for installation of Building 1 utilities and miscellaneous site work associated with the completion of Building 1. All intrusive work was conducted in accordance with the Excavation Work Plan approved by NYSDEC.

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

Stormwater and sediment samples for the current PRR period were collected on April 15, 2019, when stormwater effluent was present in sufficient quantity for sampling at the MH-1 structure. The next sampling event is tentatively scheduled for October 2019.

It should be noted that for this reporting period, the stormwater and sediment sample was collected on April 15, 2019 due to the lack of a qualifying rain event during the first three months of 2019.

## 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)
Semiannual 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

On April 15, 2019, 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 April sampling event 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 SVOCs were found in the stormwater sample for benzo[b]fluoranthene (0.00003 ppm) and chrysene (0.00004 ppm) in April 2019. Both detections were estimated values marginally above the surface water standards. Detections above NYSDEC surface water standards for metals were found in the stormwater sample for sodium (65.7 ppm) and antimony (0.00489 ppm). The antimony detection was qualified as an estimated concentration. No exceedances of the Class A freshwater sediment guidance values were detected in the April 2019 sediment sample.

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

## 4.3 Annual Site Inspection Results

A site inspection was performed on April 15, 2019, to address the frequency of once per year established by the SMP Monitoring Program requirements. A Site-wide inspection form was completed (Appendix B) during the 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. In particular, during the April, 2019 inspection, special attention was given to the erosion control measures in place surrounding the active construction area encompassing the Building 1 footprint.

Photographic logs containing photos taken during the April inspection is 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 annual inspection, 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 three 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 Annual Inspection will be performed in March of 2020. The next semi-annual SMP sampling event will be performed in September/October of 2019, 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)	Class A Freshwater Sediment Guidance Values*	Restricted Residential SCOs Table 375-6.8(b)	L1915294-01 Stormwater <sup>1</sup>	L1915294-02 Sediment
Sample ID				MH-1	MH-1
Sample Date				4/15/19	4/15/19
Units	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
<b>Semivolatile Organics (Method 8270D-SIM)</b>					
2-Methylnaphthalene	NS	NS	NS	ND	ND
2-Methylphenol	NS	NS	NS	ND	ND
Acenaphthene	0.02	NS	100	ND	ND
Acenaphthylene	NS	NS	100	ND	ND
Anthracene	0.05	NS	100	ND	0.083 J
Benzaldehyde	NS	NS	NS	ND	ND
Benzo[a]anthracene	0.000002	NS	1	ND	0.27
Benzo[a]pyrene	NS	NS	1	ND	0.28
Benzo[b]fluoranthene	0.000002	NS	1	0.00003 J	0.39
Benzo[g,h,i]perylene	NS	NS	100	0.00002 J	0.18 J
Benzo[k]fluoranthene	0.000002	NS	3.9	0.00002 J	0.12 J
Biphenyl	NS	NS	1	ND	ND
Bis(2-ethylhexyl) phthalate	0.005	360	NS	ND	0.24 J
Carbazole	NS	NS	NS	ND	0.054 J
Chrysene	0.000002	NS	3.9	0.00004 J	0.28
Dibenzo[a,h]anthracene	NS	NS	0.33	ND	ND
Dibenzofuran	NS	NS	NA	ND	ND
Di-n-butyl phthalate	0.05	NS	NS	ND	ND
Di-n-octyl phthalate	0.05	NS	NS	ND	ND
Diethyl phthalate	NS	NS	NS	0.0013 J	ND
Fluoranthene	0.05	NS	100	0.00007 J	0.53
Fluorene	0.05	NS	100	ND	0.042 J
Indeno[1,2,3-cd]pyrene	0.000002	NS	0.5	0.00002 J	0.16 J
Napthalene	NS	NS	100	ND	ND
Phenanthrene	NS	NS	100	0.00007 J	0.3
Pyrene	0.05	NS	100	0.00005 J	0.43
Pentachlorophenol	0.001	NS	6.7	0.00047 J	ND
3-Methylphenol/4-Methylphenol	NS	NS	NS	ND	0.14 J
<b>Total Metals (SW 846 Series)</b>					
Aluminum	NS	NS	NS	0.0851	12200
Antimony	0.003	NS	NS	0.00489 J	1.34 J
Arsenic	0.025	<10	16	0.0004 J	7.32
Barium	NS	NS	400	0.0068	72.7
Beryllium	0.003	NS	72	ND	0.558 J
Cadmium	0.003	<1	4.3	ND	1.13 J
Calcium	NA	NS	NS	14.5	50000
Chromium	0.05	<43	180	0.00572	18
Cobalt	NS	NS	NS	ND	9.8
Copper	0.2	<32	270	0.00181	30.5
Iron	0.3	NS	NA	0.0663	23000
Lead	0.025	<36	400	ND	59.7
Magnesium	NA	NS	NS	1.07	17100
Manganese	0.3	NS	2000	0.01903	466
Mercury	0.0007	<0.2	0.81	ND	0.069 J
Nickel	0.1	<23	310	ND	23.9
Potassium	NS	NS	NA	1.27	1210
Selenium	NS	NS	180	ND	0.542
Silver	NS	<1	180	ND	ND
Sodium	20	NS	NS	65.7	2760
Thalium	NS	NS	NS	0.00019 J	ND
Vanadium	NS	NS	NS	ND	25.8
Zinc	NS	<120	10000	ND	161



APRIL 2019

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**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 Results stormwater analysis 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)

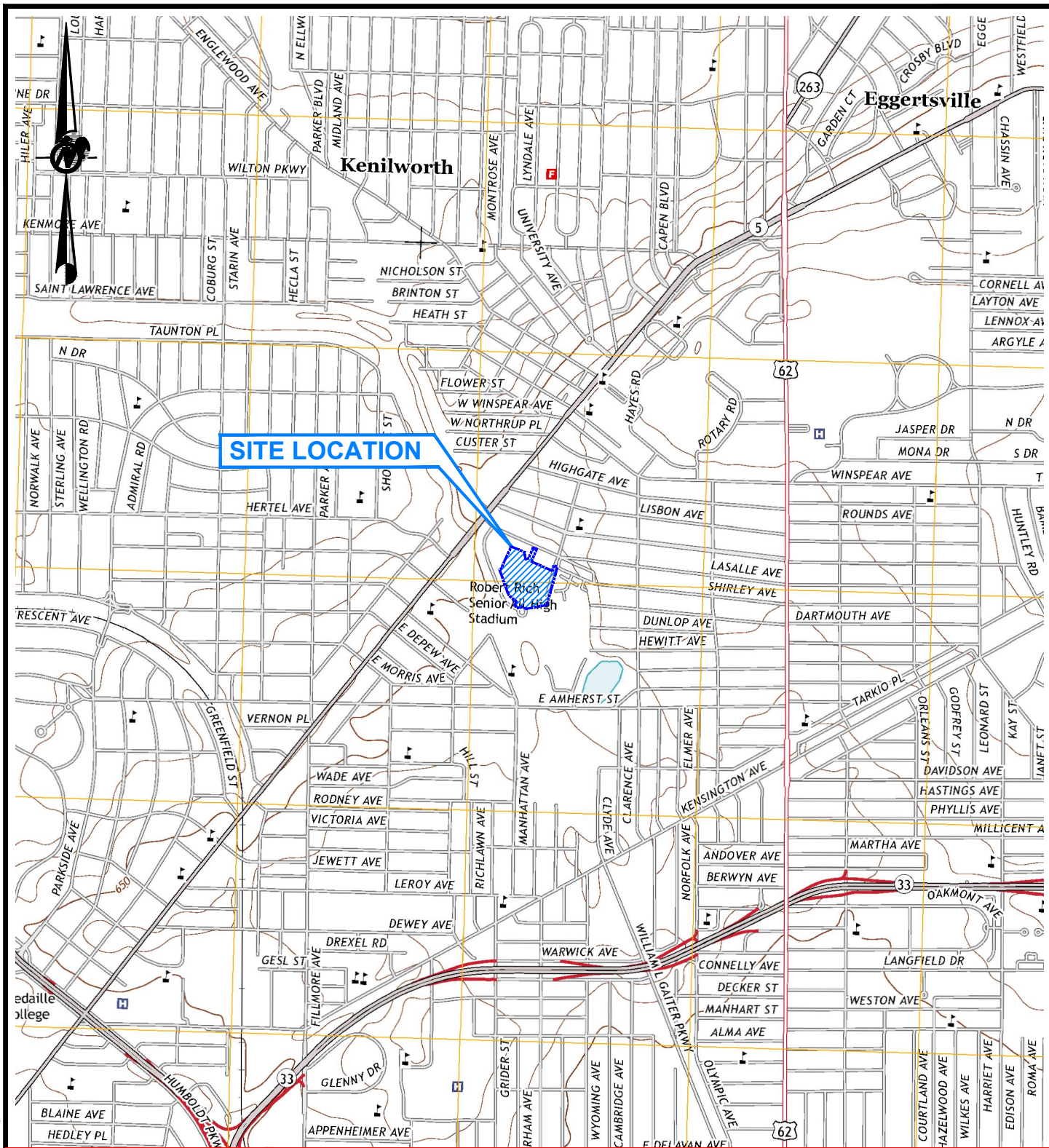
**44** = Sample concentration exceeds NYSDEC B10 Freshwater Sediment Guidance Value for Class A sediments

ND = Non detectable concentration by approved analytical methods; water quality standard.

NS = Not Specified.

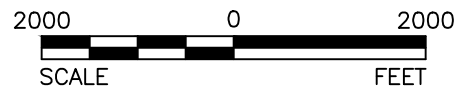
Table by:	KJ
Checked by:	PTM
Reviewed by:	PTM

## 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

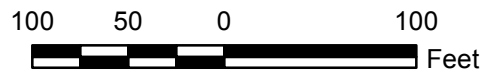


Map Document: C:\Drafting\Projects\2017\1776\65 - 89 Lasalle\map documents\1776 165002.mxd / Modified 5/5/2017 2:11:43 PM by L Stafford / Exported 5/5/2017 2:12:03 PM by L Stafford




**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						
 <b>Golder Associates</b>			PROJECT No. 1776165		FILE No. 1776165002	
			DESIGN --- ---		SCALE: AS SHOWN REV. 0	
			GIS LBS 5/5/2017		<b>FIGURE 4-1</b>	
			CHECK --- ---			
			REVIEW PTM 5/5/2017			



**APPENDIX A**  
**ANALYTICAL DATA REPORT – ALPHA ANALYTICAL**  
**APRIL 2019**



## ANALYTICAL REPORT

Lab Number:	L1915294
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:	1787491
Report Date:	04/23/19

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

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

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**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1915294-01	MH-1 STORMWATER	WATER	89 LASALLE AVE., BUFFALO, NY	04/15/19 10:25	04/15/19
L1915294-02	MH-1 SEDIMENT	SOIL	89 LASALLE AVE., BUFFALO, NY	04/15/19 10:45	04/15/19

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

### 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:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

### 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

L1915294-02: 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.

The WG1227883-3 MS recoveries for aluminum (0%), calcium (599%), iron (0%), magnesium (186%) and manganese (57%), performed on L1915294-02, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG1227883-4 Laboratory Duplicate RPDs for aluminum (33%), barium (30%), cobalt (33%), iron (31%), nickel (27%), potassium (27%) and vanadium (27%), performed on L1915294-02, are outside the acceptance criteria. The elevated RPDs have been attributed to the non-homogeneous nature of the native sample.

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

Authorized Signature:

 Melissa Cripps

Title: Technical Director/Representative

Date: 04/23/19

# ORGANICS

# SEMIVOLATILES

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**SAMPLE RESULTS**

Lab ID: L1915294-01  
 Client ID: MH-1 STORMWATER  
 Sample Location: 89 LASALLE AVE., BUFFALO, NY

Date Collected: 04/15/19 10:25  
 Date Received: 04/15/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D  
 Analytical Date: 04/21/19 15:41  
 Analyst: ALS

Extraction Method: EPA 3510C  
 Extraction Date: 04/20/19 00:02

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	1.3	J	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:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**SAMPLE RESULTS****Lab ID:** L1915294-01**Date Collected:** 04/15/19 10:25**Client ID:** MH-1 STORMWATER**Date Received:** 04/15/19**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
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	50		21-120
Phenol-d6	49		10-120
Nitrobenzene-d5	66		23-120
2-Fluorobiphenyl	72		15-120
2,4,6-Tribromophenol	68		10-120
4-Terphenyl-d14	86		41-149

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**SAMPLE RESULTS**

Lab ID: L1915294-01  
 Client ID: MH-1 STORMWATER  
 Sample Location: 89 LASALLE AVE., BUFFALO, NY

Date Collected: 04/15/19 10:25  
 Date Received: 04/15/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Water  
 Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/20/19 16:37  
 Analyst: CB

Extraction Method: EPA 3510C  
 Extraction Date: 04/20/19 00:05

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	0.07	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	0.02	J	ug/l	0.10	0.01	1
Chrysene	0.04	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	0.07	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	0.05	J	ug/l	0.10	0.02	1
2-Methylnaphthalene	ND		ug/l	0.10	0.02	1
Pentachlorophenol	0.47	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:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

**SAMPLE RESULTS**

**Lab ID:** L1915294-01  
**Client ID:** MH-1 STORMWATER  
**Sample Location:** 89 LASALLE AVE., BUFFALO, NY

**Date Collected:** 04/15/19 10:25  
**Date Received:** 04/15/19  
**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	44		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	63		23-120
2-Fluorobiphenyl	65		15-120
2,4,6-Tribromophenol	73		10-120
4-Terphenyl-d14	75		41-149

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**SAMPLE RESULTS**

Lab ID: L1915294-02  
 Client ID: MH-1 SEDIMENT  
 Sample Location: 89 LASALLE AVE., BUFFALO, NY

Date Collected: 04/15/19 10:45  
 Date Received: 04/15/19  
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil  
 Analytical Method: 1,8270D  
 Analytical Date: 04/22/19 11:08  
 Analyst: EK  
 Percent Solids: 51%

Extraction Method: EPA 3546  
 Extraction Date: 04/20/19 14:08

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	250	33.	1
Hexachlorobenzene	ND		ug/kg	190	36.	1
Bis(2-chloroethyl)ether	ND		ug/kg	280	43.	1
2-Chloronaphthalene	ND		ug/kg	320	32.	1
3,3'-Dichlorobenzidine	ND		ug/kg	320	84.	1
2,4-Dinitrotoluene	ND		ug/kg	320	64.	1
2,6-Dinitrotoluene	ND		ug/kg	320	54.	1
Fluoranthene	530		ug/kg	190	36.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	320	34.	1
4-Bromophenyl phenyl ether	ND		ug/kg	320	48.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	380	54.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	340	32.	1
Hexachlorobutadiene	ND		ug/kg	320	46.	1
Hexachlorocyclopentadiene	ND		ug/kg	910	290	1
Hexachloroethane	ND		ug/kg	250	51.	1
Isophorone	ND		ug/kg	280	41.	1
Naphthalene	ND		ug/kg	320	39.	1
Nitrobenzene	ND		ug/kg	280	47.	1
NDPA/DPA	ND		ug/kg	250	36.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	320	49.	1
Bis(2-ethylhexyl)phthalate	240	J	ug/kg	320	110	1
Butyl benzyl phthalate	ND		ug/kg	320	80.	1
Di-n-butylphthalate	ND		ug/kg	320	60.	1
Di-n-octylphthalate	ND		ug/kg	320	110	1
Diethyl phthalate	ND		ug/kg	320	29.	1
Dimethyl phthalate	ND		ug/kg	320	67.	1
Benzo(a)anthracene	270		ug/kg	190	36.	1
Benzo(a)pyrene	280		ug/kg	250	78.	1



**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**SAMPLE RESULTS**

Lab ID: L1915294-02  
 Client ID: MH-1 SEDIMENT  
 Sample Location: 89 LASALLE AVE., BUFFALO, NY

Date Collected: 04/15/19 10:45  
 Date Received: 04/15/19  
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzo(b)fluoranthene	390		ug/kg	190	53.	1
Benzo(k)fluoranthene	120	J	ug/kg	190	51.	1
Chrysene	280		ug/kg	190	33.	1
Acenaphthylene	ND		ug/kg	250	49.	1
Anthracene	83	J	ug/kg	190	62.	1
Benzo(ghi)perylene	180	J	ug/kg	250	37.	1
Fluorene	42	J	ug/kg	320	31.	1
Phenanthrene	300		ug/kg	190	39.	1
Dibenzo(a,h)anthracene	ND		ug/kg	190	37.	1
Indeno(1,2,3-cd)pyrene	160	J	ug/kg	250	44.	1
Pyrene	430		ug/kg	190	32.	1
Biphenyl	ND		ug/kg	720	74.	1
4-Chloroaniline	ND		ug/kg	320	58.	1
2-Nitroaniline	ND		ug/kg	320	61.	1
3-Nitroaniline	ND		ug/kg	320	60.	1
4-Nitroaniline	ND		ug/kg	320	130	1
Dibenzofuran	ND		ug/kg	320	30.	1
2-Methylnaphthalene	ND		ug/kg	380	38.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	320	33.	1
Acetophenone	ND		ug/kg	320	39.	1
2,4,6-Trichlorophenol	ND		ug/kg	190	60.	1
p-Chloro-m-cresol	ND		ug/kg	320	47.	1
2-Chlorophenol	ND		ug/kg	320	38.	1
2,4-Dichlorophenol	ND		ug/kg	280	51.	1
2,4-Dimethylphenol	ND		ug/kg	320	100	1
2-Nitrophenol	ND		ug/kg	690	120	1
4-Nitrophenol	ND		ug/kg	440	130	1
2,4-Dinitrophenol	ND		ug/kg	1500	150	1
4,6-Dinitro-o-cresol	ND		ug/kg	820	150	1
Pentachlorophenol	ND		ug/kg	250	70.	1
Phenol	ND		ug/kg	320	48.	1
2-Methylphenol	ND		ug/kg	320	49.	1
3-Methylphenol/4-Methylphenol	140	J	ug/kg	460	50.	1
2,4,5-Trichlorophenol	ND		ug/kg	320	61.	1
Carbazole	54	J	ug/kg	320	31.	1
Atrazine	ND		ug/kg	250	110	1
Benzaldehyde	ND		ug/kg	420	86.	1

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

**SAMPLE RESULTS**

**Lab ID:** L1915294-02  
**Client ID:** MH-1 SEDIMENT  
**Sample Location:** 89 LASALLE AVE., BUFFALO, NY

**Date Collected:** 04/15/19 10:45  
**Date Received:** 04/15/19  
**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	320	96.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	320	64.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	93		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	64		30-120
2,4,6-Tribromophenol	143	Q	10-136
4-Terphenyl-d14	53		18-120

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/23/19 13:09  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/20/19 00:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1228435-1					
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:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/23/19 13:09  
**Analyst:** SZ

**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/20/19 00:02

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG1228435-1					
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
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	38		21-120
Phenol-d6	41		10-120
Nitrobenzene-d5	45		23-120
2-Fluorobiphenyl	58		15-120
2,4,6-Tribromophenol	46		10-120
4-Terphenyl-d14	73		41-149

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

### Method Blank Analysis Batch Quality Control

**Analytical Method:** 1,8270D-SIM  
**Analytical Date:** 04/20/19 12:38  
**Analyst:** CB

**Extraction Method:** EPA 3510C  
**Extraction Date:** 04/20/19 00:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1228436-1					
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:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

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

Analytical Method: 1,8270D-SIM  
 Analytical Date: 04/20/19 12:38  
 Analyst: CB

Extraction Method: EPA 3510C  
 Extraction Date: 04/20/19 00:05

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01 Batch: WG1228436-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	35		21-120
Phenol-d6	36		10-120
Nitrobenzene-d5	46		23-120
2-Fluorobiphenyl	48		15-120
2,4,6-Tribromophenol	57		10-120
4-Terphenyl-d14	64		41-149

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/22/19 04:42  
**Analyst:** KR

**Extraction Method:** EPA 3546  
**Extraction Date:** 04/20/19 14:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1228588-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	100	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	100	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	17.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	27.
Isophorone	ND		ug/kg	150	22.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	26.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	42.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	35.
Benzo(a)anthracene	ND		ug/kg	100	19.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	100	28.

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/22/19 04:42  
**Analyst:** KR

**Extraction Method:** EPA 3546  
**Extraction Date:** 04/20/19 14:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1228588-1					
Benzo(k)fluoranthene	ND		ug/kg	100	26.
Chrysene	ND		ug/kg	100	17.
Acenaphthylene	ND		ug/kg	130	26.
Anthracene	ND		ug/kg	100	32.
Benzo(ghi)perylene	ND		ug/kg	130	20.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	100	20.
Dibenzo(a,h)anthracene	ND		ug/kg	100	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	100	16.
Biphenyl	ND		ug/kg	380	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	69.
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	100	31.
p-Chloro-m-cresol	ND		ug/kg	160	25.
2-Chlorophenol	ND		ug/kg	160	20.
2,4-Dichlorophenol	ND		ug/kg	150	27.
2,4-Dimethylphenol	ND		ug/kg	160	55.
2-Nitrophenol	ND		ug/kg	360	62.
4-Nitrophenol	ND		ug/kg	230	68.
2,4-Dinitrophenol	ND		ug/kg	800	77.
4,6-Dinitro-o-cresol	ND		ug/kg	430	80.
Pentachlorophenol	ND		ug/kg	130	36.



**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

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

**Analytical Method:** 1,8270D  
**Analytical Date:** 04/22/19 04:42  
**Analyst:** KR

**Extraction Method:** EPA 3546  
**Extraction Date:** 04/20/19 14:08

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02 Batch: WG1228588-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	26.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	32.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	58.
Benzaldehyde	ND		ug/kg	220	45.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	86		25-120
Phenol-d6	80		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	122		10-136
4-Terphenyl-d14	89		18-120

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

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: WG1228435-2 WG1228435-3								
Bis(2-chloroethyl)ether	77		41		40-140	61	Q	30
3,3'-Dichlorobenzidine	55		58		40-140	5		30
2,4-Dinitrotoluene	86		71		48-143	19		30
2,6-Dinitrotoluene	87		69		40-140	23		30
4-Chlorophenyl phenyl ether	77		59		40-140	26		30
4-Bromophenyl phenyl ether	79		65		40-140	19		30
Bis(2-chloroisopropyl)ether	76		43		40-140	55	Q	30
Bis(2-chloroethoxy)methane	80		56		40-140	35	Q	30
Hexachlorocyclopentadiene	61		37	Q	40-140	49	Q	30
Isophorone	91		59		40-140	43	Q	30
Nitrobenzene	84		48		40-140	55	Q	30
NDPA/DPA	86		70		40-140	21		30
n-Nitrosodi-n-propylamine	94		60		29-132	44	Q	30
Bis(2-ethylhexyl)phthalate	64		62		40-140	3		30
Butyl benzyl phthalate	87		85		40-140	2		30
Di-n-butylphthalate	76		70		40-140	8		30
Di-n-octylphthalate	76		73		40-140	4		30
Diethyl phthalate	87		76		40-140	13		30
Dimethyl phthalate	81		70		40-140	15		30
Biphenyl	78		57		40-140	31	Q	30
4-Chloroaniline	41		35	Q	40-140	16		30
2-Nitroaniline	76		61		52-143	22		30
3-Nitroaniline	46		43		25-145	7		30

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

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: WG1228435-2 WG1228435-3								
4-Nitroaniline	83		70		51-143	17		30
Dibenzofuran	76		57		40-140	29		30
1,2,4,5-Tetrachlorobenzene	77		50		2-134	43	Q	30
Acetophenone	89		52		39-129	52	Q	30
2,4,6-Trichlorophenol	83		60		30-130	32	Q	30
p-Chloro-m-cresol	89		67		23-97	28		30
2-Chlorophenol	74		43		27-123	53	Q	30
2,4-Dichlorophenol	77		56		30-130	32	Q	30
2,4-Dimethylphenol	56		44		30-130	24		30
2-Nitrophenol	68		37		30-130	59	Q	30
4-Nitrophenol	83	Q	70		10-80	17		30
2,4-Dinitrophenol	65		58		20-130	11		30
4,6-Dinitro-o-cresol	67		58		20-164	14		30
Phenol	63		42		12-110	40	Q	30
3-Methylphenol/4-Methylphenol	76		52		30-130	38	Q	30
2,4,5-Trichlorophenol	90		68		30-130	28		30
Carbazole	87		76		55-144	13		30
Atrazine	122		110		40-140	10		30
Benzaldehyde	86		39	Q	40-140	75	Q	30
Caprolactam	45		41		10-130	9		30
2,3,4,6-Tetrachlorophenol	83		68		40-140	20		30

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19

<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: WG1228435-2 WG1228435-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	68		35		21-120
Phenol-d6	62		40		10-120
Nitrobenzene-d5	87		48		23-120
2-Fluorobiphenyl	78		55		15-120
2,4,6-Tribromophenol	75		67		10-120
4-Terphenyl-d14	84		75		41-149

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

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: WG1228436-2 WG1228436-3								
Acenaphthene	70		79		40-140	12		40
2-Chloronaphthalene	63		71		40-140	12		40
Fluoranthene	69		82		40-140	17		40
Hexachlorobutadiene	56		60		40-140	7		40
Naphthalene	64		68		40-140	6		40
Benzo(a)anthracene	75		87		40-140	15		40
Benzo(a)pyrene	67		79		40-140	16		40
Benzo(b)fluoranthene	66		74		40-140	11		40
Benzo(k)fluoranthene	71		85		40-140	18		40
Chrysene	76		90		40-140	17		40
Acenaphthylene	66		74		40-140	11		40
Anthracene	71		82		40-140	14		40
Benzo(ghi)perylene	62		78		40-140	23		40
Fluorene	74		84		40-140	13		40
Phenanthrene	67		78		40-140	15		40
Dibenzo(a,h)anthracene	65		82		40-140	23		40
Indeno(1,2,3-cd)pyrene	65		82		40-140	23		40
Pyrene	70		83		40-140	17		40
2-Methylnaphthalene	64		68		40-140	6		40
Pentachlorophenol	63		71		40-140	12		40
Hexachlorobenzene	62		72		40-140	15		40
Hexachloroethane	60		59		40-140	2		40

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19

<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: WG1228436-2 WG1228436-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	51		55		21-120
Phenol-d6	46		52		10-120
Nitrobenzene-d5	71		73		23-120
2-Fluorobiphenyl	57		65		15-120
2,4,6-Tribromophenol	66		75		10-120
4-Terphenyl-d14	63		75		41-149

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

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: WG1228588-2 WG1228588-3								
Acenaphthene	99		91		31-137	8		50
Hexachlorobenzene	117		108		40-140	8		50
Bis(2-chloroethyl)ether	74		69		40-140	7		50
2-Chloronaphthalene	90		84		40-140	7		50
3,3'-Dichlorobenzidine	88		82		40-140	7		50
2,4-Dinitrotoluene	108		97		40-132	11		50
2,6-Dinitrotoluene	95		89		40-140	7		50
Fluoranthene	94		85		40-140	10		50
4-Chlorophenyl phenyl ether	98		90		40-140	9		50
4-Bromophenyl phenyl ether	114		103		40-140	10		50
Bis(2-chloroisopropyl)ether	74		67		40-140	10		50
Bis(2-chloroethoxy)methane	77		68		40-117	12		50
Hexachlorobutadiene	90		82		40-140	9		50
Hexachlorocyclopentadiene	96		86		40-140	11		50
Hexachloroethane	81		76		40-140	6		50
Isophorone	79		71		40-140	11		50
Naphthalene	83		80		40-140	4		50
Nitrobenzene	80		73		40-140	9		50
NDPA/DPA	104		93		36-157	11		50
n-Nitrosodi-n-propylamine	76		70		32-121	8		50
Bis(2-ethylhexyl)phthalate	123		114		40-140	8		50
Butyl benzyl phthalate	102		92		40-140	10		50
Di-n-butylphthalate	104		94		40-140	10		50

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

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: WG1228588-2 WG1228588-3								
Di-n-octylphthalate	120		114		40-140	5		50
Diethyl phthalate	108		97		40-140	11		50
Dimethyl phthalate	98		90		40-140	9		50
Benzo(a)anthracene	100		95		40-140	5		50
Benzo(a)pyrene	108		107		40-140	1		50
Benzo(b)fluoranthene	111		109		40-140	2		50
Benzo(k)fluoranthene	102		93		40-140	9		50
Chrysene	97		91		40-140	6		50
Acenaphthylene	91		87		40-140	4		50
Anthracene	90		84		40-140	7		50
Benzo(ghi)perylene	93		85		40-140	9		50
Fluorene	100		91		40-140	9		50
Phenanthrene	86		78		40-140	10		50
Dibenzo(a,h)anthracene	93		85		40-140	9		50
Indeno(1,2,3-cd)pyrene	95		89		40-140	7		50
Pyrene	91		83		35-142	9		50
Biphenyl	95		90		54-104	5		50
4-Chloroaniline	66		62		40-140	6		50
2-Nitroaniline	95		93		47-134	2		50
3-Nitroaniline	82		76		26-129	8		50
4-Nitroaniline	100		100		41-125	0		50
Dibenzofuran	97		89		40-140	9		50
2-Methylnaphthalene	87		80		40-140	8		50



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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

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: WG1228588-2 WG1228588-3								
1,2,4,5-Tetrachlorobenzene	86		82		40-117	5		50
Acetophenone	95		83		14-144	13		50
2,4,6-Trichlorophenol	95		90		30-130	5		50
p-Chloro-m-cresol	95		92		26-103	3		50
2-Chlorophenol	97		89		25-102	9		50
2,4-Dichlorophenol	99		91		30-130	8		50
2,4-Dimethylphenol	111		100		30-130	10		50
2-Nitrophenol	100		98		30-130	2		50
4-Nitrophenol	113		102		11-114	10		50
2,4-Dinitrophenol	96		87		4-130	10		50
4,6-Dinitro-o-cresol	124		114		10-130	8		50
Pentachlorophenol	123	Q	110	Q	17-109	11		50
Phenol	75		70		26-90	7		50
2-Methylphenol	95		89		30-130	7		50
3-Methylphenol/4-Methylphenol	100		91		30-130	9		50
2,4,5-Trichlorophenol	103		92		30-130	11		50
Carbazole	91		82		54-128	10		50
Atrazine	117		109		40-140	7		50
Benzaldehyde	97		89		40-140	9		50
Caprolactam	113		98		15-130	14		50
2,3,4,6-Tetrachlorophenol	114		98		40-140	15		50

**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19

<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: WG1228588-2 WG1228588-3

<b>Surrogate</b>	<b>LCS %Recovery</b>	<b>Qual</b>	<b>LCSD %Recovery</b>	<b>Qual</b>	<b>Acceptance Criteria</b>
2-Fluorophenol	93		87		25-120
Phenol-d6	90		80		10-120
Nitrobenzene-d5	81		74		23-120
2-Fluorobiphenyl	84		78		30-120
2,4,6-Tribromophenol	135		125		10-136
4-Terphenyl-d14	92		86		18-120

## METALS

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**SAMPLE RESULTS**

Lab ID: L1915294-01

Date Collected: 04/15/19 10:25

Client ID: MH-1 STORMWATER

Date Received: 04/15/19

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
Dissolved Metals - Mansfield Lab											
Aluminum, Dissolved	0.0851		mg/l	0.0100	0.00327	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Antimony, Dissolved	0.00489	J	mg/l	0.00600	0.00042	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Arsenic, Dissolved	0.00040	J	mg/l	0.00050	0.00016	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Barium, Dissolved	0.00680		mg/l	0.00050	0.00017	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Calcium, Dissolved	14.5		mg/l	0.100	0.0394	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Chromium, Dissolved	0.00572		mg/l	0.00100	0.00017	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Copper, Dissolved	0.00181		mg/l	0.00100	0.00038	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Iron, Dissolved	0.0663		mg/l	0.0500	0.0191	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Magnesium, Dissolved	1.07		mg/l	0.0700	0.0242	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Manganese, Dissolved	0.01903		mg/l	0.00100	0.00044	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/17/19 14:15	04/17/19 22:46	EPA 7470A	1,7470A	EA
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Potassium, Dissolved	1.27		mg/l	0.100	0.0309	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Sodium, Dissolved	65.7		mg/l	0.100	0.0293	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Thallium, Dissolved	0.00019	J	mg/l	0.00050	0.00014	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/17/19 19:35	04/18/19 14:48	EPA 3005A	1,6020B	AM



**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**SAMPLE RESULTS**

Lab ID: L1915294-02

Date Collected: 04/15/19 10:45

Client ID: MH-1 SEDIMENT

Date Received: 04/15/19

Sample Location: 89 LASALLE AVE., BUFFALO, NY

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Percent Solids: 51%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	12200		mg/kg	15.1	4.07	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Antimony, Total	1.34	J	mg/kg	7.53	0.573	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Arsenic, Total	7.32		mg/kg	1.51	0.313	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Barium, Total	72.7		mg/kg	1.51	0.262	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Beryllium, Total	0.558	J	mg/kg	0.753	0.050	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Cadmium, Total	1.13	J	mg/kg	1.51	0.148	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Calcium, Total	50000		mg/kg	15.1	5.27	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Chromium, Total	18.0		mg/kg	1.51	0.145	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Cobalt, Total	9.80		mg/kg	3.01	0.250	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Copper, Total	30.5		mg/kg	1.51	0.389	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Iron, Total	23000		mg/kg	7.53	1.36	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Lead, Total	59.7		mg/kg	7.53	0.404	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Magnesium, Total	17100		mg/kg	15.1	2.32	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Manganese, Total	466		mg/kg	1.51	0.240	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Mercury, Total	0.069	J	mg/kg	0.122	0.026	1	04/18/19 06:00	04/18/19 15:31	EPA 7471B	1,7471B	GD
Nickel, Total	23.9		mg/kg	3.77	0.365	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Potassium, Total	1210		mg/kg	377	21.7	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Selenium, Total	0.542	J	mg/kg	3.01	0.389	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Silver, Total	ND		mg/kg	1.51	0.426	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Sodium, Total	2760		mg/kg	301	4.75	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Thallium, Total	ND		mg/kg	3.01	0.475	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Vanadium, Total	25.8		mg/kg	1.51	0.306	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB
Zinc, Total	161		mg/kg	7.53	0.442	2	04/18/19 18:29	04/19/19 18:03	EPA 3050B	1,6010D	AB



Project Name: 89 LASALLE BCP SITE

Lab Number: L1915294

Project Number: 1787491

Report Date: 04/23/19

## Method Blank Analysis Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG1227357-1										
Mercury, Dissolved	ND		mg/l	0.00020	0.00009	1	04/17/19 14:15	04/17/19 22:32	1,7470A	EA

### Prep Information

Digestion Method: EPA 7470A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Dissolved Metals - Mansfield Lab for sample(s): 01 Batch: WG1227472-1										
Aluminum, Dissolved	ND		mg/l	0.0100	0.00327	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Antimony, Dissolved	0.00080	J	mg/l	0.00600	0.00042	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Arsenic, Dissolved	ND		mg/l	0.00050	0.00016	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Barium, Dissolved	ND		mg/l	0.00050	0.00017	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Beryllium, Dissolved	ND		mg/l	0.00050	0.00010	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Cadmium, Dissolved	ND		mg/l	0.00020	0.00005	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Calcium, Dissolved	ND		mg/l	0.100	0.0394	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Chromium, Dissolved	ND		mg/l	0.00100	0.00017	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Cobalt, Dissolved	ND		mg/l	0.00050	0.00016	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Copper, Dissolved	ND		mg/l	0.00100	0.00038	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Iron, Dissolved	ND		mg/l	0.0500	0.0191	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Lead, Dissolved	ND		mg/l	0.00100	0.00034	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Magnesium, Dissolved	ND		mg/l	0.0700	0.0242	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Manganese, Dissolved	0.00060	J	mg/l	0.00100	0.00044	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Nickel, Dissolved	ND		mg/l	0.00200	0.00055	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Potassium, Dissolved	ND		mg/l	0.100	0.0309	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Selenium, Dissolved	ND		mg/l	0.00500	0.00173	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Silver, Dissolved	ND		mg/l	0.00040	0.00016	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Sodium, Dissolved	ND		mg/l	0.100	0.0293	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Thallium, Dissolved	ND		mg/l	0.00050	0.00014	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Vanadium, Dissolved	ND		mg/l	0.00500	0.00157	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM
Zinc, Dissolved	ND		mg/l	0.01000	0.00341	1	04/17/19 19:35	04/18/19 13:44	1,6020B	AM



Project Name: 89 LASALLE BCP SITE

Lab Number: L1915294

Project Number: 1787491

Report Date: 04/23/19

## Method Blank Analysis Batch Quality Control

### Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 02 Batch: WG1227598-1										
Mercury, Total	ND		mg/kg	0.083	0.018	1	04/18/19 06:00	04/18/19 14:55	1,7471B	GD

### 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): 02 Batch: WG1227883-1										
Aluminum, Total	ND		mg/kg	4.00	1.08	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Antimony, Total	ND		mg/kg	2.00	0.152	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Arsenic, Total	ND		mg/kg	0.400	0.083	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Barium, Total	ND		mg/kg	0.400	0.070	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Beryllium, Total	ND		mg/kg	0.200	0.013	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Cadmium, Total	ND		mg/kg	0.400	0.039	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Calcium, Total	ND		mg/kg	4.00	1.40	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Chromium, Total	ND		mg/kg	0.400	0.038	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Cobalt, Total	ND		mg/kg	0.800	0.066	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Copper, Total	ND		mg/kg	0.400	0.103	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Iron, Total	ND		mg/kg	2.00	0.361	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Lead, Total	ND		mg/kg	2.00	0.107	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Magnesium, Total	ND		mg/kg	4.00	0.616	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Manganese, Total	ND		mg/kg	0.400	0.064	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Nickel, Total	ND		mg/kg	1.00	0.097	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Potassium, Total	ND		mg/kg	100	5.76	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Selenium, Total	ND		mg/kg	0.800	0.103	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Silver, Total	ND		mg/kg	0.400	0.113	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Sodium, Total	4.61	J	mg/kg	80.0	1.26	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Thallium, Total	ND		mg/kg	0.800	0.126	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB



**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19

## Method Blank Analysis Batch Quality Control

Vanadium, Total	ND	mg/kg	0.400	0.081	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB
Zinc, Total	ND	mg/kg	2.00	0.117	1	04/18/19 18:29	04/19/19 17:53	1,6010D	AB

### Prep Information

Digestion Method: EPA 3050B



**Lab Control Sample Analysis****Batch Quality Control****Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1227357-2								
Mercury, Dissolved	93		-		80-120	-		

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1227472-2					
Aluminum, Dissolved	110	-	80-120	-	
Antimony, Dissolved	93	-	80-120	-	
Arsenic, Dissolved	104	-	80-120	-	
Barium, Dissolved	105	-	80-120	-	
Beryllium, Dissolved	106	-	80-120	-	
Cadmium, Dissolved	108	-	80-120	-	
Calcium, Dissolved	111	-	80-120	-	
Chromium, Dissolved	101	-	80-120	-	
Cobalt, Dissolved	102	-	80-120	-	
Copper, Dissolved	100	-	80-120	-	
Iron, Dissolved	96	-	80-120	-	
Lead, Dissolved	113	-	80-120	-	
Magnesium, Dissolved	107	-	80-120	-	
Manganese, Dissolved	103	-	80-120	-	
Nickel, Dissolved	102	-	80-120	-	
Potassium, Dissolved	108	-	80-120	-	
Selenium, Dissolved	108	-	80-120	-	
Silver, Dissolved	103	-	80-120	-	
Sodium, Dissolved	101	-	80-120	-	
Thallium, Dissolved	105	-	80-120	-	
Vanadium, Dissolved	102	-	80-120	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 Batch: WG1227472-2					
Zinc, Dissolved	113	-	80-120	-	
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1227598-2 SRM Lot Number: D101-540					
Mercury, Total	92	-	65-135	-	

## Lab Control Sample Analysis

### Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1227883-2 SRM Lot Number: D101-540					
Aluminum, Total	71	-	50-151	-	
Antimony, Total	155	-	3-196	-	
Arsenic, Total	95	-	83-117	-	
Barium, Total	93	-	83-118	-	
Beryllium, Total	95	-	83-117	-	
Cadmium, Total	98	-	83-117	-	
Calcium, Total	87	-	81-119	-	
Chromium, Total	92	-	81-118	-	
Cobalt, Total	97	-	84-116	-	
Copper, Total	94	-	83-116	-	
Iron, Total	86	-	62-138	-	
Lead, Total	93	-	83-117	-	
Magnesium, Total	79	-	76-124	-	
Manganese, Total	94	-	82-118	-	
Nickel, Total	98	-	82-117	-	
Potassium, Total	81	-	71-130	-	
Selenium, Total	96	-	79-121	-	
Silver, Total	94	-	80-120	-	
Sodium, Total	97	-	72-127	-	
Thallium, Total	98	-	81-119	-	
Vanadium, Total	94	-	79-121	-	

**Lab Control Sample Analysis**  
Batch Quality Control**Project Name:** 89 LASALLE BCP SITE**Project Number:** 1787491**Lab Number:** L1915294**Report Date:** 04/23/19

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 Batch: WG1227883-2 SRM Lot Number: D101-540					
Zinc, Total	94	-	81-119	-	

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Lab Number:** L1915294

**Project Number:** 1787491

**Report Date:** 04/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227357-3 QC Sample: L1915242-12 Client ID: MS Sample												
Mercury, Dissolved	ND	0.005	0.00470	94		-	-		75-125	-		20

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

**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227472-3 QC Sample: L1915272-02 Client ID: MS Sample									
Aluminum, Dissolved	0.046	2	2.18	107	-	-	75-125	-	20
Antimony, Dissolved	0.0017J	0.5	0.5144	103	-	-	75-125	-	20
Arsenic, Dissolved	0.0004J	0.12	0.1260	105	-	-	75-125	-	20
Barium, Dissolved	0.0044	2	2.075	104	-	-	75-125	-	20
Beryllium, Dissolved	ND	0.05	0.05276	106	-	-	75-125	-	20
Cadmium, Dissolved	ND	0.051	0.05484	108	-	-	75-125	-	20
Calcium, Dissolved	1.64	10	12.1	105	-	-	75-125	-	20
Chromium, Dissolved	0.0009J	0.2	0.2060	103	-	-	75-125	-	20
Cobalt, Dissolved	0.0002J	0.5	0.5125	102	-	-	75-125	-	20
Copper, Dissolved	0.002	0.25	0.2566	102	-	-	75-125	-	20
Iron, Dissolved	0.039J	1	0.982	98	-	-	75-125	-	20
Lead, Dissolved	0.0007J	0.51	0.5667	111	-	-	75-125	-	20
Magnesium, Dissolved	0.200	10	10.8	106	-	-	75-125	-	20
Manganese, Dissolved	0.0121	0.5	0.5239	102	-	-	75-125	-	20
Nickel, Dissolved	ND	0.5	0.5188	104	-	-	75-125	-	20
Potassium, Dissolved	0.498	10	11.0	105	-	-	75-125	-	20
Selenium, Dissolved	ND	0.12	0.133	111	-	-	75-125	-	20
Silver, Dissolved	ND	0.05	0.05155	103	-	-	75-125	-	20
Sodium, Dissolved	15.0	10	24.8	98	-	-	75-125	-	20
Thallium, Dissolved	ND	0.12	0.1263	105	-	-	75-125	-	20
Vanadium, Dissolved	ND	0.5	0.5068	101	-	-	75-125	-	20

# Matrix Spike Analysis

## Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227472-3 QC Sample: L1915272-02 Client ID: MS Sample									
Zinc, Dissolved	0.0129	0.5	0.5598	109	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1227598-3 QC Sample: L1914481-01 Client ID: MS Sample									
Mercury, Total	1.68	0.511	0.898	0	Q	-	80-120	-	20



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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

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: WG1227883-3    QC Sample: L1915294-02    Client ID: MH-1 SEDIMENT									
Aluminum, Total	12200	300	12000	0	Q	-	75-125	-	20
Antimony, Total	1.34J	75.1	69.6	93		-	75-125	-	20
Arsenic, Total	7.32	18	25.4	100		-	75-125	-	20
Barium, Total	72.7	300	368	98		-	75-125	-	20
Beryllium, Total	0.558J	7.51	7.75	103		-	75-125	-	20
Cadmium, Total	1.13J	7.66	8.16	106		-	75-125	-	20
Calcium, Total	50000	1500	59000	599	Q	-	75-125	-	20
Chromium, Total	18.0	30	44.8	89		-	75-125	-	20
Cobalt, Total	9.80	75.1	77.6	90		-	75-125	-	20
Copper, Total	30.5	37.6	69.8	105		-	75-125	-	20
Iron, Total	23000	150	19800	0	Q	-	75-125	-	20
Lead, Total	59.7	76.6	136	100		-	75-125	-	20
Magnesium, Total	17100	1500	19900	186	Q	-	75-125	-	20
Manganese, Total	466	75.1	509	57	Q	-	75-125	-	20
Nickel, Total	23.9	75.1	90.1	88		-	75-125	-	20
Potassium, Total	1210	1500	2800	106		-	75-125	-	20
Selenium, Total	0.542J	18	19.0	105		-	75-125	-	20
Silver, Total	ND	45.1	50.2	111		-	75-125	-	20
Sodium, Total	2760	1500	4410	110		-	75-125	-	20
Thallium, Total	ND	18	15.3	85		-	75-125	-	20
Vanadium, Total	25.8	75.1	95.9	93		-	75-125	-	20

# **Matrix Spike Analysis** Batch Quality Control

**Project Name:** 89 LASALLE BCP SITE

**Lab Number:** L1915294

**Project Number:** 1787491

**Report Date:** 04/23/19

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: WG1227883-3    QC Sample: L1915294-02    Client ID: MH-1 SEDIMENT									
Zinc, Total	161	75.1	233	96	-	-	75-125	-	20

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227357-4 QC Sample: L1915242-12 Client ID: DUP Sample						
Mercury, Dissolved	ND	ND	mg/l	NC		20
Dissolved Metals - Mansfield Lab Associated sample(s): 01 QC Batch ID: WG1227472-4 QC Sample: L1915272-02 Client ID: DUP Sample						
Potassium, Dissolved	0.498	0.463	mg/l	7		20
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1227598-4 QC Sample: L1914481-01 Client ID: DUP Sample						
Mercury, Total	1.68	0.642	mg/kg	89	Q	20

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

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1227883-4 QC Sample: L1915294-02 Client ID: MH-1 SEDIMENT					
Aluminum, Total	12200	8710	mg/kg	33	Q 20
Antimony, Total	1.34J	1.44J	mg/kg	NC	20
Arsenic, Total	7.32	6.59	mg/kg	10	20
Barium, Total	72.7	53.5	mg/kg	30	Q 20
Beryllium, Total	0.558J	0.410J	mg/kg	NC	20
Cadmium, Total	1.13J	0.880J	mg/kg	NC	20
Calcium, Total	50000	53800	mg/kg	7	20
Chromium, Total	18.0	14.8	mg/kg	20	20
Cobalt, Total	9.80	7.03	mg/kg	33	Q 20
Copper, Total	30.5	28.5	mg/kg	7	20
Iron, Total	23000	16800	mg/kg	31	Q 20
Lead, Total	59.7	60.2	mg/kg	1	20
Magnesium, Total	17100	18100	mg/kg	6	20
Manganese, Total	466	388	mg/kg	18	20
Nickel, Total	23.9	18.3	mg/kg	27	Q 20
Potassium, Total	1210	922	mg/kg	27	Q 20
Selenium, Total	0.542J	ND	mg/kg	NC	20
Silver, Total	ND	ND	mg/kg	NC	20
Sodium, Total	2760	2620	mg/kg	5	20

# Lab Duplicate Analysis

*Batch Quality Control*

**Project Name:** 89 LASALLE BCP SITE

**Project Number:** 1787491

**Lab Number:** L1915294

**Report Date:** 04/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 02 QC Batch ID: WG1227883-4 QC Sample: L1915294-02 Client ID: MH-1 SEDIMENT					
Thallium, Total	ND	ND	mg/kg	NC	20
Vanadium, Total	25.8	19.7	mg/kg	27	Q 20
Zinc, Total	161	154	mg/kg	4	20

# **INORGANICS & MISCELLANEOUS**

**Project Name:** 89 LASALLE BCP SITE**Project Number:** 1787491**Lab Number:** L1915294**Report Date:** 04/23/19**SAMPLE RESULTS****Lab ID:** L1915294-02**Client ID:** MH-1 SEDIMENT**Sample Location:** 89 LASALLE AVE., BUFFALO, NY**Date Collected:** 04/15/19 10:45**Date Received:** 04/15/19**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	51.4		%	0.100	NA	1	-	04/16/19 13:44	121,2540G	RI



**Lab Duplicate Analysis**  
*Batch Quality Control***Project Name:** 89 LASALLE BCP SITE**Project Number:** 1787491**Lab Number:** L1915294**Report Date:** 04/23/19

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 02 QC Batch ID: WG1226908-1 QC Sample: L1915301-01 Client ID: DUP Sample						
Solids, Total	89.8	89.3	%	1		20



**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

**Cooler Information**

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

**Container Information**

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L1915294-01A	Plastic 250ml HNO3 preserved	A	<2	<2	2.2	Y	Absent		ARCHIVE()
L1915294-01B	Amber 250ml unpreserved	A	7	7	2.2	Y	Absent		-
L1915294-01C	Amber 250ml unpreserved	A	7	7	2.2	Y	Absent		NYTCL-8270-SIM-LVI(7),NYTCL-8270-LVI(7)
L1915294-01X	Plastic 120ml HNO3 preserved Filtrates	A	NA		2.2	Y	Absent		CU-6020S(180),K-6020S(180),SE-6020S(180),V-6020S(180),MN-6020S(180),BE-6020S(180),CO-6020S(180),MG-6020S(180),ZN-6020S(180),CA-6020S(180),CR-6020S(180),FE-6020S(180),BA-6020S(180),NA-6020S(180),NI-6020S(180),PB-6020S(180),TL-6020S(180),AG-6020S(180),AS-6020S(180),SB-6020S(180),AL-6020S(180),CD-6020S(180),HG-S(28)
L1915294-02A	Plastic 2oz unpreserved for TS	A	NA		2.2	Y	Absent		TS(7)
L1915294-02B	Metals Only-Glass 60mL/2oz unpreserved	A	NA		2.2	Y	Absent		BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)
L1915294-02C	Glass 120ml/4oz unpreserved	A	NA		2.2	Y	Absent		NYTCL-8270(14)

**Project Name:** 89 LASALLE BCP SITE**Lab Number:** L1915294**Project Number:** 1787491**Report Date:** 04/23/19

## 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:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

- 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.

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

Report Format: DU Report with 'J' Qualifiers



**Project Name:** 89 LASALLE BCP SITE  
**Project Number:** 1787491

**Lab Number:** L1915294  
**Report Date:** 04/23/19

## 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 12

Department: **Quality Assurance**

Published Date: 10/9/2018 4:58:19 PM

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), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**EPA 6860:** SCM: Perchlorate**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, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **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.

Westborough, MA 01581  
8 Walkup Dr.  
TEL: 508-898-9220  
FAX: 508-898-9193

**Mansfield, MA 02048**  
**320 Forbes Blvd**  
**TEL: 508-822-9300**  
**FAX: 508-822-3288**

Mahwah, NJ 07430: 35 Whitney Rd, Suite 5  
Albany, NY 12205: 14 Walker Way  
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

of

Date Rec'd  
in Lab 4/16/10

ALPHA Job #  
L1915294

Client: Golden Assoc.

Address: 2430 N. Forest Rd.

Ste #100

Phone: 716 204 5880

Fax: \_\_\_\_\_

Email: Pfmarthn@golden.

Project Name: 89 LaSalle BCP site

Project Location: 89 La Salle Ave, Buffalo NY

Project # 1787491

(Use Project name as Project #) ☐

Project Manager: Patrick Martin

ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:

☐ Rush (only if pre approved) ☐ # of Days: \_\_\_\_\_

These samples have been previously analyzed by Alpha ☐

**Other project specific requirements/comments:**

Please specify Metals or TAL.

☐ ASP-A
 ☒ ASP-B  
☐ EQUIS (1 File)
 ☐ EQUIS (4 File)  
☐ Other

<input type="checkbox"/> NY TOGS	<input type="checkbox"/> NY Part 375
<input type="checkbox"/> AWQ Standards	<input type="checkbox"/> NY CP-51
<input type="checkbox"/> NY Restricted Use	<input type="checkbox"/> Other
<input type="checkbox"/> NY Unrestricted Use	
<input type="checkbox"/> NYC Sewer Discharge	

☐ Same as Client Info

PO #

Please identify below location of applicable disposal facilities.

Disposal Facility:

☐ NJ      ☐ NY☐ Other: \_\_\_\_\_

NYTCL - 8270 D  
TOTAL METALS 6010 D  
TOTAL H<sub>2</sub>S

☐ Done  
☒ Lab to do  
*Preservation*  
☐ Lab to do  
*(Please Specify below)*

Sample Specific Comments

[illegible]

A = None  
B = HCl  
C = HNO<sub>3</sub>  
D = H<sub>2</sub>SO<sub>4</sub>  
E = NaOH  
F = MeOH  
G = NaHSO<sub>4</sub>  
H = Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>  
K/E = Zn Ac/NaOH  
O = Other

P = Plastic  
A = Amber Glass  
V = Vial  
G = Glass  
B = Bacteria Cup  
C = Cube  
O = Other  
E = Encore  
D = BOD Bottle

Mansfield: Certification No: MA015

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

Form No: 01-25 HC (rev. 30-Sept-2013)

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.)

**APPENDIX B**

**ANNUAL SITE INSPECTION FORM & PHOTO LOG DOCUMENTATION**

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

NYSDEC Site Number: C915283

**SEMI-ANNUAL INSPECTION FORM**

*APRIL 15, 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)	Semi-Annually	SOIL COVER SYSTEMS ARE IN GOOD CONDITION. BLDG 1 CONSTRUCTION IS NEARLY COMPLETE & DISTURBED AREAS ARE CONTINUING TO BE MANAGED APPROPRIATELY W/ PROPER EROSION CONTROLS → EXCELLENT CONDITION FINAL PAVING AROUND BLDG 2 TO BE COMPLETED IN Q2 OF 2019 → EXCELLENT CONDITION	LANDSCAPING & FINAL RESTORATION OF SOIL AREAS AROUND PERIM. OF BLDG 1 TO BE COMPLETED IN Q2 2019.
Document specific locations and nature of condition issue if any observed.			
Stormwater – Manhole Discharge Sampling Location General Condition	Semi-Annually	COMPLETED @ MH-1 ON 4/15/19 AFTER > 0.5" RAINFALL	N/A
Excavation Work Locations – General Conditions	Per Occurrence	FINAL RESTORATION OF BLDG 2 PERIMETER GRASSY AREAS TO BE PERFORMED IN Q2 OF 2019	N/A

*Patricia J. Munton*  
*4/15/19*



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

**Description:** MH-1:  
Stormwater/sediment  
sample location

04/15/19

**PHOTO 2**

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

04/15/19



**PHOTO 3**

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

04/15/19

**PHOTO 4**

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

04/15/19





**PHOTO 5**

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

04/15/19

**PHOTO 6**

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

04/15/19



**PHOTO 7**

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

04/15/19

**PHOTO 8**

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

04/15/19





**PHOTO 9**

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

04/15/19

**PHOTO 10**

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

04/15/19



## **APPENDIX C**

**SITE C915283 SITE MANAGEMENT PLAN PERIODIC REVIEW REPORT – 2018/2019  
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 Details**

**Box 1**

**Site No.** C915283

**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, 2018 to March 30, 2019

YES NO

1. Is the information above correct?

☒ ☐

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?

☐ ☒

3. Has there been any change of use at the site during this Reporting Period (see 6NYCRR 375-1.11(d))?

☐ ☒

4. Have any federal, state, and/or local permits (e.g., building, discharge) been issued for or at the property during this Reporting Period?

☐ ☒

**If you answered YES to questions 2 thru 4, include documentation or evidence that documentation has been previously submitted with this certification form.**

5. Is the site currently undergoing development?

☐ ☐

**Box 2**

YES NO

6. Is the current site use consistent with the use(s) listed below?  
Restricted-Residential, Commercial, and Industrial

☒ ☐

7. Are all ICs/ECs in place and functioning as designed?

☒ ☐

**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

**Box 2A**

YES NO

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

☐

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

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

☐

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

**SITE NO. C915283****Box 3****Description of Institutional Controls**



<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.		

3. Soil Management for any future intrusive work.

Box 4

**Description of Engineering Controls**

Parcel

Engineering Control

**79.70-2-11**

**Cover System**

1. Monitoring and maintenance of the cover system.
2. Semi-annual storm water and sediment monitoring.

**79.70-2-17.1**

**Cover System**

1. Monitoring and maintenance of the cover system.
2. Semi-annual storm water and sediment monitoring.

**79.70-2-18**

**Cover System**

1. Monitoring and maintenance of the cover system.
2. Semi-annual storm water and sediment monitoring.

**portion of 79.70-2-16.11**

**Cover System**

**Cover System**

1. Monitoring and maintenance of the cover system.
2. Semi-annual storm water and sediment monitoring.

**portion of 79.70-2-17.2**

**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



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

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

YES NO



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

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

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

\_\_\_\_\_  
Date

IC CERTIFICATIONS  
SITE NO. 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

4/30/19  
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



4/30/19  
Date