BROWNFIELDS CLEANUP PROGRAM APPLICATION

MOD-PAC CORP.
1801 Elmwood Avenue
Buffalo, New York 14207
BCP # C915314

Updated March 17, 2017

Submitted to:
Chief, Site Control Section
New York State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway
Albany, New York 12233-7020

On Behalf Of:
MOD-PAC CORP.
1801 Elmwood, Buffalo, NY 14207
HEI Project No: e1605

Prepared By:

Hazard Evaluations, Inc.
3752 North Buffalo Road
Orchard Park, New York 14127
(716) 667-3130

Schenne & Associates
391 Washington Street, Suite 800
Buffalo, NY 14203
(716) 655-4991

HAZARD EVALUATIONS

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

BROWNFIELD CLEANUP PROGRAM (BCP) APPLICATION FORM

DEC requires an application to request major changes to the description of the property set forth in a Brownfield Cleanup Agreement, or "*BCA*" (e.g., adding a significant amount of new property, or adding property that could affect an eligibility determination due to contamination levels or intended land use). Such application must be submitted and processed in the same manner as the original application, including the required public comment period. **Is this an application to amend an existing BCA?**

☐ **Yes** ☑ **No** **If yes, provide existing site number:** _____

PART A (note: application is separated into Parts A and B for DEC review purposes) ***BCP App Rev 7***

Section I. Requestor Information - See Instructions for Further Guidance

DEC USE ONLY
BCP SITE #:

NAME MOD-PAC CORP.

ADDRESS 1801 Elmwood Avenue

CITY/TOWN Buffalo ZIP CODE 14207

PHONE 716-898-8480 | FAX 716-447-9201 | E-MAIL dlupp@modpac.com

Is the requestor authorized to conduct business in New York State (NYS)? ☑ Yes ☐ No

- If the requestor is a Corporation, LLC, LLP or other entity requiring authorization from the NYS Department of State to conduct business in NYS, the requestor's name must appear, exactly as given above, in the NYS Department of State's Corporation & Business Entity Database. A print-out of entity information from the database must be submitted to the New York State Department of Environmental Conservation (DEC) with the application, to document that the requestor is authorized to do business in NYS.

Do all individuals that will be certifying documents meet the requirements detailed below? ☑ Yes ☐ No

- Individuals that will be certifying BCP documents, as well as their employers, meet the requirements of Section 1.5 of *DER-10: Technical Guidance for Site Investigation and Remediation* and Article 145 of New York State Education Law. **Documents that are not properly certified will be not approved under the BCP**.

Section II. Project Description

1. What stage is the project starting at? ☑ Investigation ☐ Remediation

2. If the project is starting at the remediation stage, a Remedial Investigation Report (RIR), Alternatives Analysis, and Remedial Work Plan must be attached (see *DER-10 / Technical Guidance for Site Investigation and Remediation* for further guidance).

3. If a final RIR is included, please verify it meets the requirements of Environmental Conservation Law (ECL) Article 27-1415(2): ☐ Yes ☐ No

4. Please attach a short description of the overall development project, including:

- the date that the remedial program is to start; and
- the date the Certificate of Completion is anticipated.

Section III. Property's Environmental History

All applications **must include** an Investigation Report (per ECL 27-1407(1)). The report must be sufficient to establish contamination of environmental media on the site above applicable Standards, Criteria and Guidance (SCGs) based on the reasonably anticipated use of the property.

To the extent that existing information/studies/reports are available to the requestor, please attach the following (**please submit the information requested in this section in electronic format only**):

1. **Reports:** an example of an Investigation Report is a Phase II Environmental Site Assessment report prepared in accordance with the latest American Society for Testing and Materials standard (ASTM E1903).

2. SAMPLING DATA: INDICATE KNOWN CONTAMINANTS AND THE MEDIA WHICH ARE KNOWN TO HAVE BEEN AFFECTED. LABORATORY REPORTS SHOULD BE REFERENCED AND COPIES INCLUDED.

Contaminant Category	Soil	Groundwater	Soil Gas
Petroleum			
Chlorinated Solvents	trichloroethene	trace TCE, cis-DCE, VC	
Other VOCs			
SVOCs	PAHs	PAHs	
Metals	arsenic, copper, mercury	arsenic, cadmium, chromium, lead	
Pesticides			
PCBs			
Other*			

***Please describe:** _____

3. FOR EACH IMPACTED MEDIUM INDICATED ABOVE, INCLUDE A SITE DRAWING INDICATING:

- **SAMPLE LOCATION**
- **DATE OF SAMPLING EVENT**
- **KEY CONTAMINANTS AND CONCENTRATION DETECTED**
- **FOR SOIL, HIGHLIGHT IF ABOVE REASONABLY ANTICIPATED USE**
- **FOR GROUNDWATER, HIGHLIGHT EXCEEDANCES OF 6NYCRR PART 703.5**
- **FOR SOIL GAS/ SOIL VAPOR/ INDOOR AIR, HIGHLIGHT IF ABOVE MITIGATE LEVELS ON THE NEW YORK STATE DEPARTMENT OF HEALTH MATRIX**

THESE DRAWINGS ARE TO BE REPRESENTATIVE OF ALL DATA BEING RELIED UPON TO MAKE THE CASE THAT THE SITE IS IN NEED OF REMEDIATION UNDER THE BCP. DRAWINGS SHOULD NOT BE BIGGER THAN 11" X 17". THESE DRAWINGS SHOULD BE PREPARED IN ACCORDANCE WITH ANY GUIDANCE PROVIDED.

ARE THE REQUIRED MAPS INCLUDED WITH THE APPLICATION?* ☑ **Yes** ☐ **No**
(*answering No will result in an incomplete application)

4. INDICATE PAST LAND USES (CHECK ALL THAT APPLY):

☐ Coal Gas Manufacturing ☑ Manufacturing ☐ Agricultural Co-op ☐ Dry Cleaner
☐ Salvage Yard ☐ Bulk Plant ☐ Pipeline ☐ Service Station
☐ Landfill ☐ Tannery ☐ Electroplating ☐ Unknown

Other:_____

Section IV. Property Information - See Instructions for Further Guidance

PROPOSED SITE NAME MOD-PAC CORP.

ADDRESS/LOCATION 1801 Elmwood

CITY/TOWN Buffalo ZIP CODE 14207

MUNICIPALITY(IF MORE THAN ONE, LIST ALL):
Buffalo

COUNTY Erie SITE SIZE (ACRES) 20.03

LATITUDE (degrees/minutes/seconds)	LONGITUDE (degrees/minutes/seconds)
42 ° 56 ‘ 43.58 “	78 ° 52 ‘ 35.57 “

COMPLETE TAX MAP INFORMATION FOR ALL TAX PARCELS INCLUDED WITHIN THE PROPERTY BOUNDARIES. ATTACH REQUIRED MAPS PER THE APPLICATION INSTRUCTIONS.
Refer to Section IV attachments for list of Parcel Numbers

Parcel Address	Section No.	Block No.	Lot No.	Acreage
1801, 1805, 1809 Elmwood; 33 Mandan; 86, 94 Ledger (all combined)				

1. Do the proposed site boundaries correspond to tax map metes and bounds? ☐ Yes ☑ No
   If no, please attach a metes and bounds description of the property.

2. Is the required property map attached to the application? ☑ Yes ☐ No
   (application will not be processed without map)

3. Is the property within a designated Environmental Zone (En-zone) pursuant to Tax Law 21(b)(6)?
   (See DEC's website for more information) Yes ☑ No ☐

   If yes, identify census tract : 50, Erie County, New York

   Percentage of property in En-zone (check one): ☐ 0-49% ☐ 50-99% ☑ 100%

4. Is this application one of multiple applications for a large development project, where the development project spans more than 25 acres (see additional criteria in BCP application instructions)? ☐ Yes ☑ No

   If yes, identify name of properties (and site numbers if available) in related BCP applications:_____

5. Is the contamination from groundwater or soil vapor solely emanating from property other than the site subject to the present application? ☐ Yes ☑ No

6. Has the property previously been remediated pursuant to Titles 9, 13, or 14 of ECL Article 27, Title 5 of ECL Article 56, or Article 12 of Navigation Law? ☑ Yes ☐ No
   If yes, attach relevant supporting documentation.

7. Are there any lands under water? ☐ Yes ☑ No
   If yes, these lands should be clearly delineated on the site map.

Section IV. Property Information (continued)

8. Are there any easements or existing rights of way that would preclude remediation in these areas? If yes, identify here and attach appropriate information. ☐ Yes ☑ No

Easement/Right-of-way Holder	Description
The former Conrail rail siding impacting 1801 Elmwood has been segregated from the proposed BCP parcel, so as not to impede remediation of the BCP parcel.	

9. List of Permits issued by the DEC or USEPA Relating to the Proposed Site (type here or attach information)

Type	Issuing Agency	Description
See Attached		

10. Property Description and Environmental Assessment – **please refer to application instructions for the proper format of <u>each</u> narrative requested.**

Are the Property Description and Environmental Assessment narratives included in the **prescribed format**? ☑ Yes ☐ No

11. For sites located within the five counties comprising New York City, is the requestor seeking a determination that the site is eligible for tangible property tax credits? If yes, requestor must answer questions on the supplement at the end of this form. ☐ Yes ☑ No

12. Is the Requestor now, or will the Requestor in the future, seek a determination that the property is Upside Down? ☐ Yes ☑ No

13. If you have answered *Yes* to Question 12, above, is an independent appraisal of the value of the property, as of the date of application, prepared under the hypothetical condition that the property is not contaminated, included with the application? ☐ Yes ☐ No

NOTE: If a tangible property tax credit determination is not being requested in the application to participate in the BCP, the applicant may seek this determination at any time before issuance of a certificate of completion by using the BCP Amendment Application, <u>except</u> for sites seeking eligibility under the underutilized category.

If any changes to Section IV are required prior to application approval, a new page, initialed by each requestor, must be submitted.

Initials of each Requestor: _____ _____ _____ _____ _____ _____

BCP application - PART B (note: application is separated into Parts A and B for DEC review purposes)

Section V. Additional Requestor Information See Instructions for Further Guidance	DEC USE ONLY BCP SITE NAME: _____ BCP SITE #:_____	
NAME OF REQUESTOR'S AUTHORIZED REPRESENTATIVE Daniel G. Keane		
ADDRESS 1801 Elmwood Avenue		
CITY/TOWN Buffalo		ZIP CODE 14207
PHONE 716-898-9480	FAX 716-447-9201	E-MAIL dkeane@modpac.com
NAME OF REQUESTOR'S CONSULTANT Michele Wittman - Hazard Evaluations, Inc.		
ADDRESS 3752 N. Buffalo Road		
CITY/TOWN Orchard Park		ZIP CODE 14127
PHONE 716-667-3130	FAX 716-667-3156	E-MAIL mwittman@hazardevaluations.com
NAME OF REQUESTOR'S ATTORNEY Marc A. Romanowski - Hopkins, Sorgi & Romanowski, PLLC		
ADDRESS 26 Mississippi, Suite 400		
CITY/TOWN Buffalo		ZIP CODE 14203
PHONE 716-427-7100	FAX 716-424-2171	E-MAIL mromanowski@hsr.legal.com

Section VI. Current Property Owner/Operator Information – if not a Requestor		
CURRENT OWNER'S NAME Same as Requestor		OWNERSHIP START DATE:
ADDRESS		
CITY/TOWN	ZIP CODE	
PHONE	FAX	E-MAIL
CURRENT OPERATOR'S NAME Same as Requestor		
ADDRESS		
CITY/TOWN	ZIP CODE	
PHONE	FAX	E-MAIL

IF REQUESTOR IS NOT THE CURRENT OWNER, DESCRIBE REQUESTOR'S RELATIONSHIP TO THE CURRENT OWNER, INCLUDING ANY RELATIONSHIP BETWEEN REQUESTOR'S CORPORATE MEMBERS AND THE CURRENT OWNER.
PROVIDE A LIST OF PREVIOUS PROPERTY OWNERS AND OPERATORS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBERS AS AN ATTACHMENT. DESCRIBE REQUESTOR'S RELATIONSHIP, TO EACH PREVIOUS OWNER AND OPERATOR, INCLUDING ANY RELATIONSHIP BETWEEN REQUESTOR'S CORPORATE MEMBERS AND PREVIOUS OWNER AND OPERATOR. IF NO RELATIONSHIP, PUT "NONE".

Section VII. Requestor Eligibility Information (Please refer to ECL § 27-1407)

If answering "yes" to any of the following questions, please provide an explanation as an attachment.

1. Are any enforcement actions pending against the requestor regarding this site? ☐ Yes ☑ No
2. Is the requestor subject to an existing order for the investigation, removal or remediation of contamination at the site? ☐ Yes ☑ No
3. Is the requestor subject to an outstanding claim by the Spill Fund for this site? Any questions regarding whether a party is subject to a spill claim should be discussed with the Spill Fund Administrator. ☐ Yes ☑ No

Section VII. Requestor Eligibility Information (continued)

4. Has the requestor been determined in an administrative, civil or criminal proceeding to be in violation of i) any provision of the ECL Article 27; ii) any order or determination; iii) any regulation implementing Title 14; or iv) any similar statute, regulation of the state or federal government? If so, provide an explanation on a separate attachment. ☐ Yes ☑ No
5. Has the requestor previously been denied entry to the BCP? If so, include information relative to the application, such as name, address, DEC assigned site number, the reason for denial, and other relevant information. ☐ Yes ☑ No
6. Has the requestor been found in a civil proceeding to have committed a negligent or intentionally tortious act involving the handling, storing, treating, disposing or transporting of contaminants? ☐ Yes ☑ No
7. Has the requestor been convicted of a criminal offense i) involving the handling, storing, treating, disposing or transporting of contaminants; or ii) that involves a violent felony, fraud, bribery, perjury, theft, or offense against public administration (as that term is used in Article 195 of the Penal Law) under federal law or the laws of any state? ☐ Yes ☑ No
8. Has the requestor knowingly falsified statements or concealed material facts in any matter within the jurisdiction of DEC, or submitted a false statement or made use of or made a false statement in connection with any document or application submitted to DEC? ☐ Yes ☑ No
9. Is the requestor an individual or entity of the type set forth in ECL 27-1407.9 (f) that committed an act or failed to act, and such act or failure to act could be the basis for denial of a BCP application? ☐ Yes ☑ No
10. Was the requestor's participation in any remedial program under DEC's oversight terminated by DEC or by a court for failure to substantially comply with an agreement or order? ☐ Yes ☑ No
11. Are there any unregistered bulk storage tanks on-site which require registration? ☐ Yes ☑ No

THE REQUESTOR MUST CERTIFY THAT HE/SHE IS EITHER A PARTICIPANT OR VOLUNTEER IN ACCORDANCE WITH ECL 27-1405 (1) BY CHECKING ONE OF THE BOXES BELOW:

☐ PARTICIPANT

A requestor who either 1) was the owner of the site at the time of the disposal of hazardous waste or discharge of petroleum or 2) is otherwise a person responsible for the contamination, unless the liability arises solely as a result of ownership, operation of, or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

☑ VOLUNTEER

A requestor other than a participant, including a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.

NOTE: By checking this box, a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site certifies that he/she has exercised appropriate care with respect to the hazardous waste found at the facility by taking reasonable steps to: i) stop any continuing discharge; ii) prevent any threatened future release; iii) prevent or limit human, environmental, or natural resource exposure to any previously released hazardous waste.

If a requestor whose liability arises solely as a result of ownership, operation of or involvement with the site, submit a statement describing why you should be considered a volunteer – be specific as to the appropriate care taken.

Section VII. Requestor Eligibility Information (continued)

Requestor Relationship to Property (check one):
☐ Previous Owner ☑ Current Owner ☐ Potential /Future Purchaser ☐ Other_____

If requestor is not the current site owner, **proof of site access sufficient to complete the remediation must be submitted**. Proof must show that the requestor will have access to the property before signing the BCA and throughout the BCP project, including the ability to place an easement on the site Is this proof attached?

☐ Yes ☐ No

Note: a purchase contract does not suffice as proof of access.

Section VIII. Property Eligibility Information - See Instructions for Further Guidance

1. Is / was the property, or any portion of the property, listed on the National Priorities List?
   If yes, please provide relevant information as an attachment. ☐ Yes ☑ No
2. Is / was the property, or any portion of the property, listed on the NYS Registry of Inactive Hazardous Waste Disposal Sites pursuant to ECL 27-1305? ☐ Yes ☑ No
   If yes, please provide: Site #_____ Class # _____
3. Is / was the property subject to a permit under ECL Article 27, Title 9, other than an Interim Status facility? ☐ Yes ☑ No
   If yes, please provide: Permit type:_____ EPA ID Number:_____
   Date permit issued:_____ Permit expiration date:_____
4. If the answer to question 2 or 3 above is yes, is the site owned by a volunteer as defined under ECL 27-1405(1)(b), or under contract to be transferred to a volunteer? Attach any information available to the requestor related to previous owners or operators of the facility or property and their financial viability, including any bankruptcy filing and corporate dissolution documentation. ☐ Yes ☐ No
5. Is the property subject to a cleanup order under Navigation Law Article 12 or ECL Article 17 Title 10?
   If yes, please provide: Order #_____ ☐ Yes ☑ No
6. Is the property subject to a state or federal enforcement action related to hazardous waste or petroleum?
   If yes, please provide explanation as an attachment. ☐ Yes ☑ No

Section IX. Contact List Information

To be considered complete, the application must include the Brownfield Site Contact List in accordance with *DER-23 / Citizen Participation Handbook for Remedial Programs*. Please attach, at a minimum, the names and addresses of the following:

1. The chief executive officer and planning board chairperson of each county, city, town and village in which the property is located.
2. Residents, owners, and occupants of the property and properties adjacent to the property.
3. Local news media from which the community typically obtains information.
4. The public water supplier which services the area in which the property is located.
5. Any person who has requested to be placed on the contact list.
6. The administrator of any school or day care facility located on or near the property.
7. The location of a document repository for the project (e.g., local library). In addition, attach a copy of an acknowledgement from the repository indicating that it agrees to act as the document repository for the property.
8. Any community board located in a city with a population of one million or more, if the proposed site is located within such community board's boundaries.

Section X. Land Use Factors

1. What is the current zoning for the site? What uses are allowed by the current zoning?
   ☑ Residential ☐ Commercial ☑ Industrial
   If zoning change is imminent, please provide documentation from the appropriate zoning authority.

2. Current Use: ☐ Residential ☐ Commercial ☑ Industrial ☐ Vacant ☐ Recreational (check all that apply)
   Attach a summary of current business operations or uses, with an emphasis on identifying possible contaminant source areas. If operations or uses have ceased, provide the date.

3. Reasonably anticipated use Post Remediation: ☑ Residential ☑ Commercial ☑ Industrial (check all that apply) **Attach a statement detailing the specific proposed use.**

   If residential, does it qualify as single family housing? ☐ Yes ☑ No

4. Do current historical and/or recent development patterns support the proposed use?	☑ Yes ☐ No
5. Is the proposed use consistent with applicable zoning laws/maps? Briefly explain below, or attach additional information and documentation if necessary. MOD-PAC CORP will continue current site usage and improve the facility to make operations more efficient, environmentally friendly, and allow the manufacturing facility to remain in the City of Buffalo. The site is primarily zoned heavy industrial with the exception of 33 Mandan and 86 & 94 Ledger which are zoned residential. Mod-Pac's operations are permitted as-of-right in the Heavy Industrial District. The proposed athletic fields are not currently permitted in the Heavy Industrial Zoning District, but a rezoning request is expected to be welcomed for the proposed facilities due to the need for them in this area.	☑ Yes ☐ No
6. Is the proposed use consistent with applicable comprehensive community master plans, local waterfront revitalization plans, or other adopted land use plans? Briefly explain below, or attach additional information and documentation if necessary. MOD-PAC CORP will continue current operations. In addition, the development on the southern portion of the site is expected to included youth sports fields. There is a need for additional recreational fields within the City of Buffalo to meet the growing youth sports market.	☑ Yes ☐ No

XI. Statement of Certification and Signatures

(By requestor who is an individual)

If this application is approved, I acknowledge and agree to execute a Brownfield Cleanup Agreement (BCA) within 60 days of the date of DEC's approval letter. I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.

Date: _____ Signature: _____

Print Name: _____

(By a requestor other than an individual)

I hereby affirm that I am Chief Executive Officer (title) of MOD-PAC CORP. (entity); that I am authorized by that entity to make this application and execute the Brownfield Cleanup Agreement (BCA) and all subsequent amendments; that this application was prepared by me or under my supervision and direction. If this application is approved, I acknowledge and agree to execute a BCA within 60 days of the date of DEC's approval letter. I hereby affirm that information provided on this form and its attachments is true and complete to the best of my knowledge and belief. I am aware that any false statement made herein is punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.

Date: 2/7/17 Signature: Daniel G Keane

Print Name: Daniel G Keane

SUBMITTAL INFORMATION:

- **Two (2)** copies, one paper copy with original signatures and one electronic copy in Portable Document Format (PDF), must be sent to:
    - Chief, Site Control Section
    - New York State Department of Environmental Conservation
    - Division of Environmental Remediation
    - 625 Broadway
    - Albany, NY 12233-7020

FOR DEC USE ONLY
BCP SITE T&A CODE: _____ **LEAD OFFICE:** _____

Supplemental Questions for Sites Seeking Tangible Property Credits in New York City ONLY. Sufficient information to demonstrate that the site meets one or more of the criteria identified in ECL 27 1407(1-a) must be submitted if requestor is seeking this determination.

BCP App Rev 7

Property is in Bronx, Kings, New York, Queens, or Richmond counties. ☐ Yes ☐ No
Requestor seeks a determination that the site is eligible for the tangible property credit component of the brownfield redevelopment tax credit. ☐ Yes ☐ No
Please answer questions below and provide documentation necessary to support answers.
1. Is at least 50% of the site area located within an environmental zone pursuant to NYS Tax Law 21(b)(6)? Please see DEC's website for more information. ☐ Yes ☐ No
2. Is the property upside down or underutilized as defined below? Upside Down? ☐ Yes ☐ No Underutilized? ☐ Yes ☐ No **From ECL 27-1405(31):** "Upside down" shall mean a property where the projected and incurred cost of the investigation and remediation which is protective for the anticipated use of the property equals or exceeds seventy-five percent of its independent appraised value, as of the date of submission of the application for participation in the brownfield cleanup program, developed under the hypothetical condition that the property is not contaminated. **From 6 NYCRR 375-3.2(l) as of August 12, 2016:** (Please note: Eligibility determination for the underutilized category can only be made at the time of application) 375-3.2: (l) "Underutilized" means, as of the date of application, real property on which no more than fifty percent of the permissible floor area of the building or buildings is certified by the applicant to have been used under the applicable base zoning for at least three years prior to the application, which zoning has been in effect for at least three years; and (1) the proposed use is at least 75 percent for industrial uses; or (2) at which: (i) the proposed use is at least 75 percent for commercial or commercial and industrial uses; (ii) the proposed development could not take place without substantial government assistance, as certified by the municipality in which the site is located; and (iii) one or more of the following conditions exists, as certified by the applicant: (a) property tax payments have been in arrears for at least five years immediately prior to the application; (b) a building is presently condemned, or presently exhibits documented structural deficiencies, as certified by a professional engineer, which present a public health or safety hazard; or (c) there are no structures. "Substantial government assistance" shall mean a substantial loan, grant, land purchase subsidy, land purchase cost exemption or waiver, or tax credit, or some combination thereof, from a governmental entity.

Supplemental Questions for Sites Seeking Tangible Property Credits in New York City (continued)

3. If you are seeking a formal determination as to whether your project is eligible for Tangible Property Tax Credits based in whole or in part on its status as an affordable housing project (defined below), you must attach the regulatory agreement with the appropriate housing agency (typically, these would be with the *New York City Department of Housing, Preservation and Development*; *the New York State Housing Trust Fund Corporation*; the *New York State Department of Housing and Community Renewal*; or the *New York State Housing Finance Agency*, though other entities may be acceptable pending Department review). **Check appropriate box, below**:

☐ Project is an Affordable Housing Project - Regulatory Agreement Attached;

☐ Project is Planned as Affordable Housing, But Agreement is Not Yet Available* (*Checking this box will result in a "pending" status. The Regulatory Agreement would need to be provided to the Department prior to issuance of the CoC in order for a positive determination to be made.);

☐ This is Not an Affordable Housing Project.

From 6 NYCRR 375- 3.2(a) as of August 12, 2016:

(a) "Affordable housing project" means, for purposes of this part, title fourteen of article twenty seven of the environmental conservation law and section twenty-one of the tax law only, a project that is developed for residential use or mixed residential use that must include affordable residential rental units and/or affordable home ownership units.

(1) Affordable residential rental projects under this subdivision must be subject to a federal, state, or local government housing agency's affordable housing program, or a local government's regulatory agreement or legally binding restriction, which defines (i) a percentage of the residential rental units in the affordable housing project to be dedicated to (ii) tenants at a defined maximum percentage of the area median income based on the occupants' households annual gross income.

(2) Affordable home ownership projects under this subdivision must be subject to a federal, state, or local government housing agency's affordable housing program, or a local government's regulatory agreement or legally binding restriction, which sets affordable units aside for home owners at a defined maximum percentage of the area median income.

(3) "Area median income" means, for purposes of this subdivision, the area median income for the primary metropolitan statistical area, or for the county if located outside a metropolitan statistical area, as determined by the United States department of housing and urban development, or its successor, for a family of four, as adjusted for family size.

BCP Application Summary (for DEC use only)

Site Name: MOD-PAC CORP. **Site Address:** 1801 Elmwood
City: Buffalo **County:** Erie **Zip:** 14207

Tax Block & Lot
Section (if applicable): **Block:** **Lot:**

Requestor Name: MOD-PAC CORP. **Requestor Address:** 1801 Elmwood Avenue
City: Buffalo **Zip:** 14207 **Email:** dlupp@modpac.com

Requestor's Representative (for billing purposes)
Name: Daniel G. Keane **Address:** 1801 Elmwood Avenue
City: Buffalo **Zip:** 14207 **Email:** dkeane@modpac.com

Requestor's Attorney
Name: Marc A. Romanowski - Hopkins, Sorgi & Romanowski, PLLC **Address:** 26 Mississippi, Suite 400
City: Buffalo **Zip:** 14203 **Email:** mromanowski@hsr.legal.com

Requestor's Consultant
Name: Michele Wittman - Hazard Evaluations, Inc. **Address:** 3752 N. Buffalo Road
City: Orchard Park **Zip:** 14127 **Email:** mwittman@hazardevaluations.com

Percentage of site within an En-Zone: ☐ **0%** ☐ **<50%** ☐ **50-99%** ☑ **100%**

Requestor's Requested Status: ☑ **Volunteer** ☐ **Participant**

Section I

Requestor Information

MOD-PAC CORP. – Business Entity Information

NYS Department of State

Division of Corporations

Entity Information

The information contained in this database is current through January 20, 2017.

Selected Entity Name: MOD-PAC CORP.
Selected Entity Status Information

Current Entity Name:	MOD-PAC CORP.
DOS ID #:	230187
Initial DOS Filing Date:	NOVEMBER 08, 1968
County:	ERIE
Jurisdiction:	NEW YORK
Entity Type:	DOMESTIC BUSINESS CORPORATION
Current Entity Status:	ACTIVE

Selected Entity Address Information

DOS Process (Address to which DOS will mail process if accepted on behalf of the entity)

C/O LECARON ENTERPRISES CORP.
P.O. BOX 754
BUFFALO, NEW YORK, 14207-0754

Chief Executive Officer

DANIEL G KEANE
1801 ELMWOOD AVE
BUFFALO, NEW YORK, 14207

Principal Executive Office

MOD-PAC CORP.
135 DONCASTER ROAD
KENMORE, NEW YORK, 14217

Registered Agent

NONE

This office does not record information regarding the
names and addresses of officers, shareholders or

directors of nonprofessional corporations except the chief executive officer, if provided, which would be listed above. Professional corporations must include the name(s) and address(es) of the initial officers, directors, and shareholders in the initial certificate of incorporation, however this information is not recorded and only available by viewing the certificate.

***Stock Information**

# of Shares	Type of Stock	$ Value per Share
100	No Par Value	

*Stock information is applicable to domestic business corporations.

Name History

Filing Date	Name Type	Entity Name
NOV 08, 1968	Actual	MOD-PAC CORP.

A **Fictitious** name must be used when the **Actual** name of a foreign entity is unavailable for use in New York State. The entity must use the fictitious name when conducting its activities or business in New York State.

NOTE: New York State does not issue organizational identification numbers.

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Section II

Project Description

Project Description

For over 130 years, MOD-PAC has been a pioneer in the printing and manufacturing of premium quality folding cartons. Founded in 1881 as Cooper Paper Box, the company was acquired by Astronics Corporation (Nasdaq ATRO) in 1972, at which time the MOD-PAC CORP. name was established. The printing & packaging segment of Astronics that was operated through MOD-PAC became a separate corporation in March 2003 (Nasdaq MPAC). Then in 2013, the company was taken private by Kevin Keane, Chairman, and Daniel Keane, President and CEO, and their associates and affiliates.

MOD-PAC has grown to be the largest printing firm in Western New York, currently employing over 370 employees. At the current 500,000 square foot manufacturing facility in Buffalo, New York, MOD-PAC produces high quality folding cartons for large companies and small businesses alike.

MOD-PAC manufactures cartons that are used to package a wide range of consumer products that includes the simplest to the most expensive: from foodstuffs such as dry food, cakes and biscuits, chocolate and confectionary, frozen food, and convenience food; to non-food products such as household products, medical, and pharmaceuticals. The packaging gets products safely and securely from the point of production to the point of sale and use. Without packaging, food and other goods would be lost due to handling damage, lack of hygiene and insufficient information on product use.

Consumer health and safety is a top priority for MOD-PAC. Our goal is to continually improve our operations: from raw material intake, through design for compliance and manufacturing, to storage and delivery. Adopting industry best practices and rigorous work practices and quality procedures helps us to prevent health hazards or unacceptable changes in the taint and odor characteristics of a food product that may result from excessive migration of components from the packaging material

Proposed re-development

MOD-PAC has been making great strides in renovating our current manufacturing facilities, however, we face many challenges. Operating a modern packaging plant in a 100+ year old industrial facility is difficult. We have areas that are underutilized due to the amounts of historical industrial fill that require special handling and remediation. We also have asbestos throughout which limits the ability to upgrade areas of the buildings. All need to be addressed for our facility to remain competitive for the future. The environmental issues need to be remediated to ensure our packaging is consistently produced in conformity with applicable Consumer health and safety rules and ISO quality standards. This re-development will support continued growth of investment and employment wages at MOD-PAC in Buffalo, New York.

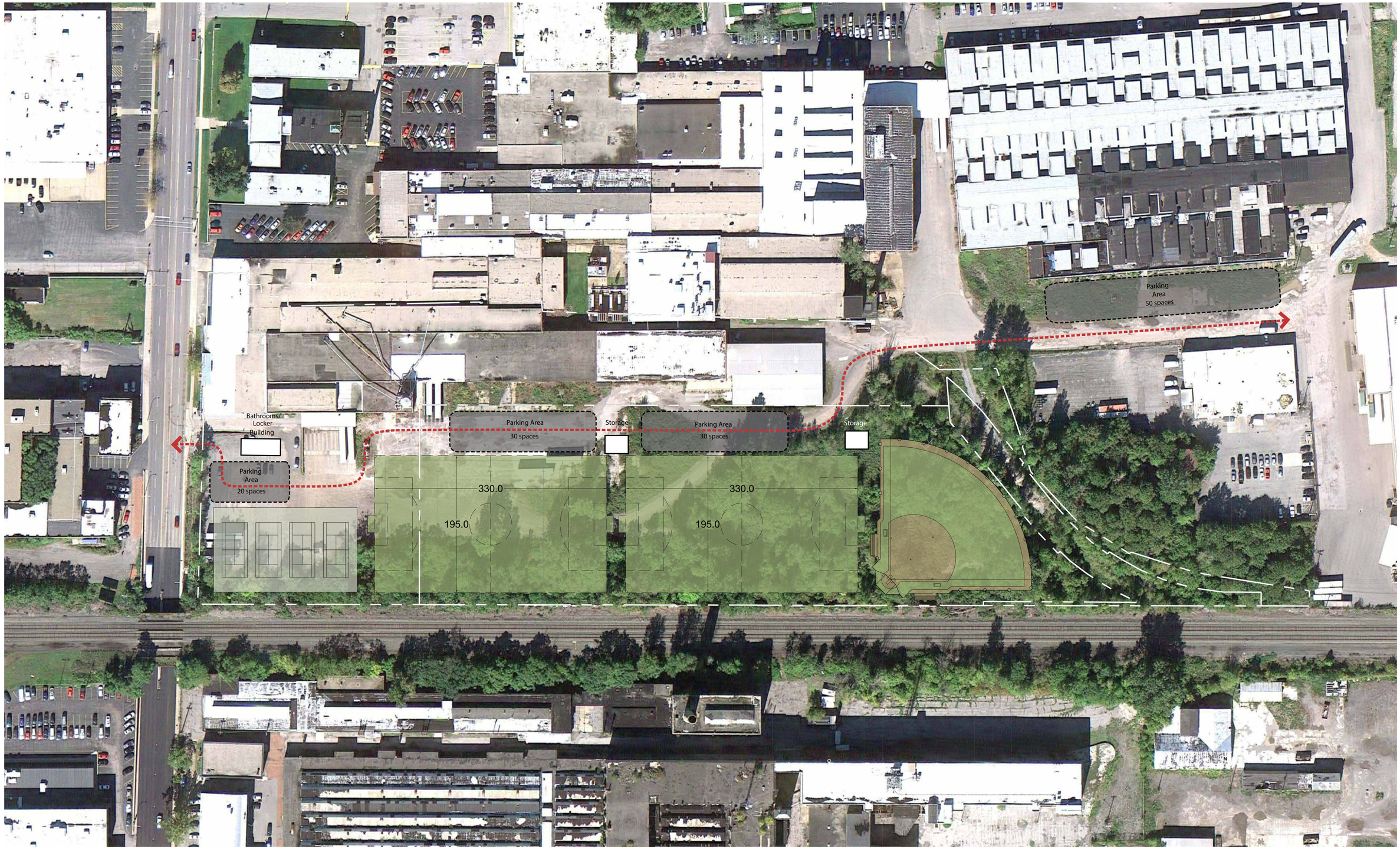
MP has invested over $24 million in the last 10 years ($53 million in last 15 years). Going forward we expect an additional $20 to $40 million in plant and equipment investments to remain a competitive and flourishing company located within the City of Buffalo.

Southern Area of Site

The southern portion of the Site is currently underutilized, underdeveloped property located in the City of Buffalo. The land has been vacant and over grown for over 25 years. Development has not occurred due to the significant presence of historical industrial fill throughout the area. Our vision for the property is to design an inner-city youth sports center that helps meet the growing demand for facilities as identified in the Recreational Needs Assessment Study conducted by the Buffalo Urban Development Corporation in January 2015. To that end we formed a partnership with Nardin Academy and have begun to develop alliances with other schools and neighborhood programs to facilitate developmental and competitive programming in a variety of indoor and outdoor sports.

The proposed complex will include one to two soccer fields, tennis courts, and possibly a softball diamond. Phase I of the project opened in October of 2016. Nardin and Mod-Pac completed construction of one of the only indoor soccer facilities in the city of Buffalo on the eastern adjoining facility. A 30,000 square foot indoor soccer and squash facility opened this year. The facility is open to the community and will serve the youth of Western New York. The new Sports Complex on the southern portion of the Site will support and complement the recently completed indoor facility. The Brownfield redevelopment project will repurpose the industrial land into an asset for the community.

Remedial investigation are expected to start in spring/summer 2017 with Interim Remedial Measures (IRM) activities in summer/fall 2017. Phase I of the sports complex construction is expected to begin in Spring 2018. The Certificate of Completion is anticipated by December 2017.



NORTH

SCALE: 1" = 60'

0 60 120

NARDIN ACADEMY
1801 ELMWOOD AVE - ALTERNATE
January 28, 2015

PETER GISOLFI ASSOCIATES
Architects Landscape Architects, LLP

NORTH

SCALE: 1" = 60'

0 60 120

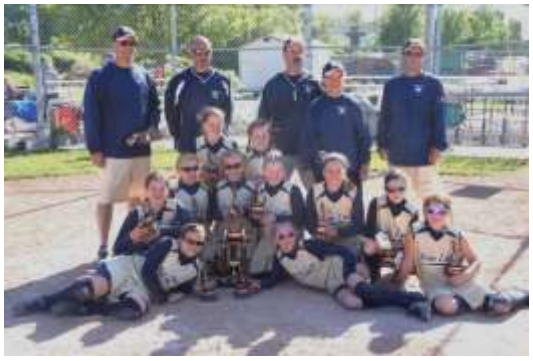
NARDIN ACADEMY
1801 ELMWOOD AVE
January 28, 2015

PETER GISOLFI ASSOCIATES
Architects Landscape Architects, LLP

NARDIN ACADEMY ATHLETIC CENTER

SCHNEIDER DESIGN ARCHITECTS, PC

NARDIN ACADEMY
MDCCCLV II
PRO CHRISTI
IMPENDAR TOTUS
ECCLESIA
BUFFALO, NEW YORK



Recreational Needs Assessment Study

The South Buffalo Brownfield Opportunity Area

Presented to:

Buffalo Urban Development Corporation

Presented by:

Paradigm Economics
Wendel Companies
Spicer Group

January, 2015

This document was prepared for the Buffalo Urban Development Corporation and the City of Buffalo with financial assistance provided by the New York State Department of State Brownfield Opportunity Area Program.

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Statement of Limiting Conditions

City-Based Recreation and Economic Development Initiative
Recreation Needs Assessment

The consulting study is subject to the following limiting conditions, except as otherwise noted in the study:

1. The conclusions stated in the comprehensive analysis and market research study apply only as of the date indicated and no representation is made as to the effect of subsequent events on the study.

2. By reason of this assignment, Paradigm is not required to give testimony or be in attendance in court or any government or other hearing with reference to the study without written contractual arrangements having been made relative to such additional employment.

3. Neither all nor any part of the content of the report shall be disseminated through advertising media, public relations media, news media or any other means of communication including without limitation prospectuses, private offering memoranda, and other offering material provided to prospective investors.

4. Information, estimates and opinions contained in this report, obtained from sources outside of our office, are assumed to be reliable and may not have been independently verified.

The analyses contained in this study incorporate numerous estimates and assumptions regarding market performance, general and local business and economic conditions, the absence of material changes in the competitive environment and other matters. However, some estimates or assumptions inevitably will not materialize, and unanticipated events and circumstances may occur. Therefore, actual issues, outcomes and results experienced during the period covered by the enclosed analyses are likely to vary from our estimates, and the variations may be material.

I. INTRODUCTION

Paradigm Economics, a Buffalo-based sports, live entertainment, cultural tourism, and public assembly facility market research and facility management consulting practice, was contracted with by the Buffalo Urban Development Corporation (BUDC) in January of 2014 to work with the BUDC and its public sector project partners to identify and assess the regional indoor and outdoor recreational sports facility market and programmatic opportunities, priorities, and issues that are related to the maximization of facility operation and program execution within the South Buffalo Brownfield Opportunity Area (SBBOA).

This needs assessment project was intended to provide direction with respect to options and opportunities for attracting private sector developers to the SBBOA, for converting former industrial land within the SBBOA to productive use, to serving recreational needs of Buffalo and surrounding Western New York communities, and to generating incremental sports tourism activity so as to attract out-of-town visitors and increase measurable local economic impact.

As a Buffalo-based facilities consulting practice, Paradigm has, over the last 20 years, conducted over 100 market, feasibility, operational audit, and strategic planning studies across the country, with a significant percentage of those projects being located in New York State, and Western New York. Buffalo, Amherst, Hamburg, Niagara Falls and Jamestown are locales in which Paradigm has project experience, and First Niagara Arena, the Northtown Center at Amherst, Jamestown Savings Bank Arena, and Dwyer Ice Arena are representative venues on which Paradigm has worked and at which Paradigm has in some cases provided ongoing consultative services.

Similarly, Paradigm's project team members on this study, Wendel and Spicer Group, have extensive, significant, and relevant local and regional architectural, engineering, and construction cost project experience that, when combined with the background and experience of Paradigm, contributed to a well-qualified project team that was able to comprehensively, efficiently, and effectively address the assessment components that were articulated in the final BUDC study scope of services.

The main task areas of the project scope of services were articulated as follows:

A. Preliminary Analysis
B. Existing Conditions/Supply Analysis
C. Demand Analysis
D. Market Analysis

E. Comparables Identification and Analysis
F. Location Analysis
G. Construction Cost Estimates
H. Financial Operations Analysis
I. Economic Impact Analysis

The project had an initial projected duration of four (4) months, which was extended to a term of eight (8) months due to the identified need for conformation to both materials development and data collection realities related to the research-specific areas of front-end tasks and subtasks, as well as to late winter-early spring weather conditions impacting project team access to City of Buffalo outdoor fields and facilities capable of hosting seasonal use and play.

II. EXECUTIVE SUMMARY

Preliminary Analysis

In January of 2014, the South Buffalo Brownfield Opportunity Area's recreational needs assessment study was initiated with Paradigm Economics and its project team consisting of Wendel Companies (site analysis, existing facility conditions) and Spicer Group (construction cost estimation) engaging with an advisory committee comprised of representatives from the Buffalo Urban Development Corporation, the State of New York, Visit Buffalo Niagara/Buffalo Niagara Sports Commission, the City of Buffalo Office of Strategic Planning, and the City of Buffalo Division of Parks and Recreation.

The overarching goal of the study was to determine the demand for a new facility (or facilities) development project in the SBBOA, or elsewhere in the City, preliminarily identified as an indoor-outdoor soccer/turf field complex attractive to private sector development and ownership. The overall needs assessment was confirmed to be bifurcated in that critical audiences for the research and analysis were Visit Buffalo Niagara for sports tourism needs and development, and the City of Buffalo Division of Parks and Recreation for recreation facility maintenance and resource allocation.

Existing Conditions/Supply Analysis

Working with the Division of Parks and Recreation, the project team first confirmed and quantified the inventory of outdoor recreational assets (football, soccer, baseball, softball, little league, t-ball, basketball, tennis, track, roller hockey) within the four traditional recreation districts designated by the City (South, East, West, Olmsted) in a comprehensive supply analysis. Findings related to this inventory determined that most sports fields were in fair to good condition, and in need of common repairs including drainage improvement, regarding, weed removal, and installation of amenities (fences, benches, paths). Facility concentrations were determined to exist in North Buffalo, South Buffalo, and the East Side, and are generally lacking on the City's West Side.

The overall facilities inventory within the City is represented by a variety of owners and operators including the City, Olmsted Parks Conservancy, Buffalo Public Schools, private high schools, and colleges. The City-owned facilities inventory is supplemented by seven outdoor all-weather surface fields. Five

confirmed and potential additions to this existing City-wide inventory were determined to be D'Youville College (new outdoor turf field, opened Q3 of 2014), proposed/potential projects at Tapestry Charter School (outdoor turf field and track), English Pork Pie Company (rugby stadium, side fields, other), and developer-driven interests in both South Buffalo and the Outer Harbor. Lastly, using Division of Parks and Recreation permitting histories and program/user data, a thorough inventory of City of Buffalo recreation facility for-profit (20 groups) and not-for-profit (50 groups) facility users was conducted, so as to measure both the distribution and density of annual usage received by the City facility inventory.

Demand Analysis

The demand analysis for the SBBOA recreation needs assessment was intended to evaluate the ability of identified recreational resources within the City of Buffalo to meet current and future market demand. Census data material was utilized that determined that between the years 1940-2010, City of Buffalo population decreased by 55%, with the population density decreasing to 6,472 residents per square mile. At the same time, the recreational youth sports market in the City grew significantly since the 1960s and 1970s. The net effect on the City's recreational assets has been that in the face of a declining population, pressure on the facilities from user groups in fact has increased over historical levels, especially in the past 40+ years. This pressure has been exacerbated by a significant increase in adult recreational sports programs hosted within the City during that period.

Comparing City of Buffalo facility inventories and user demand characteristics against facility standards developed by the National parks and Recreation Association (NPRA), it was determined that user demand in Buffalo aligned with a 30-year national trend indicating demand *decreases* for basketball and tennis courts, but an *increase* in demand for baseball and softball diamonds, as well as for rectangular sports fields. Anecdotal information gathered through user group interviews confirmed that both City-based non-profit and for-profit recreational youth and adult sports programs are now constrained by a lack of field space facilities in particular.

The local soccer community in particular is attempting to address this outdoor (and indoor) field space shortage by organizing so as to advocate private sector development projects. The Division of Parks and Recreation's own experience in

allocating user permits indicates a significant need for more ball field and rectangular field space. Interviews with for-profit user groups in particular indicated a strong demand for additional indoor turf/training facilities within the market; over two dozen user groups interviewed cited the need for additional indoor facilities more centrally-located within the market as being necessary for them to more adequately serve existing programs (i.e. intercollegiate and interscholastic athletics), and to grow their travel- and premier-level training, league and tournament offering (especially soccer).

Market Analysis

The study's supply analysis indicated a pent up demand for both indoor and outdoor field sports facilities, exhibited by youth and adult recreational programs, by the for-profit travel and premier-level soccer community, by City-based colleges, and by charter and private high schools. With respect to the indoor sports field investment and development option that was identified as a primary focus of the study, a critical mass of "pay-to-play" users was readily identified as including existing outdoor adult leagues, new indoor adult leagues, City-based travel, premier, and other membership soccer programs, regional baseball and softball programs (for off-season training), and City-based collegiate and private high school programs (off-season training).

A test of this identified demand for indoor field facility access was conducted against the other nine largest counties in New York State. Within the seven-member cohort of counties having indoor turf field facilities, Erie County had the lowest density of indoor turf facilities per 100,000 population unit, with half as many facilities per population unit as Monroe County in particular. This finding supports the general premise that is implicit in the study's program representative interviews, that there is significant pressure within the local-regional sports market for greater access to indoor "off-season" facilities and turf time. Such indoor facility investment and operation is supported by demonstrated local user market characteristics including volume of existing programs, rates charged by existing facilities, volume of current utilization exhibited by existing programs, membership and program expansion goals of existing programs, and outdoor adult recreational programs that desire to provide an indoor season program offering to their current members.

The merit of such a facility development opportunity and business operation option includes quality of life improvement for City of Buffalo and regional

residents, contribution to the overall marketability of the City of Buffalo, a financially-sustainable business operation that should not require private sector investment or subsidy, and economic impact through both business operation and generation of incremental retail traffic and spending by users.

Comparables Identification and Analysis

An attempt was made by the Paradigm project team to identify contemporary industry standards for indoor facility design, operation, ownership, and development. Key findings in this analysis included economical design programs and use of lower-cost exterior and interior materials, multi-field configurations to allow for program flexibility and maximization of rental revenues, inclusion of basic retail (i.e food service, equipment sales) components, a high incidence of private sector investment, ownership and operation, exhibited financial sustainability through facility operations, and user-promoted and supported facility development and operation.

A comparables cohort of New York State metropolitan statistical areas (MSAs) was identified and assessed, to determine the degree to which the contemporary industry standards that were identified earlier in the section were in evidence in other NYS markets. The inventory of indoor facilities throughout the state includes converted tennis centers, inflatable sports domes (or “bubbles”), and built-to-suit buildings, with newer metal buildings and metal buildings in general being the dominant facility type. Many buildings have suburban locations, and city-based facilities tend to be located outside of the urban center or core.

Because of both its proximity to Buffalo and its high indoor turf field facility density, the Monroe County facility inventory was scrutinized in detail. Themes represented by these facilities include private ownership and operation, multiple facility ownership, multi-surface design and layout, a variety of field dimensions, and inclusion of some non-field sports (i.e. basketball court) spaces.

Location Analysis

Based on the determination of a potential new facility type that was identified in this study’s market supply and demand analysis, a preliminary location analysis was conducted that considered potential geographic footprints within the City of Buffalo that might serve as host sites for the indoor-outdoor turf field facility. This location analysis included three main components: development of criteria for optimal project location; creation of a comparative analysis of primary and

secondary locations based on evaluation criteria; and evaluation of sites within the South Buffalo BOA against the location criteria.

The location criteria were applied against 11 preliminary target locations provided to the project team by the BUDC. These locations were identified based on location and available acreage. No effort was made at this time to determine their availability. This set of location options happened to include seven (7) geographic footprints that were located in one of the four current Brownfield Opportunity Areas within the City of Buffalo. This location set and the BOA within which each location resides is provided as follows:

1. 90 Hopkins Street – South Buffalo BOA;
2. Outer Harbor – Buffalo Harbor BOA;
3. Elk Street – Buffalo River BOA;
4. Emerson Young Park – Buffalo Harbor BOA;
5. Tee-to-Green property – Tonawanda Corridor BOA;
6. Black Rock Yard – Tonawanda Corridor BOA;
7. 1070 Seneca Street;
8. Kensington Heights;
9. Buffalo Forge;
10. Village Farms/Hydroponics/English Pork Pie Company; and
11. American Axle.

Profiles for each of these 11 locations were developed that included geographic location detail, access detail, contextual detail (i.e. proximity to schools, retail and entertainment, and parks and recreation), and a placement map indicating location within the City of Buffalo footprint.

A comparative analysis of all 11 preliminary target locations against the primary and secondary location criteria indicated that with respect to the key primary location criteria of massing ability of necessary acreage, seven of the 11 target locations (Outer Harbor, Elk Street, Tee-to-Green, Black Rock Yard, 1070 Seneca Street, Kensington Heights, and Village Farms) have enough of a footprint so as to allow for both initial facility development, as well as expandability of the indoor-outdoor complex should marketability and operating characteristics of a new facility indicate that business operation expansion is appropriate.

Construction Cost Estimates

Based on the demand, market, and comparables findings articulated in earlier sections of this study, the Paradigm study group endeavored to generate a set of preliminary construction cost estimates based on the indoor-outdoor turf field complex facility type that was elevated to priority status within the new facility type option evaluation.

Based on predominant user group needs, recommendations, and requirements that were generated through the market supply and demand sections interview process, a set of *preliminary base case facility parameters* were developed by Spicer Group that reflected the indoor, outdoor, and support space construction specifications that would support a conservative construction scenario within the indoor-outdoor turf field facility type. These parameters were transferred to Spicer Group for construction cost estimating purposes, and are articulated as follows:

- One (1) 330'x210' indoor turf field surface;
- Two (2) 180'x300' outdoor field surfaces;
- Two (2) 240'x360' outdoor field surfaces;
- Paved parking for 200 vehicles (@325 SF/space);
- Interior support space that includes retail, administration, food service, lavatories, and storage;
- Adequate interior circulation space;
- Basic Butler building-type metal clad structure and materials;
- HVAC system that allows for year-round utilization of indoor spaces;
- 50' ceiling height over indoor playing surface;
- Security fencing around the footprint perimeter.

The total construction cost estimate, which includes soft costs, site preparation, some non-fixed equipment, bonding costs, insurance, and a 15% contingency, overhead, and profit, was determined to total $10,498,678. This construction cost does not include cost of land.

The 21-acre footprint includes approximately 13 acres for building, parking lots, and outdoor fields, and eight additional acres for outdoor circulation, landscaping, and auxiliary space.

Financial Operations Analysis

Based on the design program selected for the proposed indoor-outdoor turf and field sport center (one full-sized indoor turf field, four outdoor turf and natural grass fields), a set of assumptions were generated that provided the basis for a preliminary financial performance analysis for the proposed facility operation. A summary of these key characteristics included but was not limited to the following:

- A private legal structure and operation (either for-profit or not-for-profit) is preferred;
- The business operation essentially has a 6-month revenue period (November-April); and
- The facility will be required to internally develop, market, and administer a variety of leagues and programs including but not limited to youth and adult soccer, flag football, and similar.

Other key characteristics for the cash flow model were preliminarily selected for illustrative purposes, and are described as follows:

- Indoor utilization reflects a 90% utilization of available prime time hours;
- Not-for-profit legal status has been selected and applied, which allows for solicitation of grants, donations, and pledges;
- A management company line item is included in the expense budget, which reflects the opportunity for experienced indoor/outdoor recreation facility operators to oversee day-to-day facility operation for ownership on a contract basis;
- Indoor field utilization is expected to include a combination of league and tournament play (run by the facility) and straight rentals by outside user groups. Also expected is variable utilization volume by sports type; and
- An 80% loan over 25 years on a construction budget of $10,498,678 at 6.5% has been factored in as an expense.

The preliminary cash flow model included revenues from indoor and outdoor field utilization (“Total Usage Revenue”), as well as non-rental revenues that include concessions revenues (net), field sponsorship rights, revenues from grants, donations, and pledges, and sponsorship package revenues (“Ancillary Revenues”).

The expense side of the cash flow model includes expense line items such as payroll (facility management, sports coordinators), utilities, management company fee, telephone/internet, insurance, building/grounds maintenance, equipment replacement fund, office expenses and supplies, contract services, legal and accounting fees, and marketing.

Total revenues ($1,174,098) were aligned against total expenses ($1,099,172) to generate a net cash flow figure of $74,926. This net cash flow figure represents the cash that is available to the facility owner to make loan/mortgage payments that are incurred to purchase property and for building development/construction. For purposes of this financial performance modeling exercise, those payment obligations have not been estimated or included as line items in the expense side of the cash flow model.

Economic Impact Analysis

The Paradigm project team utilized estimations of projected facility construction cost and facility financial performance to determine an estimation of economic impact generated by both the single event (construction) and ongoing annual activity (financial performance). In this effort, the Minnesota IMPLAN economic impact model was utilized in conjunction with current Bureau of Economic Analysis (BEA) market data for Erie County.

The economic impact generated within Erie County by the proposed *indoor facility construction* is summarized as follows:

Impact Type	Employment	Labor Income	Output
Direct Effect	66.8	$3,196,756	$7,417,760
Indirect Effect	13.5	$772,878	$1,964,339
Induced Effect	21.0	$896,164	$2,651,473
Total Effect	**101.3**	**$4,865,797**	**$12,033,572**

Estimated economic impact for *indoor facility operations* from the IMPLAN model based on an annual revenue projection of $1,174,098 is as follows:

Impact Type	Employment	Labor Income	Output
Direct Effect	6.0	$146,500	$1,174,098
Indirect Effect	2.1	$110,093	$314,420
Induced Effect	1.4	$57,729	$170,796
Total Effect	9.4	$317,322	$1,659,313

III. PRELIMINARY ANALYSIS

On January 21, a kick-off meeting was held at the BUDC offices with members of the project's advisory committee. The purpose of the meeting was to confirm goals and objectives for the project, to identify what materials and contact information existed within the advisory committee that could be helpful to and collected by the Paradigm project team, and to discuss interactively the overall project process and context. Participants at that meeting were of two groups as follows:

SBBOA project advisory committee:

Pete Cammarata (BUDC);

Mike Even (Visit Buffalo Niagara/Buffalo Niagara Sports Commission);

Becky Gandour (City of Buffalo);

Dave Stebbins (BUDC);

Dennis Sutton (City of Buffalo).

(Not in attendance – Chris Bauer, NYS, and Andy Rabb, City of Buffalo Division of Parks and Recreation)

Paradigm Economics project team:

Michael Bogucki (Paradigm);

Dean Gowen (Wendel).

It was confirmed that the core group for the advisory committee is Chris Bauer, Mike Even, and Andy Rabb, with BUDC participants acting as the facilitating entity.

Regularly scheduled monthly meetings were confirmed, to facilitate information sharing, interactivity, and a consistent feedback loop regarding work in progress and contact and information brainstorming.

It was confirmed that City of Buffalo Strategic Planning, City of Buffalo Division of Parks and Recreation, and Visit Buffalo Niagara participants were key to the

project with respect to definition of project roles and outcomes expectations. The SBBOA was confirmed as the tacit target geography for study, but it was also confirmed that the assessment was to have a City-wide focus, especially with respect to an existing conditions and supply analysis specific to City of Buffalo recreation facility assets.

The overarching question to be answered by the assessment effort was identified as follows:

"Is the demand for a new facility (or facilities) to be located somewhere in the City limits real, is the facility type able to be preliminarily identified as an indoor-outdoor sports complex of some defined size and purpose and if so, can private sector investment and ownership criteria be identified so as to allow for the advocating by the public sector of such a project?"

The three key phases of the project were reiterated and confirmed to be (1) inventory/supply/physical analysis; (2) demand analysis; and (3) economic analysis.

It was also stressed that the assessment needed to be bifurcated, that is, that it needed to assess a sports tourism component (for VBN), and a community recreation component (for the City of Buffalo).

For VBN specifically, sports to target were identified as baseball, softball, football, soccer, lacrosse, field hockey, rugby, track and field (all outdoor), as well as gymnastics, wrestling, indoor track, basketball, cheer, and dance (all indoor). Fresh water sports were also determined to be a consideration, given the proximity of the SBBOA to fresh water access.

It was determined and confirmed that VBN would be the best repository to access for sports tourism histories, sports tourism business development efforts and interests, and "lost business" information. Additionally, the City of Buffalo Department of Parks and Recreation was confirmed as being the office in which historical documentation resided in the areas of City of Buffalo field and facility permitting, City of Buffalo recreation asset inventory information, and historical facility/asset use information.

IV. EXISTING CONDITIONS/SUPPLY ANALYSIS

Task One in the SBBOA recreation needs assessment study entailed the identification and inventorying of recreational resources currently existing within the study area. This study area was not restricted to the SBBOA area and neighborhoods proper, but encompassed the entire inventory of recreational assets within the City limits.

While the inventory exercise focused primarily on City of Buffalo Division of Parks and Recreation assets, the effort also encompassed non-City recreational assets within the City, which either theoretically contribute to the overall inventory of available recreational assets, or in fact contribute in practice based on their known availability to City and other user groups.

City of Buffalo Division of Parks and Recreation Recreational Facilities Inventory

Materials available to the Paradigm project team through COB Parks and Recreation allowed for identification and a distribution analysis of existing COB recreation assets. COB recreational assets are identified based on the department's maintenance districts: South, East, West, and Olmsted. Facility types captured within these three distinct geographic districts and the Olmsted parks subset are identified as follows:

Football fields (game, practice);

Soccer fields (game, practice, with and without goal frames);

Hardball fields (baseball);

Softball fields;

Little League fields;

T-ball fields;

Basketball courts (full and half);

Tennis courts; and

Outdoor tracks.

The provided parks and recreation materials were confirmed for completeness by the project team, and then manipulated so as to present all COB recreational facility assets by district, and with subtotals of facility type by district and totals by facility type for the City. This information is presented in Table One.

TABLE ONE – CITY OF BUFFALO RECREATIONAL FACILITIES DISTRIBUTION

SOUTH DISTRICT	**Football Field**	**Soccer Field**	**Hardball**	**Softball**	**Little League**	**T-Ball**	**B'ball**	**Tennis**	**Track**	**Roller Hockey**
JFK Park	1	2		1			3	4		
Willert							2			
Spring (Wende)							2			
Conway	1			2						
Mullen							1			
Collins							1			
Lanigan		1 (prac)					1.5			
Houghton	1	1 (prac)	1	1			2	1		2
Hillary	1	2					1.5			
Mungovan		1							1	
Boone				1			1			
Mulroy	1									
Okell	1		2	1	1	1	1			
Tifft	1	1		1						
Durant		1 (small)					1			
Franczck	1	1 (prac)		2			1 full, 2 half			1
Hennepin							1	4		
Subtotal =	**8**	**10**	**3**	**9**	**1**	**1**	**21**	**9**	**1**	**3**
EAST DISTRICT										
McCarthy	1	1	2	1	2		3	2		
Manhattan	1	1 (prac)					1			
Dewey		1 (prac)		1	1		3			
Trinidad	1 (short)						2			
Glenny	1			2			2			
Roosevelt	1	1 (prac)					2	1		
Kingsley		1 (prac)				1	2			
Masten				1			4			
Ed Dawson							1			
Nowak		1 (prac)								
Emerson	2					1	2	2		
Walden/Scaj	1	1 (prac)	1		2					
Schiller	1	1 (prac)					2			
Lang Weber	1	1 (prac)				1	1			
Lincoln						1	1			
Box/Glennwd							1			
Fr. Eckridge							3			
Sperry				1			3			
Bailey/Moore	1									
Woodlawn (Perkins)		1 (prac)				1	3			
Subtotal =	**11**	**10**	**3**	**6**	**5**	**5**	**36**	**5**		
WEST DISTRICT										
Waterfront	1	1					1	3		
Massachusetts		1 small prac					1			
Allison							2			
LaSalle	1	2		3	3	1				
Peter St.							1			
JH Williams		2					1.5			
Shoshone			1	2	2	1	2			
Subtotal =	**2**	**6**	**1**	**5**	**5**	**2**	**8.5**	**3**		

OLMSTED DISTRICT										
Delaware	1	5	2	1			4	17		
Riverside	1		1	1	2	1	2	2		
MLK							2	4		
Front		1						2		
Cazenovia	1	3	2	2			2	4		
South Park				2						
Subtotal =	**3**	**9**	**5**	**6**	**2**	**1**	**10**	**29**		
Total – All Districts=	**24**	**35**	**12**	**26**	**13**	**9**	**75.5**	**46**	**1**	**6**

Source: City of Buffalo Division of Parks and Recreation

Table One indicates that the City has an overall inventory of outdoor recreational assets (including practice fields) as follows:

Football fields	24
Soccer fields	35
Hardball fields	12
Softball fields	26
Little league fields	13
T-ball fields	9
Basketball courts	75.5
Tennis courts	47
Outdoor track	1
Roller hockey	6

This inventory includes facilities owned, maintained and permitted by the City. The Johnny B. Wiley sports complex is owned by the City, but is maintained and booked by Buffalo Public Schools under a management contract with the City. That complex includes a hardball field, an outdoor track, and a turf field that accommodates football, soccer, and lacrosse.

Supply Analysis Summary

As a component of the conditions/supply analysis, the project team identified proposed facilities in addition to the total number of existing City of Buffalo assets. Methodology included site visits and subjective rating, geographic spatial data utilizing ArcGIS, aerial imaging and interviews. The analysis included the geographic distribution, condition and use of facilities based on 2013 reservation data. A graphical representation of this asset analysis is provided in the report Appendix.

Based on our review of the City of Buffalo recreation facility inventory included within this study, five key findings were identified as follows:

1. Most sports fields are in fair to good condition; numerous City of Buffalo operated courts are currently in the process of being renovated. Common repairs needed include drainage improvement, re-grading, weed removal and park amenities such as fences, benches and paths;

2. Facilities are concentrated in areas of South Buffalo, along the East Side, and parts of North Buffalo. The west side is generally lacking recreation facilities;

3. The East Parks District accounts for over 45% of all public (public = City of Buffalo/Olmsted Parks Conservancy operated) football fields and basketball courts;

4. Current recreation facilities are owned/operated by a variety of actors: private developers, City of Buffalo Parks Dept., Olmsted Parks Conservancy, public schools and private schools; and

5. Climate is a constraint on the existing field supply usability as there is only one indoor soccer field in Buffalo (Tosh Collins Community Center).

Non-City of Buffalo Recreational Facility Inventory

In addition to City of Buffalo recreational facility assets, there are within the City limits a number of outdoor and indoor sports-rec facilities to which the general public, typically in the form of organized teams, leagues, and similar user groups, has access. This access is typically on a rental basis, but use is not exclusive to a rental arrangement in all cases, as private owners sometimes offer free or discounted use to groups with which they have affiliated or preferential relationships.

Table Two indicates the inventory of non-City recreational assets currently available to outside user groups. This includes facilities owned, maintained, and permitted by City-based private high schools, colleges, and Buffalo Public Schools primarily. The table generally follows the district designations of Table One, so as to make comparison of public vs. private inventories as well as to make possible aggregation of all facilities in a geographic district by type.

TABLE TWO – NON-CITY OF BUFFALO RECREATIONAL FACILITIES DISTRIBUTION

SOUTH DISTRICT	Football Field	Soccer Field	Hardball	Softball	Little League	T-Ball	B'ball	Tennis	Track
Pirce Field at Mulroy Park	**1**	**1**							
Subtotal =	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
EAST DISTRICT									
All-High Stadium (BPS)	1	1							1
Subtotal =	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
WEST DISTRICT									
Riverside High School (BPS)	1	1							1
Coyer Field (Buff State)	1	1							1
Demske Complex (Canisius)	1	1							
Canisius H.S.	1	1							
Nichols School	1	3							
Subtotal =	**5**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
OLMSTED DISTRICT									
Subtotal =	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Total – All Districts =	**7**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**3**

Source: City of Buffalo Division of Parks and Recreation

Table Two indicates that non-City facility owners theoretically contribute to the overall available football field (which typically allow for soccer, lacrosse and field hockey play as well), soccer, and track and field inventory within the City. However, there are conditions typically associated with privately-owned and public non-City facilities, and which are in place at this set of non-City facilities that can be articulated as follows:

- Unlike City of Buffalo facilities, which favor youth groups on its hierarchy of permitting, privately-owned facilities typically identify their own internal teams and programs as the absolute scheduling priority;

- For college facilities in particular, intercollegiate athletics, intramurals, and recreational use by campus constituents are scheduling priorities ahead of most if not all outside user groups;

- Unlike City of Buffalo facilities, privately-owned facilities typically charge *all* user groups a rental fee for use of their facilities, including *both* youth and adult programs; and

- Buffalo Public School facilities must first accommodate its interscholastic sports programs at its available facilities before considering permitting to outside groups.

Potential Additions to City of Buffalo Recreational Facility Inventory

In addition to existing City of Buffalo and non-City of Buffalo recreational facilities within the City limits, there are a number of recreational facility projects that are either underway or proposed that will and may, respectively, impact the overall recreational facility inventory within the City in the near term or otherwise. Paradigm has endeavored to identify and assess the status of these projects so as to determine the relative impact that each might ultimately have on overall facility availability within the City. Descriptions of actual and potential projects of this type that have been identified to-date are provided as follows:

- ***D'Youville College (new outdoor turf field):*** Construction recently completed on Porter Avenue. All-weather surface has a configuration that accommodates soccer, field hockey, lacrosse, football, as well as softball and baseball. Facility will not be available to outside groups for first full year of operation, but DYV athletics intention is to make facility available to outside groups on a rental basis thereafter.

- ***Tapestry Charter School (outdoor turf field and track):*** Combination of components is still under development, proposed components have

included all-weather turf surface (football, basketball, soccer, field hockey), 8-lane track encircling field, and seasonal air structures (domes) covering the all-weather surface in late fall-winter-early spring.

- ***English Pork Pie Company (rugby stadium, side fields, indoor fieldhouse):*** Proposed for outside space behind EPPC corporate location at 1176 South Park Avenue. Ownership indicates an intention to privately-finance development, primarily to provide a centralized and rugby-centric location for regional rugby play, as well as a secondary purpose of providing outdoor field space for the local soccer community. This intent would require acquisition by EPPC of contiguous land currently owned by the City, and the ability of EPPC to do so is uncertain at this time.

- ***Lee Street Property (outdoor surfaces for soccer, rugby, lacrosse, beach volleyball):*** 18 total acres, including existing structures, envisioned as potential live entertainment, retail and outdoor recreation complex to complement contiguous projects and business operations at Larkinville, Railroad Museum, Silo City, etc.

- ***Outer Harbor (multiple development proposals):*** Projects have been proposed that are baseball-centric and multi-function (combination of retail, participative sports, live entertainment, other), as well as new Bills stadium-centric. Proposed as privately-developed, owned, and operated projects most likely, they are all speculative at present, likely require 100-150+ acres of development, propose to have sports facility components that might lend themselves to “sports tourism” opportunities that could align with VBN interests, and would likely require rental payments for access by outside groups and event.

On a probability scale, the DYC project was completed in Q3 of 2014, with availability to outside local user groups beginning perhaps in 2015-2016.

Tapestry Charter School has had a deliberate process in place since 2013 to both plan and fundraise for an 8+-acre project on land that it currently owns on Great Arrow Avenue. That said, if a development plan and funding was in place by fall of 2014, it is likely that facilities could not be online before spring of 2016, based on typical construction timelines that consider design efforts, materials purchase, and seasonality constraints.

The outer harbor proposals that have some degree of potential event, program, and/or recreational sports capability are expansive in their scopes, and would qualify as major development projects that would require significant funding, design, public-private collaboration, and construction efforts. As a result, the green-lighting of one or more of these projects would certainly be both intricate and deliberate. Therefore, integrating any aspect of their proposed component strategy is likely not advisable for planning for recreation program access and use in particular. That said, they do have relevance for potential VBN sports tourism business development efforts, and any eventual development component decisions that come to pass with respect to one or more of them.

Task Two in the SBBOA recreation needs assessment study entailed the determination and codification of the *current utilization* of existing recreational resources currently existing within the study area.

City of Buffalo Division of Parks and Recreation files and records, especially annual permitting logs, were utilized to create a comprehensive summary of users of City outdoor facilities, separated into for-profit and not-for-profit user groups. These summaries are provided in Table Three and Table Four, respectively.

TABLE THREE – FOR-PROFIT FACILITY USERS

Name	Sport(s)	District(s)	Park(s)
Buffalo Social Club	Softball, soccer	S,W,O	JFK, Franczyk, LaSalle, Front, Delaware, Schiller, Walden
M/ilesports	Softball, kickball, flag football, soccer	S,E,W,O	Conway, Tifft, Glenny, LaSalle, Delaware
South Buffalo Softball	Softball	S,O	Houghton, Caz, Franczyk
Queen City Softball	Softball	W	LaSalle
Game On	Softball, baseball, flag football	O,E,S	South Park, Glenny, Boone, Del, Houghton, Franczyk
Buffalo Wings	Baseball	O	Caz, Delaware
Old First Ward	Softball	S	Conway
Friendly Friday	Softball	S	Conway
Buffalo Rugby Club	Rugby	O	Delaware
Buffalo Women's Rugby	Rugby	O	Delaware
USA Ultimate Frisbee	Frisbee		
WAKA	Kickball	O	Delaware
New Era 14U	Baseball	O	Delaware
Soccer Shots	Soccer	O	Delaware, South Park
Buffalo Niagara Tennis	Tennis	W,O	Riverside, Delaware
New Era Tourney	Baseball	O,E	Caz, McCarthy, Delaware
WNYFFL	Flag football	S	JFK
Go Flingo	Kickball	W	LaSalle
Tuesday Women's Night	Volleyball	S	Houghton
Old Neighborhood	Softball	S	Conway

Source: City of Buffalo Division of Parks and Recreation

Table Three indicates that at least 20 for-profit recreational sport organizations utilize City of Buffalo Recreational facilities on an annual basis in order to run their respective programs. These for-profits are almost exclusively for adult leagues, and represent men's, women's, and coed sports and leagues. The key users based on annual volume – Buffalo Social Club, M/ilesports, and Game On – provide multiple participative sports opportunities, and therefore use a wider variety of City field types and park locations. Other heavy users such as South Buffalo Softball are single-sport, but utilize multiple park locations as well due to their sizable membership.

The main calendar period for these sports and users is the May-August timeframe, with some activity taking place in "shoulder" seasons of April and September.

TABLE FOUR – NOT-FOR-PROFIT FACILITY USERS

Name	Sport(s)	District(s)	Park(s)
MUNY MSPL	Baseball	E,O	Walden/Scaj., Delaware
Nardin	Tennis	O	Delaware
Canisius H.S.	Baseball	O	Delaware
Bishop Timon	Baseball, football, lacrosse	O,S	Delaware, Mulroy, Tifft
Mt. Mercy	Softball	O	Caz
South Buffalo Little League	Baseball	S	Okell
Kensington Little League	Baseball	E	McCarthy
NICYO	Baseball	E	Walden/Scaj.
West Side Little League	Baseball	W	LaSalle
Hertel N. Park Little League	Baseball	W	Shoshone
Riverrock Little League	Baseball	O	Riverside
BPS	Tennis, baseball, football, softball	O,E,W	Delaware, MLK, Riverside, Caz, Dewey, Masten, Waterfront, Riverside, Shoshone, LaSalle, Houghton, JFK
Maritime Charter	Baseball	O	Delaware
Delaware Soccer Club	Soccer	O,W,E	Delaware, JH Williams, McCarthy
Monsignior Nash	Softball	O	Caz
W. Side Int'l Soccer	Soccer	W	Front, Massachusetts
AAABA	Baseball	O	Delaware
Bflo Legion Post 64	Baseball	O	Delaware
Jr. Bisons CEBA	Baseball	O	Caz, Delaware
S. Buffalo Soccer	Soccer	O	Delaware
PAL	Basketball, baseball, soccer, tennis	W,O	Riverside, Delaware, Caz, Houghton
Ballin' for Breast Cancer	Basketball	O	Delaware
S. District Summer Camp	Basketball	O	Caz
S. Buffalo Football	Football	S	Hillary
Buffalo ravens	Football	E	Glenny
Redskins	Football	W	Waterfront
Cowboys	Football	E	JB Wiley
Buffalo Vets	Football	E	Manhattan
N. Buffalo Jr. Athletics	Football	E	McCarthy
Hurricanes	Football	S	Houghton
West Side Football	Football	W	LaSalle
Stingrays	Football	S	Okell
Blackrock Riverside	Football	W	Riverside
Wolverines	Football	E	Schiller
Buffalo Raiders	Football	E	Emerson

GC Cowboys	Football	E	Trinidad
Lovejoy Lions	Football	E	Bailey Moreland
Steelers	Football	E	Walden/Scaj.
JFK Giants	Football	S	JFK
Redskins	Football	E	Kingsley
Falcons	Football	S,E	Franczyk, Lang Weber
Jets	Football	S,E	Mungavin, Nowak
JFK Flag Football	Flag football	E	McCarthy, Manhattan
Medaille	Softball	Ee	McCarthy
Sacred Heart Academy	Softball	W	Shoshone
Notre Dame	Baseball, softball	S	Conway
Buffalo Soccer Club	Soccer	W	Waterfront
NABA	Baseball	W	LaSalle
S. Buffalo Celtics	Football	S	Tifft
Diocese of Bflo CYO	Softball	S	Houghton

Source: City of Buffalo Division of Parks and Recreation

The not-for-profit cohort includes 50 user groups. Two of the largest users, Buffalo Public Schools and PAL, are multi-sport users and therefore utilize a variety of facilities throughout the City districts. Other high-volume users such as Delaware Soccer Club are single-sport, but make high use of multiple facilities, in the case of DSC Olmsted Park facilities (Delaware Park), as well as McCarthy and J.H. Williams. Seasonal neighborhood youth sports programs are significantly represented, and typically utilize facilities located within their own neighborhoods.

A number of private city-based high schools make significant use of City facilities, as they typically do not have facilities of their own for outdoor fall or spring sports.

V. DEMAND ANALYSIS

The demand analysis for the SBBOA recreation needs assessment was intended to evaluate the ability of identified recreational resources within the City of Buffalo to meet current and future market demand.

For purposes of this analysis, the inventory of City-owned recreation facilities was the primary focus, as the identified privately-owned facilities comprise a relatively small and frequently hard-to-access subset of the overall recreation facility inventory within the City of Buffalo geography.

Based on the current City of Buffalo recreation utilization analysis generated in the previous section, the primary sources of "demand" were determined to be a combination of not-for-profit programs, primarily for resident youth populations, and for-profit programs that generally cater to adult rec sport participants.

In addition to City of Buffalo Department of Parks and Recreation anecdotal information that speaks to current and projected demand trends, two key areas of quantifiable information that help to focus on the relationship between population and recreation resources are historical City of Buffalo population characteristics, and recreation industry baselines and standards.

City of Buffalo Population Characteristics

The City of Buffalo Office of Strategic Planning provided to the study an in-house data set of City of Buffalo census data reaching back to 1940. This data was utilized to identify and evaluate a 70-year history of population changes, as well as calculations of population density per square mile and population density by City of Buffalo census tracts. These subsets of population data are exhibited in Table Five.

TABLE FIVE – CITY OF BUFFALO 70-YEAR POPULATION AND DENSITY TRENDS

	1940	1950	1960	1970	1980	1990	2000	2010
Total Pop.	575,901	580,132	532,527	462,655	357,800	328,320	292,648	261,310
Density/Sq. Mi.	13,993	14,096	12,939	11,249	8,695	8,083	7,205	6,472

Source: City of Buffalo Office of Strategic Planning, U.S. Census

Table Five indicates that over the period 1940-2010, the City of Buffalo experienced a population decline of 314,591, or 55%. It is the project's

understanding that the City's recreational asset inventory remained relatively stable during that period, and in fact became more formalized in some instances, and has most recently been added to (i.e. McCarthy Park). This, to serve a City population less than half the size in 2010 than it was 3+ generations previous.

Another look at this data deals with population density. Whereas the population density per square mile in the City was 13,993 in 1940, due to consistently falling population numbers over the following 70-year period, the 2010 population density was calculated to be 6,472 residents per square mile.

Changes to the Traditional and Historic Youth Sports and Adult Recreation Markets

The other side of this particular data assessment considers the change in recreational programming that has taken place over that same period. Recreational sports for the youth market specifically have grown since the 1960s and 1970s; youth football and soccer especially have gained in popularity, and require green field space that heretofore was not required of City parks. Both non-profit and for-profit organizations have stepped in to provide programming options and opportunities in baseball, softball, football, and soccer for the youth market.

The net effect for the City is that while the population has decreased by half since 1940, additions to the overall inventory of popular youth sports, supported by the development of youth sports programs within the City to satisfy the program side of the overall recreational sports program equation, have served to actually increase the pressure on finite City of Buffalo Division of Parks and Recreation resources, some of which have been both in place and relatively unchanged for up to 100 years, to provide space and time for interested user groups based primarily within the City of Buffalo.

In addition to this youth sports program increase, the trend of increased activity in adult recreational sports further complicates the ability of the City to satisfy overall user-program demand. For-profit enterprises have seized the opportunity to provide adult recreation programs in the form of leagues primarily to satisfy not only traditional adult male rec sport demand in the areas of baseball, softball, and basketball, but also the now-institutionalized prevalence of both women's-only

and coed sports and leagues, including relatively new sports such as soccer, flag football, ultimate Frisbee, volleyball, lacrosse, and others.

Recreation Industry Standards

A way of measuring the adequacy of the City of Buffalo recreation asset inventory is to identify recreation industry standards that allow for both indexing and comparison to an identifiable comparable metropolitan area cohort.

Both The Trust for Public Land and the National Recreation and Parks Association (NRPA) proved to be valuable sources of information in the areas of metropolitan area recreation resource databases as well as facility prevalence per unit of population.

A survey of 100 U.S. cities conducted by The Trust for Public Land produced information on the prevalence of ball diamonds, basketball hoops, tennis courts, public golf courses, and ice skating rinks per 10,000 residents. High, low and median calculations were extracted from this 100-city deep database by Paradigm, to show the relative position of Buffalo against other U.S. markets exhibiting high and low prevalence, and against the median for all 100 markets. This comparison is provided in Table Six below.

TABLE SIX – SELECT FACILITIES PER 10,000 RESIDENTS – BASELINES

Facility	High	Low	Median	Buffalo
Ball Diamonds	5.3 (St. Paul)	0.0 (Laredo)	1.5	2.4
Basketball Hoops	10.7 (Madison)	0.0 (Miami)	2.2	6.4
Tennis Courts	6.0 (Norfolk)	0.1 (Boise)	1.7	2.1
Public Golf Courses (1)	1.7 (Honolulu)	0.0 (Gilbert AZ)	0.75	1.5
Ice Skating Rinks (2)	12.2 (Minneapolis)	0.0 (Tucson)	0.0	1.5

Source: The Trust for Public Land
(1) Per 100,000 residents, moderate-to-high density cities only;
(2) Per 100,000 residents, only five cities over 1.5.

Table Six would indicate that the City of Buffalo is above the median with respect to facilities per 10,000 in the areas of ball diamonds, basketball hoops, and tennis courts, three key facility types in the SBBOA needs assessment.

Another analysis to be conducted using this data is the comparing of the City of Buffalo against a cohort of other cities deemed to be comparable to Buffalo based on age, geographic location, and to a lesser extent, population size. This comparison is provided in Table Seven.

TABLE SEVEN – FACILITIES PER 10,000 RESIDENTS – BUFFALO AND COHORT

	Population	Ball Diamonds	Basketball Hoops	Tennis Courts
Columbus (OH)	809,798	1.1	1.9	1.7
Detroit	701,475	3.1	3.0	1.7
Baltimore	621,342	3.3	1.6	1.8
Milwaukee	598,916	0.9	2.3	1.3
Minneapolis	392,880	5.0	1.7	4.6
Cincinnati	390,928	3.6	6.9	4.2
Cleveland	318,172	3.6	5.9	2.8
Pittsburgh	306,211	4.0	3.5	2.8
St. Paul	290,770	5.3	1.3	2.6
Toledo	284,012	n.a.	n.a.	n.a.
Newark	277,727	1.4	1.5	1.6
Buffalo	***259,384***	***2.4***	***6.4***	***2.1***
Jersey City	254,441	0.4	0.8	0.2

Source: The Trust for Public Land

Table Seven indicates that with respect to the other 12 cities included in the cohort, Buffalo is ranked 8th in ball diamonds per 10,000, 3rd in basketball hoops, and 6th in tennis courts.

The NRPA data takes the position of suggesting what volume of facilities *should* be available to a local population. Access to "suggested development standard" information from the NRPA for the years 1983 and 2013 provide an opportunity to not only see the standards established for 2013, but the relative change by facility by type over the 30-year period in between the years. This comparison is provided in Table Eight.

TABLE EIGHT – NPRA PARK FACILITY STANDARDS

	1983 – NPRA "Suggested Facility Development Standards"	2013 – NPRA "Median Jurisdiction Population Per Facility"
Basketball Court (outdoor)	1 per 5,000	1 per 6,644
Diamond Field (baseball, softball)	1 per 5,000	1 per 3,403
Rectangular Field (football, soccer)	1 per 20,000/1 per 10,000	1 per 4,242
Tennis Court (outdoor)	1 per 2,000	1 per 4,283

Source: "Recreation, Park and Open Space Standards and Guidelines", 1983 (NRPA); "2014 Parks and Recreation National Database Report" (NRPA)

Table Eight would indicate that the *suggested* requirement for basketball courts per population unit decreased by 33% over the 20-year period, as did the need for tennis courts (114% decrease). Conversely, the suggested requirement for baseball and softball diamonds per population increased by 32% during the period, while rectangular field requirements increased by 471%.These figures coincide in particular with pressure felt by the City of Buffalo parks-rec

department with respect to anecdotal demand for time by both youth and adult leagues at City-run baseball, softball, football, and soccer fields.

It should be noted that the NRPA put out an update in 1995 that focuses on a level of service (LOS) approach to determining park and recreational needs, as opposed to the traditional straight XX/1,000 persons recommendation. This LOS approach attempts to incorporate a more holistic and community-specific evaluation into overall recreational asset and programmatic strategies and development.

Anecdotal Evidence of Facility Need and Opportunity

Interviews were by Paradigm with City of Buffalo Department of Parks and Recreation personnel with respect to the department's assessment of where current pressure points exist in program scheduling and facilities use, and also where it is felt that future pressure will rest and what additional spaces might be necessary to relieve that pressure.

Additionally, Paradigm conducted direct first-person interviews with a representative sampling of current youth and adult program organizers so as to gather their thoughts, concerns, and recommendations regarding current facility availability, constraints holding back the growth of their programs, and ideas for future facility investment and use.

Summary statements based on these interviews are provided as follows:

- City-based non-profit youth programs are currently constrained by a lack of available facilities. Organizations such as the PAL believe that they could provide more opportunity within their core summer sports, if they had greater access to a larger inventory of recreational facilities;

- For-profit adult programs such as M/ilesports and Buffalo Social Club are similarly constrained by a lack of City-based facilities. Their current experience is that potential participant programs migrate to suburban leagues, in some cases, due to a lack of league opportunity at City facilities, and/or because league seasons are shorter in the City due to a lack of facility availability. High growth of coed, kickball, and soccer programs in particular have created opportunity for these adult programs,

but the facility inventory in general in the City is unable to keep pace with that growth;

- Not-for-profit adult leagues such as South Buffalo Softball are similarly constrained by a lack of facilities, and have also been limited by the curtailing of certain opportunities to play which, in the case of South Buffalo Softball, included the elimination of lights at Houghton Park that had historically allowed for softball play past dark and into the middle and late evenings, as well as fall league evening play;

- The local soccer community, in particular, is taking it upon itself to organize and mobilize with respect to advocating investment somewhere in the market in a soccer complex of some size and capacity. The Buffalo Soccer Council currently includes as its members the following organizations: Westside International Soccer Club; FC Buffalo; Soccer Shots; Yemen Soccer; UB Men's Soccer; Buffalo developmental Soccer League; and Blackwatch Premier. Additionally, interviews with other premier programs such as Empire United and New York Premier Soccer indicate a desire on their part to advocate for a centrally-located soccer complex that would allow them to consolidate their outdoor training, outdoor league games, and off-season indoor training for their 200+ and 300+ participants respectively;

- City of Buffalo Division of Parks and Recreation estimates that if the current composition of available facilities in the City remains static, 80% of permitted time at City facilities will be allocated to youth programs within five years, and that that figure will grow to 85% in 10 years. It is estimated that an additional 10+ soccer fields would allow for youth program growth, while at the same time leaving availability for revenue-generating adult programs. Similarly, because many if not most of the City's baseball diamonds are "home" fields for City-based youth baseball programs, young and older adult baseball programs have limited opportunity to schedule time at City facilities. It is estimated that an additional four baseball fields would allow for more adult league play, and would be readily booked in the months of May, June, and July. Lastly, City softball diamonds are largely booked by under-10 baseball programs. The growth of coed, women's, and adult fun league programs has created added

pressure for softball play on the City's softball field inventory. It is estimated by the City that an additional 4-6 softball fields would readily accommodate adult league play and allow for their expansion.

Facility Options and Opportunities – Incremental and Non-COB Recreational Sports Demand

In the course of conducting interviews with City of Buffalo Division of Parks and Recreation youth sports and recreation program representatives, a degree of crossover was identified between programs that typically utilize City recreational assets on a generally seasonal basis (i.e. baseball, softball, soccer, football, other) and other sports-rec programs that operate as aggressive private non-profit or private sports program organizers and operators, with the later in some instances indicating a need for and willingness to pay for "off-season" (i.e September-October through March-April) time at indoor facilities. This indication aligned with largely anecdotal information circulating within the market regarding the need for additional indoor sports facilities that could accommodate off-season clinics, training, leagues, tournaments, and related activities.

The preliminary indication gathered by Paradigm related to this indoor facility option caused a rigorous interview process to be constructed and executed by the project team, so as to add to largely anecdotal information regarding the need within the market, and perhaps within the City of Buffalo specifically, by speaking directly with key program representatives and user groups already established and active within the Western New York market. Ultimately, this effort included a broad interview process that captured information from a targeted variety of entities including but not limited to the following:

- City-based private high schools;
- City-based colleges;
- City-based charter schools;
- Youth sport membership programs (i.e. house/travel soccer, lacrosse);
- Premier youth sports programs (i.e. high-level premier soccer); and
- Adult membership sports programs (adult soccer and lacrosse leagues).

Specific programs and entities interviewed by the Paradigm team within these categories include but are not limited to the following:

- Blackwatch Premier (youth soccer, premier level);
- Buffalo District Soccer League (adult soccer);
- Buffalo Legacy Project;
- Buffalo Soccer Council;
- Buffalo State College;
- Buffalo/Western New York Junior Soccer League;
- Canisius College;
- Canisius High School;
- Daemen College;
- Delaware Soccer Club
- D'Youville College;
- Empire United Soccer (youth premier-level soccer);
- English Pork Pie Company
- Erie Canal Harbor development Corporation
- Erie Community College;
- FC Buffalo (adult soccer);
- Global Premier Soccer (youth premier-level soccer, NYS chapter);
- Health Science Charter School;
- Medaille College;
- Nichols School;
- Tapestry Charter School;
- University at Buffalo track (includes USATF and NYS high school); and
- West Side Soccer (youth soccer).

Informative themes, issues, and recommendations were identified throughout these interviews that in combination provide a consistent advocacy by potential users for a new indoor turf-centric sports-rec facility within the Western New York market. A condensation of these themes, issues, and recommendations is provided as follows:

- Programs that believe the regional youth-adult sports market is underserved by the current inventory of indoor turf facilities generally believe that a City-based indoor facility would have great utility not only for their own program(s), but for other local-regional programs needing indoor training, league, clinic, and tournament play, access, and programs;

- Programs that have extensive experience participating in competitions across the state support the development and operation of an additional indoor facility in WNY, based on their specific knowledge of facility inventories and facility operations not only in other New York State markets such as Rochester and Syracuse, but also in non-NYS markets in Boston, Ohio, Massachusetts, Connecticut, and elsewhere;

- The location of existing indoor turf facilities in WNY (i.e. Epic, Sahlens) tend to provide consistent travel issues related to concerns and challenges that come with winter driving during the November-February period;

- High-volume users of indoor turf time (i.e. premier youth soccer programs primarily) have a difficult time finding enough indoor time for training during the indoor season. Additionally, they find it problematic to consolidate their training schedules at a single facility or at one facility primarily. They would prefer to have “resident” status at a single facility, which would make the administration of their program in particular more efficient and effective;

- A lack of geographically-proximate indoor turf creates logistical issues for City-based college athletics programs looking for indoor training time for their spring sports programs. Programs do use existing indoor turf facilities for this purpose, but bussing student athletes to at-a-distance locations creates not only extra costs, but use-of-time issues that are inconvenient and that can cause scheduling challenges;

- Programs that are looking to grow their membership are restrained because of priority scheduling at existing indoor facilities that preclude them from gaining scheduling advantages over entrenched (i.e. “preferred”) user programs;

- The evident volume of indoor softball training in particular at Sahlen’s indicates a lack of specific indoor softball training facilities in WNY, which provides evidence of a potential for strong second-tier user demand generated by programs other than youth and adult soccer;

- In some instances, programs are relegated to utilizing hard-court indoor surfaces for practices and training, even at Epic Center, when turf field surface access would be preferred. Program representatives are sometimes forced to change and/or otherwise limit their training regimen on hard surfaces, because spaces tend to be smaller than preferred, are boarded on their perimeter, or are in gymnasiums with bleachers and/or concrete walls on the immediate perimeter.

VI. MARKET ANALYSIS

The purpose of the recreational needs assessment market analysis was to identify and evaluate target market, participant, and user segments for potential new facility utilization, and to also assess the relative merits of targeted markets and users within a City of Buffalo planning and development context.

It is relevant at this point in the overall analysis to restate the key question that is driving the recreational needs assessment, as follows:

"Is the demand for a new facility (or facilities) to be located somewhere in the City limits real, is the facility type able to be preliminarily identified as an indoor-outdoor sports complex of some defined size and purpose and if so, can private sector investment and ownership criteria be identified so as to allow for the advocating by the public sector of such a project?"

Potential Target Markets, Participants, and User Segments

Based on both City of Buffalo Department of Parks and Recreation program permitting experience as well as primary interviews conducted with current key City recreational facility user programs, there is clear evidence that overall demand is not being adequately met by the combination of City-owned and other-owned facilities in the City of Buffalo geography. In the case of the City of Buffalo, there are not enough facilities to satisfy the demand of either youth sports programs that play for free, or the adult pay-to-play programs that follow behind City-based youth programs and the Buffalo Public Schools interscholastic sports programs from a permitting priority standpoint.

City-based private facility owners including colleges and private high schools have scheduling priorities that preclude consistent access and utilization by outside user groups and programs. And Buffalo Public Schools, while having in its own inventory of facilities some of the newest and most contemporary fields within the City limits, have administrative processes in place that tend to limit and in some cases discourage pay-to-play programs from seeking access to and permitting for these high-demand facilities.

From the perspective of a private sector facility investment, development, ownership, and management opportunity, any attractive and realistic investment

will need to exhibit revenue-generating capability that will warrant the initial investment. Therefore, indoor and outdoor spaces that can attract pay-to-play programs need to be identified, quantified, and translated into annualized revenue estimates. Such programs have been determined to exist within the current City of Buffalo recreation facilities user base. In some cases, these programs are consistent and active users that would welcome additional access to facilities. In other cases, these programs are limited and inconsistent users of City facilities, not because the demand is not there, but because they are at the end of the City prioritization list and/or because they desire to access facilities that appear to them to be in the shortest supply (i.e. full-sized soccer fields).

For facilities that are accessible, there is evidence that demand will flow in the direction of new outdoor facilities in particular that are introduced to the market, and that pay-to-play programs in particular will permit for time especially if the facility provides a contemporary setting and play experience. An example of this is the new all-weather Pierce Field at Mulroy Park facility in South Buffalo. Additionally, private facilities that actively and aggressively book time, such as Nichols with its outdoor all-weather field surfaces, can generate six-figure annual income from outside rentals without compromising access by its own interscholastic sports programs.

Therefore, a focus on pay-to-play adult programs, as well as on for-profit premier league youth programs, can justify investment in outdoor facilities and spaces that are of a contemporary nature, and which most likely need to have extended-season capability by being of an all-weather surface design.

Additionally, off-season indoor training and league play can justify investment in an indoor facility. While not experienced by the City of Buffalo or City-based private sector facility owners, an indoor turf field facility in particular is routinely discussed by pay-to-play programs as being necessary within the market, and attractive if located within the City of Buffalo. Such an indoor facility would allow pay-to-play programs that are active at City and non-City facilities during the outdoor season to migrate indoors during the off season, and perhaps at the same location at which they concentrate their outdoor season play and training.

Lastly, with respect to an indoor turf field investment opportunity, City-based colleges and high schools in particular indicated an interest in having access to and utilization of a City-based indoor venue for off-season and pre-season training for football, baseball, softball, soccer, lacrosse, and field hockey.

In summary, target programs within the general "pay-to-play" category can be identified as including but not being limited to the following:

- *Existing outdoor adult leagues* (soccer, softball, baseball, kickball, flag football, volleyball, other) looking for contemporary, accessible, and convenient play opportunity;

- *Potential indoor adult leagues* (soccer, kickball, flag football, volleyball, other) looking to expand their participant base into year-round activity;

- *City-based travel, premier and other high-end soccer programs* (for both outdoor and indoor seasons and training), as well as soccer programs not necessarily resident within the City, but with large participant bases that are geographically proximate to the City;

- *Regional softball and baseball programs* conducting off-season training; and

- *City-based college and private high school sports programs* in need of off-season training facilities (for football, baseball, softball, soccer, lacrosse, and field hockey).

Test of Program Demand Against Measurable NYS Market Experience

The stated demand of local and/or City-based recreational, intercollegiate, and other sports programs for indoor facility access can be framed within and tested against the actual experience of other identifiable metropolitan markets in New York State, in order to better ascertain the credibility of indoor facility development as a preferred option within the City of Buffalo. This can be achieved by evaluating economic-demographic characteristics of comparable NYS markets by ranking NYS markets by county size, and by then comparing the inventory of available indoor turf facility assets to the population density of each market. This comparable county markets assessment is provided below in Table Nine.

Table Nine: NYS County Demographics

Market	Tot. Population (2000 actual)	Tot. Population (2013 est.)	# Indoor Field Sports Facilities
Erie	950,265	919,866	3
Monroe	735,343	749,606	5
Onondaga	458,336	468,387	4
Albany	294,565	306,945	3
Oneida	235,469	233,585	2
Broome	200,536	197,534	3
Ontario	-	109,103	0
Tompkins	96,501	103,617	1
Tioga	51,784	50,243	0
Chenango	51,401	49,503	0

Source: U.S. Census 2000 and 2013, New York State West Youth Soccer Association

This table would indicate that Monroe County has the largest number of indoor facilities in the top 10 NYS county markets.

Additionally, the exhibit represents that a wide range of indoor field sports venues per 100,000 of population exists between markets. This range, represented from high density of venues to low density of venues per county, is summary as follows:

Broome	One venue per 66,000
Albany	One venue per 102,315
Tompkins	One venue per 103,000
Onondaga	One venue per 117,000
Oneida	One venue per 117,000
Monroe	One venue per 150,000
Erie	One venue per 306,622

This facility density summary would indicate that, assuming that program and facility demand is equal among county markets, the Erie County market, at three indoor turf field facilities (Epic Center, Sahlen Sports Park, Sportsplex), is relatively underrepresented by indoor field sports facilities when compared to five lesser-sized NYS county markets that have at least one indoor facility. This supports the general premise that is implicit in the information generated through the study's program representative interviews, that there is significant pressure within the market for greater access to indoor "off season" turf time within the market.

Sports Program Market Characteristics that Apply to and Support Indoor Facility Investment and Operation

A set of key quantifiable information captured through secondary research and program representative interviews serve in the aggregate to support the contention of the market that the regional outdoor recreational, intercollegiate and related sports market is of a size and has budget, membership and operational characteristics that align with assumptions that would integrate with business plan development and financial modeling exercises for such a project. Examples of such information can be articulated as follows:

- Existing local indoor turf field facilities can charge between $165-$225 per hour for prime field time, which is a rental fee range that is similar to ranges charged in other NYS markets and by facilities in those markets that follow a private ownership model and which have exhibited operational longevity in their respective markets;

- Similarly outdoor fields in WNY tend to charge in the range of $125 per hour for rental time, which again is commensurate with rental rates charged by going concern facility operations in other markets;

- Larger premier soccer programs in WNY exhibit a range of annual indoor and outdoor field rental costs of $140,000-$180,000 each;

- Larger premier soccer programs in WNY have membership levels of 200-375 annually, with desires to and expectations of enlarging these programs, with field access being a key consideration in their efforts to do so;

- City-based house and premier soccer programs are expanding in order to add play levels to their overall offering, in particular in the areas of girls' travel and girls' premier team play;

- Existing rec sports programs that operate primarily in the summer (May-September) spend low- to mid-five figures in outdoor facility rentals annually, and believe that they could expand their program offering to include indoor sports with the addition within the City of contemporary indoor facility space.

Relative Merits of Target Markets and Users

In the judgment of the study team and within a City of Buffalo planning and economic development context, a privately-developed indoor-outdoor sports complex would appear positioned to contribute in both a broad and specific manner.

In broad terms, the type of sports programs and the profile of program participants envisioned for a proposed indoor-outdoor sports complex speak directly to “quality of life” enhancement for City residents primarily. Such a development project contributes specifically to the marketability of the City of Buffalo as a place to live, work and recreate. A project of this type can also combine with other recent and forthcoming recreation, leisure, and public assembly development projects and business operations – think Larkinville, HarborCenter, inner and outer harbor and similar – in a “whole is greater than the sum of its parts” manner.

In more specific terms, the target users and programs represented by the “pay-to-play” universe represent disposable income, and therefore economic impact. Expansion of existing adult rec sport programs means the likelihood of additional employment and incremental business spending. Incremental business spending generates incremental economic impact through business operations – direct, indirect, induced, and fiscal.

Additionally, a state-of-the-art complex that produces an ongoing stream of user programs and participants in turn will likely produce incremental foot traffic for restaurants, retailers, service stations, and the like. Target audiences and program participants that might otherwise limit their exposure to and time in the City as a result of minimal participation in available City-based recreational programs, or who might not experience the City at all because they or their children currently utilize suburban facilities for league play and/or training, will contribute to an incremental increase in visitations to the City by adults, young adults, and families with children.

On the other side of this point, City of Buffalo residents who currently participate in suburban recreation programs due to a lack of similar program opportunity in the City, will be able to remain in the City to satisfy their recreational needs, and will keep their related social dollar spending in the City as a result.

Lastly, the ultimate design program for an indoor-outdoor sports complex may lend itself to some of the functionality that will allow Visit Buffalo Niagara to increase its business development efforts and sports tourism prospecting success rate, by including outdoor sports field and indoor field house capability that satisfies the facility requirements of local, regional and other bid opportunities in the areas of baseball, softball, soccer, lacrosse, field hockey, rugby (all outdoor), as well as gymnastics, wrestling, indoor track, basketball, cheer, dance, and other (all indoor).

Investment that would allow for sports tourism-related functionality and competitive positioning would depend largely if not solely on the cost-benefit that would be attributable by the owner to the capital investment and operating budget, and specifically the amount of annual projected revenue that would be gained, or lost, by allocating rentable time to potentially low- or non-rent-paying multi-day sports events.

Support for Indoor Turf-Centric Development Opportunity

Based on the key user, overall demand, broad market and competitive facility analyses conducted by the project team in this study, the professional judgment of the project team concludes that an indoor turf-centric development project identifies, above other indoor or outdoor facility types that might be considered, as a high-priority need within the WNY market, and within the City of Buffalo in particular, and importantly as one that should be attractive to private sector developer-owner-operators because of its financial performance viability.

Characteristics of an indicative prototype facility can be identified based on the project analyses conducted in this and previous report sections, can be judged against active comparable market economic, demographic, and existing facility conditions as assessed in the report section that follows, and will be fully articulated as a preliminary layout and construction cost estimation in a later section of this report.

The judgment of the project team specifically indicates the following list of criteria for the prototype facility:

- A City-based location, having relatively high visibility for vehicular traffic, in-place infrastructure, easy ingress and egress for passenger vehicles;

- In an optimal situation, room within the geographic footprint for potential facility expandability in later phases, with any expansion to be based on demonstrated key program need and growth;

- Construction using metal clad ("Butler building") materials and technology, to maintain a conservative overall construction budget;

- A single-field indoor design as a first phase construction, with a dimension large enough to both support true 11v11 U18 and adult soccer play, and to also be sectionable with curtaining so as to divide into three smaller side-by-side fields;

- A cluster of four outdoor playing surfaces, two all-weather surface and two natural grass surface, to accommodate late-season and early season demand in particular as indicated by local soccer, lacrosse, rugby, and other field sport teams, leagues, and programs, and to create in combination with the indoor facility a true indoor-outdoor complex that supports year-round play and activities;

- A primary programmatic focus on satisfying local/regional team, league, program, and school needs so as to maximize both seasonal utilization and revenue-generating opportunities for the ownership group, with a limited focus on special events other than those that can be conceived of and managed by the facility itself; and

- A private not-for-profit legal/business structure that is capable of maximizing revenue generation while at the same time taking advantage of income and tax-saving opportunities that are available to registered non-profits.

VII. COMPARABLES IDENTIFICATION AND ANALYSIS

ANALYSIS OF EXISTING SPORTS-REC FACILITY INDUSTRY CONDITIONS

An analysis of existing industry conditions on behalf of the proposed indoor turf center project focused on supply-related characteristics of the local-regional facility and events market, as well as on identification of regional and other comparable facility development projects and operations that a new City of Buffalo-based strategic planning, design, and management-operations planning could both learn from and model itself after.

DESIGN AND OPERATIONAL TREND SUMMARY

As is the case with indoor skating venues, contemporary indoor turf field facility design and construction has accelerated within the last decade based primarily on the increasing level of youth soccer participation in the U.S.

Particularly in seasonal regions of the country like the northeastern U.S., soccer programs benefit from the year-round activity that indoor facilities allow, as do other outdoor sports with lesser participation such as lacrosse and field hockey. As a result, facility design programs and specifications have adjusted in order to provide a more satisfactory indoor playing experience for participants, as well as for a more comfortable experience for attending non-participants. In certain cases, some of these improvements have now become the new technical standard and are expected by individual users and programs to be included in a facility's design or renovation process.

These improvements and considerations should be acknowledged and top-of-mind for a proposed City of Buffalo project as it contemplates an indoor turf field investment as a potential component of a potential regional multi-activity sports complex development project.

A summary of contemporary indoor turf field facility design trends is provided in the following key areas:

- Multi-field configuration
- Retail component integration
- Energy efficiency
- Enhancement of user spaces
- Community component inclusion
- Enhancement of exterior and interior treatments
- Enhancement of seating capacity and type of seating
- Allowance for year-round utilization
- Cost per square foot (SF) range
- Break-even opportunity

- **Multi-Field Configuration:**

  Sizing of new facilities is typically carried out in order to accommodate the current and projected programming needs of existing local-regional user groups and anchor tenants. A consideration in many cases is the inclusion of at least two playing surfaces in a development project. This can be justified, beyond projected tenant utilization, as a means for better accommodating special events (such as field sports leagues, tournaments and clinics) that require access to more than one playing surface. Additionally, assuming that there is alignment with market demand, multiple fields are often a requirement to generate sufficient revenue to assure successful long-term financial performance.

  Lastly, some projects adopt either a “wait and see” strategy that allows for building expansion and the increasing in size of an initial single-field configuration, and/or the adding of a second or third field at a later date should user demand warrant;

- **Retail Component Integration:**

  Typical concessions food is generally offered, as well as vending machine fare. Pro shops that sell athletic gear specific to the facility’s targeted sports are often found, but they typically occupy a modest amount of space and often are combined with the food sales operation so as to minimize staffing for each. Interviews with NYS-based owner-operators has indicated that food service and retail operations are often provided as a courtesy to users, not with an intention of generating incremental revenues;

- **Energy Efficiency:**

  Unlike indoor skating venues, indoor field sports facilities have relatively limited utility (electric, gas, water) requirements, due to the need to only warm and cool the air of a typical indoor environment during a typical 6-month operating calendar. This can make the indoor field sports facility, as opposed to an ice rink complex, a more attractive type of facility and operation from a purely operational (i.e. expense line item for utilities) standpoint;

- **Enhancement of User Spaces:**

  Maximizing field use is key to enhancing revenue performance in any new indoor facility. That said, support spaces for field sport activities are typically less in demand than they are in indoor skating venues. Locker rooms are helpful but not always necessary, as field sports participants can arrive in their athletic gear. The same applies to referees. Therefore, it is possible to concentrate space allocation on the playing surface specifically, as opposed to on support spaces. The exception is for storage space, which is always in some degree of demand;

- **Enhancement of Interior and Exterior Treatments:**

  Typically, facilities are of a "Butler building" design so as to minimize the cost per square foot of construction. However, for facilities that are intended to be "signature" structures for a municipality or on a college campus, enhanced exteriors and interiors might be a necessary construction investment, so that the look and feel of the facility satisfactorily integrates into the overall design and development strategy of its surroundings;

- **Enhancement of Seating Capacity and Type of Seating:**

  Organized soccer play does not typically attract the same size crowds as does indoor ice hockey or figure skating. However, in order to accommodate anticipated special events, new facilities having multiple fields can consider having a designated "feature" field that provides a larger volume of seating (sometimes 1,000+ seats) than the typical facility.

  Seating capacity must be provided so as to accommodate the greatest volume of anticipated attendees at any regular user group event, and consideration is often given to providing seating in excess of that amount, in order to accommodate on a situational basis special events as well as future anchor tenant programs. In many cases, use by a local college soccer and/or

lacrosse program, or anticipation of serious regional or national tournament play, can be the justification for extra seating;

- **Allowance for Year-Round Utilization:**

  Older indoor field sports facilities typically were not designed to be utilized during the traditional outdoor playing season (May-September). That is, they often did not have HVAC systems installed initially that were capable of cooling the facility for summer use.

  Today, almost all new turf field facilities are designed to be used on a year-round basis, even if off-season utilization is relatively minimal. This requires investment in and installation of HVAC equipment, the running of which increases energy use and expenses during warm weather months. However, field sports typically migrate outdoors during the May-September period, and limited revenue opportunity typically exists for field sports facilities during the late spring-summer and early fall months.

- **Cost Per Square Foot (SF) Range:**

  In today's indoor turf field facility development environment, the construction cost per SF that is associated with contemporary design and utilization has a price point range that is fairly narrow, but which is at the same time more costly than that which was experienced by earlier generations of turf field facilities.

  Typical metal facilities are in the $75-$125 per SF range for construction only. Facilities on the low end of this range have found ways to economize on materials purchase (by receiving discards and donated materials) and on construction labor (by using volunteer labor). The specific economic benefits created by donated materials and labor are best generated by an ownership group operating under non-profit status (typically 501 I(3)), which allows for tax benefits for donations of materials and time. More expensive facilities tend to include enhanced food service and retail components, as well as higher price points on interior and exterior materials and finishes;

- **Break-Even Opportunity:**

  The volume of annual rented field time and hourly rental rates are the most significant variables impacting an indoor field sport facility's ability to generate operating revenues.

In many cases, particularly in smaller and/or isolated markets with low or moderate prime time rental rates, primary user groups (youth soccer, youth lacrosse and field hockey) with small memberships and low public use volumes (i.e. open play), achieving financial break-even on operations can be problematic, and covering typical debt service for a traditional construction loan is often unrealistic. In these instances, public or private operating subsidies are necessary.

Conclusion

In summary, older generations of indoor field sports facility complexes were designed to simply accommodate the most basic recreational and competitive play needs of their primary sports participant audience. User comfort, customer service, marketability, and any needs of non-participating fans, parents, and friends were of little or no consideration in early facility design and operation.

Today, contemporary design at minimum considers the needs of both facility users and the spectating public, as well as the opportunity to enhance the marketability and revenue-generating ability of the facility, and also to accommodate non-field sports, multi-purpose use and year-round utilization.

Contemporary design considerations and options are typically focused on the generation of revenue above and beyond field rentals, the more comfortable and expeditious accommodation of user groups, support personnel, and event attendees, the enhancement and streamlining of facility operations and functionality, and the minimization of common and major operational expenses. However, such designs and accommodations come at a cost of construction that is greater than that which was found in earlier generations of buildings.

Additionally, the seasonal aspect of indoor field sports operations, when combined with unique market characteristics that can impact revenue generation (size of target market, price points on field rentals, incidence and size of traditional field sports user groups), can make the achieving of financial breakeven a goal that not every indoor facility in every U.S. market can attain.

DEVELOPMENT TREND SUMMARY

Earlier generations of indoor field sports facilities were developed in a typically straightforward manner. In many cases during the 1980's and 1990's, indoor field sports were played on a temporary basis on top of temporarily covered municipal ice sheets, or on hardwood gym floors in school and church gymnasiums.

In some instances, municipalities financed, developed, operated, and then subsidized the operation of (primarily) single-field indoor enclosed facilities, with a target user market being the local and regional tax-paying public. Private schools, colleges, and universities also built new indoor facilities in order to accommodate their intercollegiate programs primarily and on-campus user groups secondarily.

Since the early 1980's, and primarily based on the interest in soccer generated by U.S.-based Summer Olympics competition, World Cup Soccer play, and the achievements of the U.S. women's national soccer team, U.S. youth and adult soccer participation growth has stimulated the development of a new generation of indoor field sports venues in the U.S., particularly to accommodate off-season indoor play. In many cases, traditional municipal financing, development, and operating mechanisms are no longer applicable based on a facility owner's need to cost-justify its initial capital, and potentially its ongoing operational, investment.

As a result, a number of non-traditional conditions and characteristics are regularly found attached to current-generation indoor field sport facility development, renovation, and expansion projects. A summary is provided in this section of these conditions and characteristics in the following areas:

- Multi-purpose utilization strategy
- Public/private partnerships
- Generation of ancillary economic development as a key strategic goal
- Generation of commercial foot traffic as a key strategic goal
- Non-traditional ownership, management, and utilization
- User-promoted development

- **Multi-Purpose Utilization Strategy:**

  Traditional indoor field sport facilities were typically designed and operated for single-purpose utilization only.

In today's user climate, research can indicate that a facility investment can better or best serve its targeted service area by being multi-purpose in its intent, design, and operation. Additionally, multi-purpose capability can oftentimes provide the year-round revenue generating capability that a facility needs in order to sustain itself financially.

Multi-purpose utilization of an indoor field sport facility can include the hosting of ticketed events during the indoor season (by covering the turf playing surface) or during the off season, as well as scheduling of a variety of "dry" events such as craft fairs, CPA exams, and consumer shows;

- **Public/Private Partnerships:**

  Traditional facilities were typically financed and developed by either a municipality or by an educational institution.

  In today's indoor field sports facility industry development and operating environment, most facilities are found to be owned and operated privately. This runs contrary to the typical ownership/operating scenario found with indoor skating venues, and speaks to the more attractive investment opportunity that indoor field sports venues generally represent when compared to ice rink operations;

- **Generation of Ancillary Economic Development as Key Strategic Goal:**

  Traditional indoor field sport facilities had a simple mission: to provide a recreational opportunity to the local/regional recreational sports public.

  While an indoor field sport's facility's strategic purpose can be multi-dimensional, the concentration of privately-owned indoor field sports facilities causes ancillary economic development to typically be a low priority. Private owner-operators generally are focused on generating revenues for their facilities primarily if not solely, and any ancillary economic development or benefit that results is typically unplanned and unexpected;

- **Generation of Commercial Foot Traffic as a Key Strategic Goal:**

  Once again, the concentration of field house operations with private operators makes location of facilities in high or potentially high foot traffic areas a low priority. While retail operations within facilities do need a steady flow of retail consumers, those can typically be generated by the facility's user base for whom the food-beverage and other retail are typically tailored;

- **Non-Traditional Ownership, Management, and Utilization:**

  In today's market, facilities tend to have ownership, management, and utilization characteristics that have not been found at traditional municipal indoor field sports venues. With respect to new or recently-built indoor field sports facilities, USA Soccer-connected ownership groups, and even not-for-profit foundations are now in the business of financing, developing, and operating indoor field sports operations.

  Private management companies, theoretically providing to facilities operational expertise and access to unique industry resources, are being contracted with on a limited basis to oversee facility operations on behalf of both private and public owners. And non-field sports uses are frequently becoming a greater percentage of the facility's annual event schedule;

- **User-Promoted Facility Development:**

  Demand for primetime indoor field use in the U.S. by both youth soccer and, to a lesser extent, youth lacrosse and field hockey associations, has grown dramatically since the late 1980s. As a result, these primary user groups primarily have been strong advocates for the renovation, replacement, and addition of new indoor field sports facilities, particularly at the private ownership and operation level. In some cases, regional youth-adult soccer organizations themselves have become developers and owner-operators, especially with outdoor soccer field complexes, which often serve as a prelude to indoor field sports facility development and operations.

Conclusion

As is the case with indoor skating facilities, the projected financial performance of new indoor field sports facilities is now a key consideration for most development projects of this type. Market evidence indicates that the private development-ownership-management model is most prevalent with new indoor field sports complexes, and the imperative is therefore on optimizing financial performance for the private owner-operator. The exception in indoor field sports facility development is now the traditional municipally-financed, owned, and operated facility.

ANALYSIS OF COMPARABLE AND REGIONAL COMPETITIVE FACILITY OPERATIONS

COMPARABLE INDOOR FIELD SPORTS FACILITIES/MARKETS ANALYSIS

Beyond the broad U.S. indoor field sports facilities market, it is important for the purpose of this City of Buffalo analysis to examine subsets of the facilities universe that can serve as strategic and operational reference points for a potential Buffalo-based indoor turf field sports facility operation.

In order to accomplish this, an evaluation was made by the Paradigm project team of indoor field sports facilities in major NYS markets, as well as in NYS markets deemed to be most comparable in size to that of Erie County, with particular interest in facilities designed to accommodate either, and perhaps a combination of, youth sports programs, interscholastic, and intercollegiate field sports programming.

Key U.S. Census Bureau Data

As a state with one of the country's most active youth soccer program volumes, New York State serves as an appropriate geographic territory to identify applicable markets against which the Erie County market can be measured.

Using actual 2000-2013 U.S. Census data and estimates, all major metropolitan statistical areas (MSAs) in NYS were evaluated according to total population in order to determine correlations between existing NYS market characteristics, and incidence of indoor sports field facilities and operations in those markets.

These markets were then cross-referenced against indoor field sports venue databases, to show the number of indoor field sports facilities *that actively book indoor sports-rec programs* per major NYS MSA. Table Ten provides a comparative summary of this data.

Table Ten: Comparable Markets Analysis – New York State

Market (MSA)	Tot. Population (2000 actual)	Tot. Population (2013 est.)	# Indoor Field Sports Facilities
Buffalo-Niagara – WNY	1,170,111	1,134,115	3
Rochester	1,098,201	1,083,278	5
Albany-Schenectady-Troy	875,583	877,905	3
Syracuse	650,154	662,578	4
Utica-Rome	299,896	297,766	2
Binghamton	252,320	247,777	3
Jamestown	139,750	133,080	0
Glens Falls	124,345	128,774	1
Elmira	91,070	88,506	0

Source: U.S. Census 2000 and 2013, NYS West Youth Soccer Association

- While the NYSWYSA database may not include all available indoor field sport facilities in every market, it does provide a reliable standardized measure for comparing one market against another. As would be expected, and with some exceptions, larger metropolitan areas in New York State exhibit substantially larger inventories of indoor venues than do smaller markets.

OLDER, RECENTLY OPENED, AND PENDING NYS FACILITIES

A second context that was assessed was the more specific classification of inventory of old, new or recently opened, and pending indoor field sports facilities in New York State.

By identifying and understanding the strategic reasoning behind these development projects, it was expected that broad industry and market trends could be identified that would have relevance to the strategic decision-making that would need to be applied against facility development considerations for a new indoor facility in the City of Buffalo.

Using a variety of industry and professional contact resources, an inventory of long-standing and recently built facilities, as well as pending or under construction facilities, have been identified in New York State by the market study.

This inventory is represented in Table Eleven.

Table Eleven: NYS Indoor Field Sport Facilities Inventory

Facility	Location	Legal Entity Type	# Indoor Fields	Year Opened/ Added	Comments
OLDER FACILITIES					
Akron Sports Park	Akron	Private	3	Unknown	Might have been closed – phone and e-mail disconnected
Rochester Sports Garden	Rochester	Private	3	Unknown	Appears to be low-cost complex and provider.
Sportsplex Indoor Soccer Center	Tonawanda	Private	2	1982	Very old building, former indoor tennis center, limited flexibility.
Syracuse Indoor Soccer Center	Syracuse	Private	2	1984	Debt paid off, owner beginning to reinvest in facility.
NEWER FACILITIES					
All Star Sports Arena	Rochester	Private	2	2006	Converted in 2006.
Brighton Sports Zone	Rochester	Private	2+	2006	Converted in 2006.
CNY Family Sports Centre	Baldwinsville	Private	2	Unknown	Rumored by other facilities in market to be for sale.
Cortland	Cortland	Private Non-Profit	2	2004	$1 million in foundation support for construction.
Epic Center Indoor Soccer	Lancaster	Private	2	1998	Very aggressive operation, multi-sport programming.
Sahlen's Sports Park	Elma	Private	2	1997	Significant corporate/family financial support.
SportsCenter 481	Syracuse	Private	2	Unknown	Fairly traditional operation.
The Field	Ithaca	Private Non-Profit	2	2001	Fields added on to existing indoor skating rink operation
Total Sports Experience	Rochester	Private	3	DNK	Multi-function sports and non-sports capability.
Turin Sports Dome	Fairport	Private	1	DNK	Converted tennis center.
Ultimate Goal	Syracuse	Private	2	DNK	Company's Watertown location closed down 2-3 years ago.
Sports Dome	Endicott	Private	3	2006	Large inflatable dome.
PENDING FACILITIES					
Canandaigua	Canandaigua	Private Non-Profit	TBD	TBD	1-2 field facility planned, in discussion since early '00s.
Greater Binghamton	Conklin	Private Non-Profit	3	2005	Phase Two to include double-sheet ice skating component.

Source: Paradigm Economics interviews and database

- Only two of the state's *existing* facilities, The Community Center (The Rink/The Field) in Ithaca, and the Cortland facility, operate as a private non-profit (501 I(3) entity;

- The two *proposed* new NYS facilities are proposing to construct and operate as private non-profit entities;

- Four facilities are considered to be "older", and 12 facilities are considered "newer" and are estimated to have come on line since 1996, with five and perhaps six either having been built or converted since 2001.

A summary of significant characteristics of the facilities highlighted above is as follows:

Reality of Economic Breakeven Potential

- Because these facilities are all operating as either private for-profit or private non-profit entities, they have a financial imperative to at least break even on operations and repayment of debt service. There is no public subsidy or underwriting available to these facilities if they suffer a financial shortfall (unlike the operation of most ice rink operations);

- The potential ramifications of private ownership and operation can be felt by user groups. As employees and utilities are the number one and two annual expense line items, these two areas tend to be cut back if a facility experiences difficulty in generating targeted revenues. As a result, customer service and user comfort tends to decrease if and when this occurs. The current Vestal facility in particular seems to have these characteristics, and some facilities in the Syracuse area are rumored to have lean and inexperienced staffs and what seems to be lower indoor temperatures (as a result of lowered utility utilization) as well;

- Elimination or minimization of debt service, when possible, can relieve financial pressure from facilities. The Ithaca facility in particular exemplifies how creative construction and development strategies can lower building debt service – discarded light fixtures from Home Depot were utilized to light the indoor skating facility, conveyor belt remnants were used to piece together floor surface covers at the rink, and donated materials were utilized to build bleacher seating using 100% volunteer labor.

Reality of Multi-Purpose Utilization

- Even when planned for in advance, true multi-purpose utilization of an indoor field sports facility is difficult to attain due to the lack of attractiveness of indoor facilities during the spring-summer-fall months for either sports or non-sports programming;

- In actuality, indoor facilities tend to fall back on multi-purpose utilization as a means for making up for an inability to schedule rental times during the off-season at a volume great enough to meet operating projections. Under this scenario, facilities are often forced to retrofit themselves and reorient their operations and marketing staffs in a multi-purpose manner that was originally unintended and unprepared for during the facility's planning, grand opening, and stabilization phases.

Benefits of Multi-Function Program of Requirements

- Municipal facilities in particular are tending to bundle a variety of use opportunities into their facility planning and design, in order to extend the overall economic impact that is generated by the initial facility project. However, this tendency is not typically evidenced in private facility development projects, as private sector developer/owner/operator groups tend to have limited resources to invest, a small margin for financial error, and therefore a specific focus on the intended indoor sports facility and its specific operation only;

New Facilities Have Active and Stable Programs as Anchor Tenants

- Most facilities from the above list were committed to and developed knowing that they had existing youth soccer, youth lacrosse, and in some cases high school and college sports programs that would be either league participants or contract users upon opening. This provided these facilities with guaranteed annual rental revenues from the outset;

Nature of Legal Entity and Accounting Practices Can Make Assessment of Profit-Loss Difficult

- In some cases, facility operating detail for for-profit operations can be either unavailable, and/or perhaps difficult to decipher. On the other hand, non-profit entity statements are by law readily accessible, but allow for accounting practices that can make true determination of operational characteristics difficult as well;

Conclusion

Recent indoor field sports facility development in New York State has occurred in and around major markets (Buffalo, Rochester, Syracuse) as well as in some smaller markets (Ithaca). In all but two cases, new facilities were built by private for-profit developers/operators. Based on assessment of available operating information from some of these facilities, it is evident that achieving economic break-even as a for-profit entity requires that per session team fees for leagues be in the range of $550-$650 (kickball) and $785-$825 and up to $1,200 per team for soccer and lacrosse, with per hour field rental rates of $100 or $175 to $225 per hour being the norm throughout the state.

Additionally, indoor field sports facilities are in reality not actually readily adaptable for multi-purpose utilization. However, some new development projects are expecting to have success in bring complementary recreational functions (fitness centers, public spaces, meeting areas) together under one roof.

ANALYSIS OF MONROE COUNTY COMPETITIVE FACILITY OPERATIONS

Within New York State, Monroe County provides the example of the greatest density of indoor turf facilities per 100,000 of population in markets having more than one indoor facility. Paradigm conducted a comprehensive analysis of indoor turf, indoor multi-sport, and indoor track facilities within the Monroe County geography, so as to understand the most aggressive New York State competitive context within which any new City of Buffalo-based indoor-outdoor turf field facility would compete for targeted users, programs, and revenues.

Paradigm conducted a broad facilities identification exercise that captured both indoor and outdoor facilities and locations identified as being in both the City of Rochester and Monroe County market proper, and attempted to identify key design, layout, management, ownership, marketing, pricing, and user group characteristics of each business operation.

For comparative purposes, indoor turf facility summary descriptions have been in Monroe County have been captured in summary form in Table Twelve so that key facility characteristics by category can be assessed against each other.

Table Twelve: Regional Indoor Specialty Use and Multi-Sport/Turf Field Facility Inventory

Facility	Ownership	Sports Supported	Building Specs	Programming	Marketing	Other	Users
All Star Sports Arena **557 East Ridge Road** **Rochester**	Lonestar Recreation (private)	Travel Soccer, lacrosse, baseball, football, kickball	40x80 yd boardless field; 40x60 yd boardless field; 30,000 total SF	Multi-sports afterschool programs; lessons; youth and adult leagues; private rentals	"tournaments, camps, preseason practices, special events, corporate outings, birthday parties"	Has main lobby area, game area, snack bar; Was converted from a boarded field/rink in 2006; Empire Sports Solutions does naming/sponsorship sales;	Empire United Soccer; Pittsford Mustangs Soccer Club; Fairport Soccer Club; Victor Farmington United Soccer; Chili Soccer Association; Penfield Rangers; Penfield Strikers; Rush-Henrietta Soccer; Honeoye Falls Blaze Soccer Club
Brighton Sports Zone **3195 Brighton Henrietta Road** **Rochester**	Lonestar Recreation (private)	Travel soccer, lacrosse, baseball, football, kickball	40x100 yd boardless 40x100 yd boardless 20x30 yd walled	Boys and girls leagues ages 11-16, and scholastic; $100 cost for 2-hr birthday party for 10	"Rochester's premier indoor sports facility"	Converted from a skate park to a turf field facility in 2006	
Rochester Sports Garden **1460 E. Henrietta Rd.** **Rochester**	Private	Indoor soccer, "soccer tots", basketball, batting cages, table tennis	75x175 ft boardless 75x125 ft boardless 3 basketball courts 2 batting cages Fields are field turf; Have electronic scoreboards;	Batting clinics, adult basketball leagues, soccer leagues and tournaments, rentals, men's annual holiday tournament	"Rochester's premier indoor sports facility"	$25/hr rate for basketball court; $45/hr rate for 2 batting cages (youth league rate); Hours = 7 days per week, M-F 12n-midnight, open 10a weekends; Installing new turf July 2011; Have relationship with	

						West Ham United Int'l Academy, and Super 9 Soccer	
Total Sport Experience	Private	Soccer, lacrosse, basketball, baseball, softball, indoor football	50x80 yd boardless 28x62 yd boarded 25x25 yd warmup 40x65 ft basketball All Astroplay turf	Leagues, camps, clinics, academies, tournaments	"Total Sports Experience is the ultimate sports center!"	$225/hr. full boarded field, $145/hr half field; $125/hr boarded field $60/hr training area $40/hr basketball court	
Turin Sports Dome **260 Hogan Road** **Fairport**	Lonestar Recreation (private)	Travel soccer, lacrosse, baseball, football	40x80 yd boardless Field is Supergrass Outdoor facilities include 2 pools, tennis courts, 40x80 yd field, snack bar, game room, basketball court, locker rooms, pro shop	Kickball leagues (@ $700/team) – 8-wk session, runs Nov.-April		"Adult beverages allowed" at kickball leagues	

Source: Paradigm Economics database and site visits

Table Twelve indicates that within the regional Rochester/Monroe County market, there exist five active indoor rec sports facilities having all-weather turf surfaces either exclusively or in combination with other hard surface areas. These facilities are all privately owned and operated. Three of the facilities – All Star Sports Arena, Brighton Sports Dome, and Turin Sports Dome – are owned by a single owner/operator, Lonestar Recreation. As privately owned and operated facilities, the sole purpose for their existence is to generate revenue. Therefore, their legal structures, business models, and marketing, booking, and scheduling priorities are assumed to focus on this revenue-first operating objective.

The dimensions of the indoor turf surfaces represented by these five facilities are significant to the City of Buffalo facility analysis. These facilities' largest surfaces are of the following dimensions: 100x40 yards, 80x50 yards; and 80x40 yards. These fields can accommodate play up to U12 youth soccer specifications (100-105 yard length min/max, 40-55 yard width min/max), and almost accommodate U13 play (100-110 yard length min/max, 50-60 yard width min/max). Adult play requirements specify 110-120 yard length min/max, and 65-80 yard width min/max.

These five facilities typically include some combination of ancillary and support spaces that includes locker rooms, game rooms, concessions areas, lounge areas, and retail components.

In some cases, it is estimated that the hours of weekly operation for these business operations – that is, how many hours of rental time are available to outside programs and individual users - can reach 90+.

In addition to the five identified indoor turf surface facilities, the regional market has a baseball-specific privately owned indoor operation (Valle Sports Indoor Baseball) and one privately owned volleyball-specific indoor facility (Hotshots Volleyball).

VIII. LOCATION ANALYSIS

Based on the determination of a potential new facility type that was identified in this study's market supply and demand analysis, a preliminary location analysis was conducted that considered potential geographic footprints within the City of Buffalo that might serve as host sites for the indoor-outdoor turf field facility. This location analysis included three main components as follows:

- Development of criteria for optimal project location;
- Creation of a comparative analysis of primary and secondary locations based on evaluation criteria; and
- Evaluation of sites within the South Buffalo BOA against the location criteria.

Development of Criteria for Optimal Project Location

The first consideration for determining the criteria for optimal facility project location is the size of the geographic footprint that needs to be available in order to site indoor and outdoor facilities, parking, and adequate outdoor circulation areas. In this effort, square footage calculations were conducted by the Paradigm project team so as to determine the geographic footprint size that would accommodate the indoor/outdoor sports complex development project that is being preliminarily considered.

The geographic footprint range that was identified (in round figures) is a minimum of 13 acres for a "base" project (indoor turf facility, outdoor soccer fields, parking), and up to a maximum of 37 acres for a phased project that considers additional revenue-generating spaces based on exhibited demand and cost-benefit that could ultimately include a second indoor turf field facility (with additional parking), an indoor baseball/softball training center (with additional parking), and an indoor field house/events center with seating capacity of 5,000+, a rubberized hard floor surface for indoor track and other sports, with additional parking for 1,818 based on a standard 2.75 live event patrons-per-vehicle calculation. Obviously, the need for substantial parking for a potential indoor field house component adds significantly to the maximum footprint scenario (approximately 13.5 acres, or over 33% of the total).

Additionally, using observational information gathered from similar facility types in Western New York and Central New York primarily, a location characteristics wish list was identified that included both primary and secondary criteria as follows:

- Primary criteria:

  - Ability to mass acreage that has been determined to be necessary for both initial development and potential expansion;
  - Immediate access to primary vehicular thoroughfares (i.e. ready access from all directions, and major thoroughfares);
  - Effective traffic controls re vehicular ingress/egress;
  - High visibility by vehicular traffic (neighborhood, local, elevated, other);
  - Geographic proximity to existing/planned complementary business operations (i.e. especially retail, entertainment, gas and food service, recreational, other hospitality);
  - Ability to accommodate high and/or surging vehicle counts without negative impacts on neighborhood;
  - Ability to accommodate relatively high noise (and perhaps field lighting after sundown) levels without negative impacts on neighborhood;
  - Ability to secure perimeter of property;

- Secondary criteria:
  - Proximity to shareable public parking;
  - Ability to install outdoor field lights without negative neighborhood impacts;
  - Proximity to additional, safe walkable street and/or other public parking.

Using these primary and secondary criteria as a guideline, an exercise need to be conducted that provided a determination as to how and where this scenario fit within the South Buffalo BOA, and whether there were one or more location alternatives within the BOA that could be considered for development. Additionally, alternatives outside of the BOA were determined to be of interest as well, so that location characteristics for an array of potential location options within and without the BOA could be compared, as information on and comparison of a menu of preliminarily-identified locations would be of primary interest to potential private sector developer candidates.

Comparative Analysis of Locations

With assistance from the BUDC and the City of Buffalo, an inventory of potential host locations for the new facility project was identified that included both South Buffalo BOA and other City of Buffalo locations. This set of potential sites was selected based solely on a combination of size and availability (i.e. vacant land). Owners of these locations were not contacted and have not indicated that these sites would be available for this type of development and use. The intent of determining this initial set of locations is to indicate that there are potential sites within the City limits that meet the preliminary study criteria.

A total of 11 locations were identified for evaluation by the Paradigm team. This set of location options happened to include seven (7) geographic footprints that were located in one of the four current Brownfield Opportunity Areas within the City of Buffalo. This location set and the BOA within which each location resides is provided as follows:

12. 90 Hopkins Street – South Buffalo BOA;
13. Outer Harbor – Buffalo Harbor BOA;
14. Elk Street – Buffalo River BOA;
15. Emerson Young Park – Buffalo Harbor BOA;
16. Tee-to-Green property – Tonawanda Corridor BOA;
17. Black Rock Yard – Tonawanda Corridor BOA;
18. 1070 Seneca Street;
19. Kensington Heights;
20. Buffalo Forge;
21. Village Farms/Hydroponics/English Pork Pie Company; and
22. American Axle

A more explicit description of basic location characteristics is provided in Table Thirteen below.

Table Thirteen: Target Location Descriptions

	Street Address	Ownership	Size
1. 90 Hopkins Street	90 Hopkins and 40 Hopkins	City, LKQ	17 acres
2. Outer Harbor	Buffalo Outer Harbor	Empire State Development	120 acres
3. Elk Street	85 Lee Street, 98 Maurice, 42 Elk (Buffalo Color), and 503 Elk Street (ExxonMobil)	Buffalo Color, ExxonMobil	15-49 acres
4. Emerson Young Park	Including 43 Carolina	City	15+acres
5. Tee-to-Green	189/191/205 Tonawanda Street, and 69 Dearborn	Golf & Recreational/Ambassador Bridge	32+ acres
6. Black Rock Yard	300 Hertel	CSX	28+ acres
7. 1070 Seneca Street	Same	Private	21.5 acres (potential for add'l 6)
8. Kensington Heights	1827 Fillmore	BMHA	71 acres
9. Buffalo Forge	490 Broadway	Buffalo Forge/Howden Fan	8 acres, plus 4 add'l
10. Village Farms/EPPC	1176/1216 South Park Ave.	EPPC, city-sponsored econ dev	33 total acres

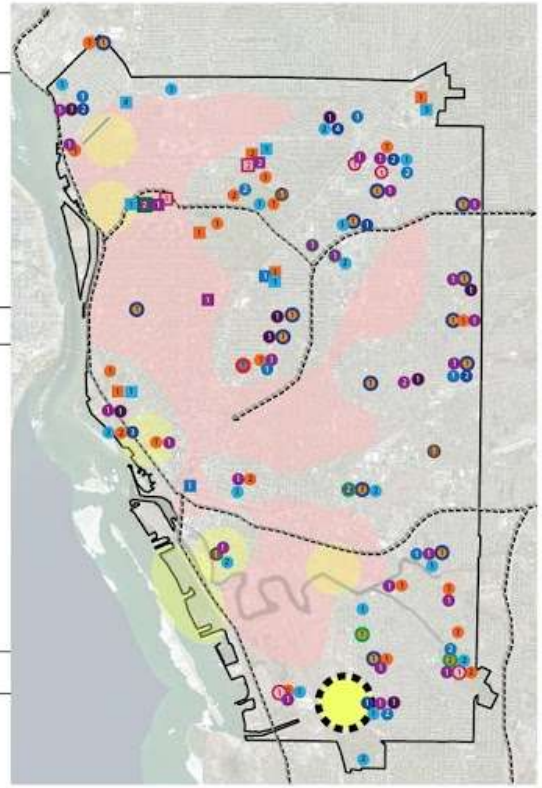
11 American Axle	1001 East Delevan Avenue		5-8 acres total

Source: BUDC

In order to best evaluate the 11 identified City of Buffalo location options, the Paradigm team conducted first-person site evaluations of all the target locations, and supplemented those evaluations with aerial scans using Google Earth. Particular attention was paid to assessing the locations against the primary and secondary criteria that were identified as being elemental to optimal facility location and operation. The following maps and narrative summaries provide a more detailed analysis for each location that allow for a preliminary comparative analysis and prioritization of these sites.

Hopkins

90 Hopkins St. (COB owned) (9 acres)
40 Hopkins St. (LRQ) (8 acres)
South Buffalo BOA



Access

Skyway
Hopkins St.
S. Park Ave.
Ridge Rd.
Tift St.

Context

Schools:

South Buffalo Charter School

Retail & Entertainment:

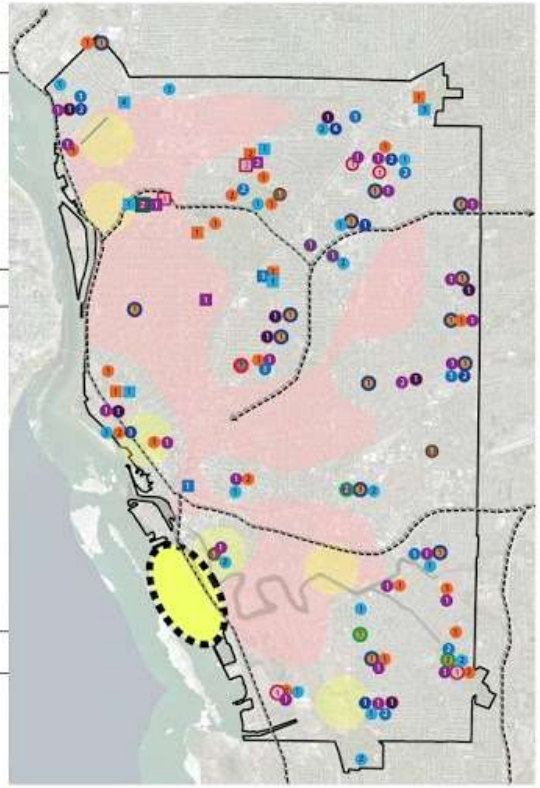
Outer Harbor

Parks & Recreation:

Durant park (1 Prac. Soccer, 1 BBall)
Okell park (1 Football, 2 Hardball, 1 Softball, 1 L.L., 1 Tball, 1BBall)
Tift / Hartmann Field (1 Football, 1 Soccer, 1 L.L.)
South park (2 Softball)
Botanical Gardens

Outer Harbor

ESD property
Buffalo Harbor BOA
120 acres



Access

Skyway
190
Furhmann Blvd.
Ohio St.
Michigan
S. Park Ave.
Boat harbor

Bus route: 74
Outer Harbor/ Tift Bike Trail

Context

Schools:

Southside Elementary School

Retail & Entertainment:

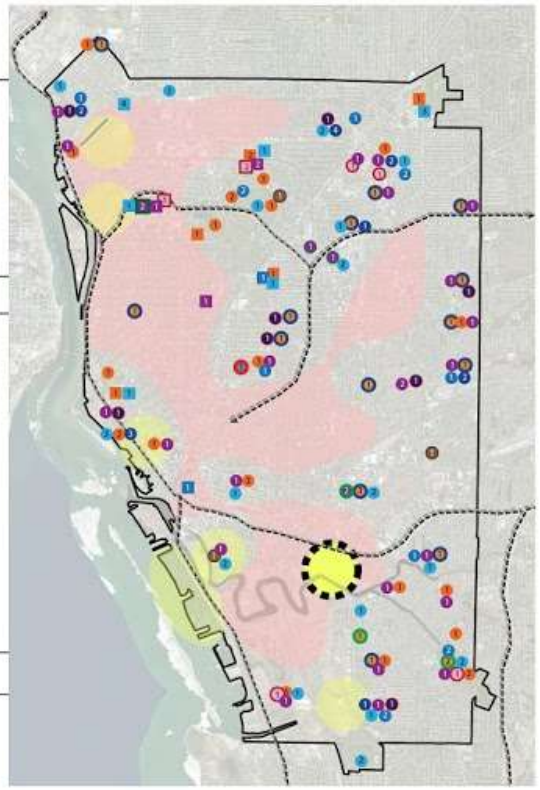
Silo City
Downtown
Casino

Parks & Recreation:

First Niagara Center
Coca Cola Field
Tift / Hartmann (1 Football, 1 Soccer, 1 L.L.)
Conway park (1 Football, 2 Softball)
Times Beach & Wilkenson Point

Elk St.

Buffalo Color (South Buffalo Development Co., 85 Lee, 98 Maurice, 42 Elk)
ExxonMobil- 503 Elk
Buffalo River BOA
15-49 acres



Access

190
S. Park Ave.
Bailey Ave.
Elk St.
Babcock St.
Seneca St.
Clinton St.
Filmore

Context

Schools:

Southside Elementary School

Retail & Entertainment:

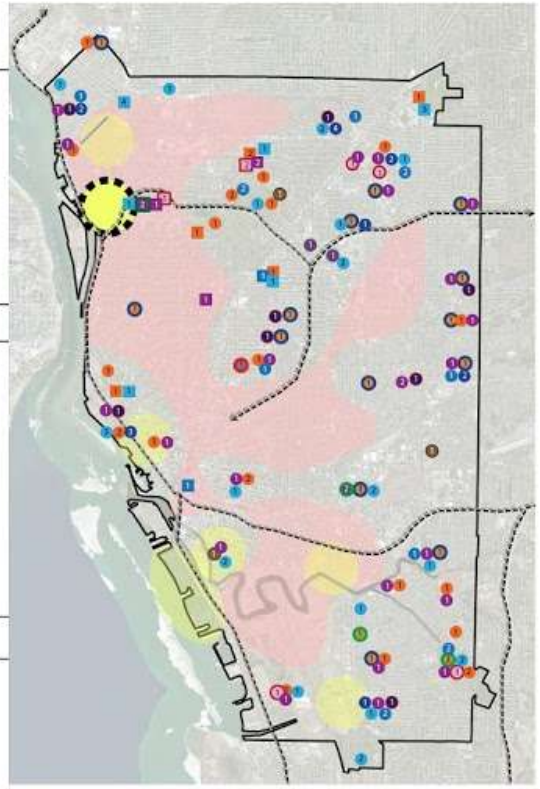
Larkinville

Parks & Recreation:

Houghton park (1 Football, 1 Soccer,1 Softball, 3 BBall, 4 Tennis)
Franczyk park (3 Prac. Soccer, 2 Softball, 1 BBall, 2 Half-BBall)
Boone park (1 Softaball, 1 BBall)
Tift / Hartmann (1 Football, 1 Soccer, 1 L.L.)
Southside Elementary School Field (1 Football/ Soccer)

Tee-to-Green

189, 191, 205 Tonawanda St. (25 acres)
69 Dearborn (7 acres)
Tonawanda Corridor BOA
1 owner



Access

190
198
Tonawanda St.
Amherst St.
Niagara St.
Forest Ave.
Grant St.

Bus Routes: 5, 32, 40
Scajaquada Bike Trail

Context

Schools:

Buffalo State College
McKinley H.S.
Math & Science Prep School

Retail & Entertainment:

Wegmans
Regal Movie Theatre
Elmwood Ave.

Parks & Recreation:

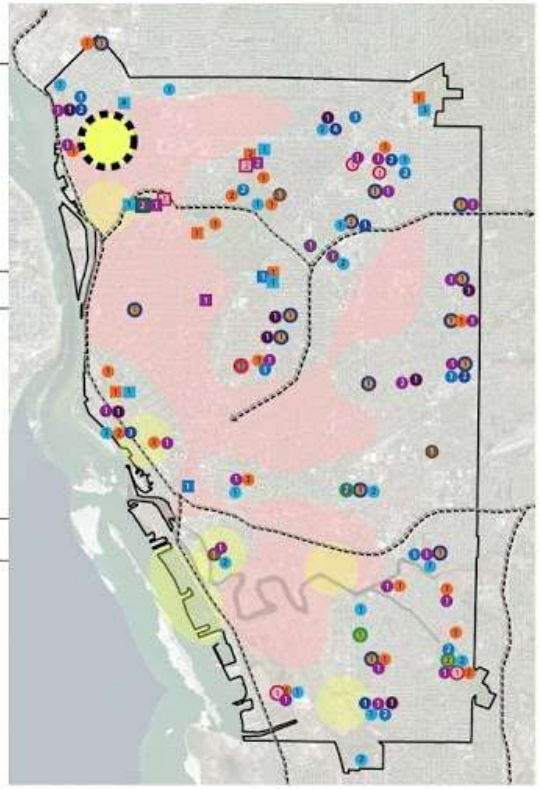
Squaw Island

Buffalo State Fields (1 Softball, 1 Football, 1 Prac.)

Delaware park (1 football, 5 soccer, 2 hardball, 1 softball, 4 BBall, 17 tennis)

Black Rock Yard

300 Hertel Ave.
Tonawanda Corridor BOA
28.6 acres
1 owner



Access

Hertel Ave.
190
198
Niagara St.
Amherst St.

Tonawanda St.
Bus Routes: 5, 23

Context

Schools:

McKinley H.S.
Riverside H.S.
Math & Science Prep School
Buffalo State College

Retail & Entertainment:

Wegmans
Regal Movie Theatre
Elmwood Ave.
Hertel Ave.

Parks & Recreation:

Private Softball fields (4)

Riverside H.S. Field (1 Football/Soccer)

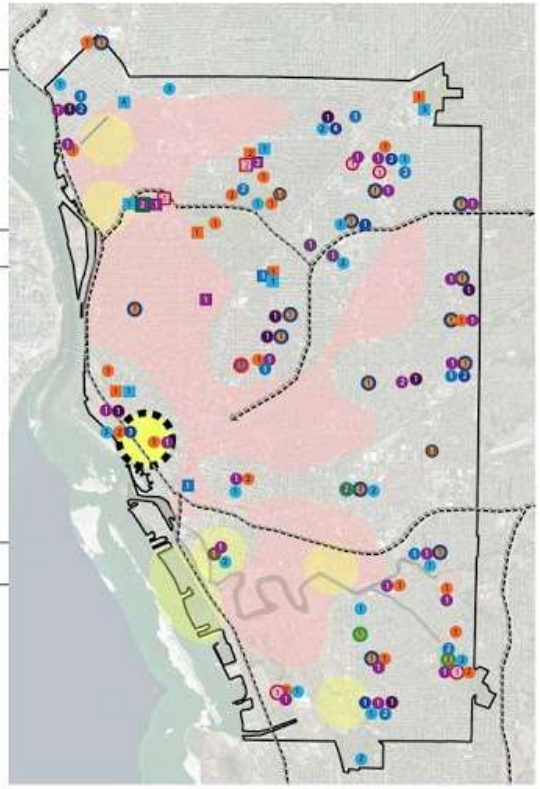
Buffalo State Fields (1 Softball, 1 Football, 2 Prac.)

Delaware park (1 football, 5 soccer, 2 hardball, 1 softball, 4 BBall, 17 tennis)

Riverside park (1 Football, 1 hardball, 1 softball, 2 L.L., 1 T-ball, 2 BBall, 2 Tennis)

Waterfront

43 Carolina
Buffalo Harbor BOA
15+ acres



Access

190
33
Skyway
Delaware Ave.
Niagara St.
Elmwood Ave.
Division St.

Peace Bridge
Virginia St.
Subway
Bus Routes: 1, 2, 4
Close to Riverwalk Bike Trail

Context

Schools:

Hutch Tech.
Waterfront School
ECC
D'Youville

Retail & Entertainment:

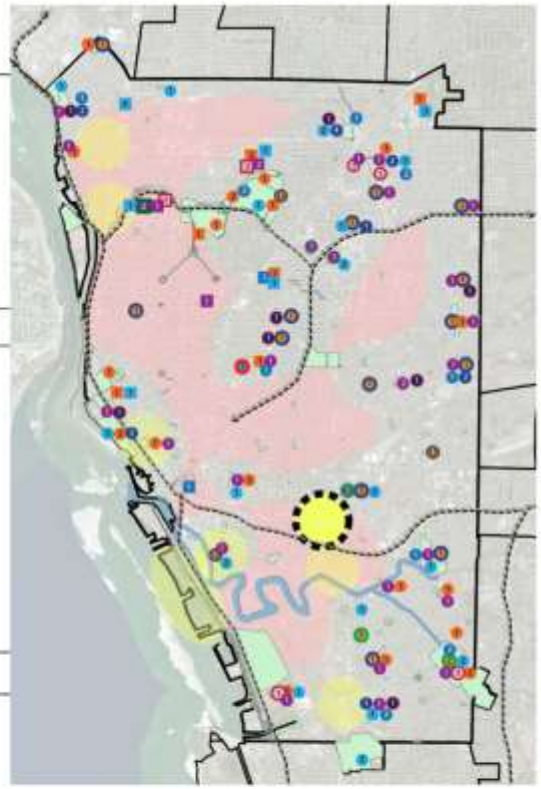
Downtown
Dipson Market Arcade
Theatre District
Chippewa
Kleinhans

Parks & Recreation:

Harbor Center
Erie Basin Marina
Naval park
Coca Cola field
Times Beach & Wilkenson Point
Front park (1 soccer)
JFK park (1 football, 2 soccer, 1 softball, 3 BBall, 4 tennis)
Waterfront park (1 football, 2 soccer, 1 softball backstop)
LaSalle park (1 football, 2 soccer, 3 softball, 3 L.L., 1 T-ball)

1070 Seneca St.

90 Hopkins St. (COB owned) (9 acres)
40 Hopkins St. (LRQ) (8 acres)
21.5 acres
[City Engineering facilities at 1120 Seneca, potential 6 acres]



Access

190 Seneca St.
Clinton St.
Smith St.
Bailey Ave.

Bus routes: 6, 15, 103

Context

Schools:

PS 26

Bilingual Center

Retail & Entertainment:

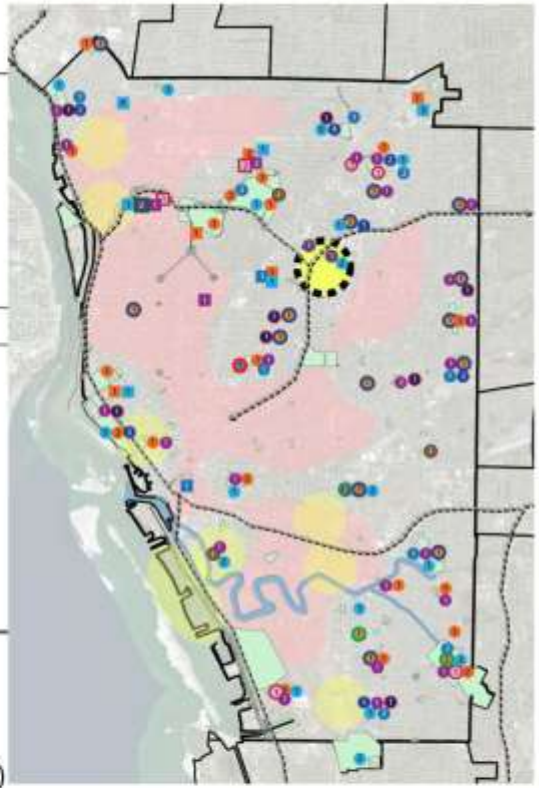
Babcock Boys and Girls Club
Larkinville

Parks & Recreation:

Red Jacket River Front Park
Franczyk Park (1 Football prac., 2 Soccer, 1 Softball, 3 BBall, 4 Tennis)

Kensington Heights

1827 Fillmore Ave.
Owned by BMHA
17 acres
Unused ECMC parking lot (1825 Fillmore Ave.) 4.5 acres



Access

33
Fillmore Ave.
Delevan Ave.
Humboldt Pkwy.

Bus routes: 6, 23, 102, 111

Context

Schools:

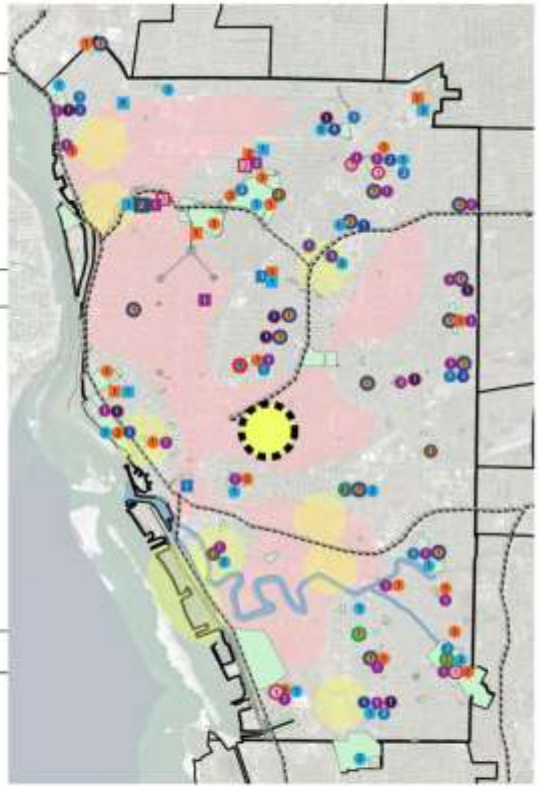
Canisius College
St. Marys School for the Deaf
Dr. Lynda T Wright School
PS 84
Seneca HS
Burgard Vocational HS
UB School of Medicine

Parks & Recreation:

Trinidad Park (1 short Football, 2 BBall)
Glenny Park (1 Football, 2 Softball, 2 BBall)
Dewey Park (1 Soccer prac., 1 Softball, 1 L.L., 3 BBall)

Buffalo Forge

490 Broadway
Adjacent parking at 498 Broadway and 213, 187 and 233 Mortimer
8 acres (plus additional 4 acres with adjacent parking)
Single owner (Buffalo Forge/Howden Fan)



Access

33 Bus routes: 4, 6, 18, 19
Broadway
Jefferson Ave.
Sycamore St.
Genesee St.
William St.

Context

Schools:

PS 41
PS 12
Bryant Stratton College

Parks & Recreation:

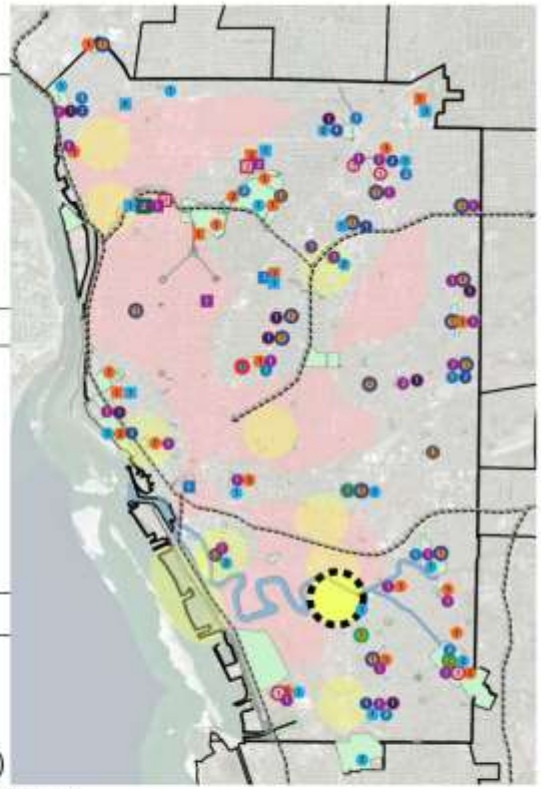
Willert Park (2 BBall)
JFK Park (1 Football, 2 Soccer, 1 Softball, 3 BBall, 4 Tennis)

Retail & Entertainment:

Buffalo & Erie Public Library
Downtown

Village Farms/Hydroponics/Pork Pie

1176 S. Park Ave. (Owned by city-sponsored development corp.)
1216 S. Park Ave.
33 acres



Access

South Park Ave.
Tift St.
190
Bailey Ave.

Bus routes: 14, 16, 23, 101, 111

Context

Schools:

Bilingual Center

Retail & Entertainment:

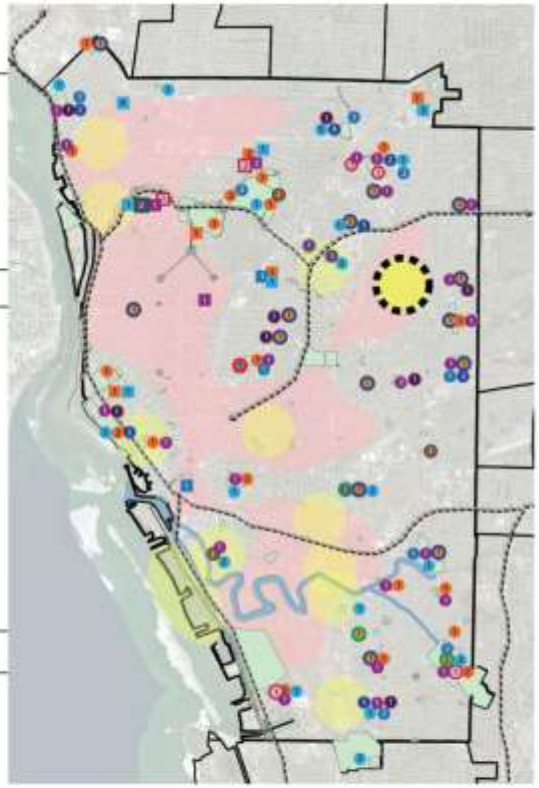
Outer Harbor
Tift Nature Preserve
Larkinville

Parks & Recreation:

Boone park (1 Softball, 1 BBall)
Durant park (1 small Soccer, 1BBall)
Red Jacket River Front Park

American Axle

1001 E. Delevan Ave.
5-8 acres



Access

Bailey Ave. Bus routes: 19, 26, 102
33
E. Delevan Ave.
E. Ferry St.
Genesee St.

Context

Schools:

PS 23
Seneca HS
East HS
PS 84
Dr. Lynda T Wright School

Retail & Entertainment:

Bailey Ave.

Parks & Recreation:

MLK Jr. Park (2 BBall, 4 Tennis)
Walden Park (1 Football, 1 Soccer prac., 1 Hardball, 2 L.L.)
Dewey Park (1 Soccer prac., 1 Softball, 1 L.L., 4 BBall)
Schiller Park (1 Football, 1 Soccer prac., 1 B-Ball

Table Fourteen is completed using high-medium-low designations so as to allow for a standardized comparison of the 11 individual locations.

Table Fourteen: Target Location Comparative Analysis

	Primary Criteria								Secondary Criteria		
	Massable Acreage Available	**Major Street Access**	**Existing Traffic Controls**	**Vehicular Traffic Visibility**	**Proximity to Complementary Development**	**High-Volume Vehicle Capability**	**High Noise Level Ability**	**Ability to Secure Property Perimeter**	**Proximity to Shareable Public Property**	**Ability to Install Outdoor Lights**	**Proximity to Safe/ Walkable Parking**
1. 90 Hopkins Street	Med	High	Med	Low	Med	High	High	High	Low	High	Med
2. Outer Harbor	High	High	High	High	High	High	High	Med	Med	High	Med
3. Elk Street	High	High	High	Med	High	High	High	High	Low	High	Low
4. Emerson Young Park	Med	High	High	High	Low	High	Low	Med	High	Low	High
5. Tee-to-Green	High	High	High	Med	Low	High	High	High	Low	High	Low
6. Black Rock Yard	High	High	High	Low	Low	High	High	High	Low	High	Low
7. 1070 Seneca Street	High	High	High	Med	Low	High	High	High	Low	High	Low
8. Kensington Heights	High	High	High	High	Med	High	High	High	High	High	High
9. Buffalo Forge	Low	High	High	Med	Low	High	Med	Med	Med	Med	Low
10. Village Farms	High	High	High	Med	Med	High	High	Med	Med	High	Med
11. American Axle	Low	Med	High	Med	Low	Med	Med	Med	Low	Low	Low

Source: Paradigm Economics

Table Fourteen would indicate that with respect to the key primary location criteria of massing ability of necessary acreage, seven of the 11 target locations (Outer Harbor, Elk Street, Tee-to-Green, Black Rock Yard, 1070 Seneca Street, Kensington Heights, and Village Farms) have enough of a footprint so as to allow for both initial facility development, as well as expandability of the indoor-outdoor complex should marketability and operating characteristics of a new facility indicate that business operation expansion is appropriate.

IX. CONSTRUCTION COST ESTIMATION

Based on the demand, market, and comparables findings articulated in earlier sections of this study, the Paradigm study group endeavored to generate a set of preliminary construction cost estimates based on the indoor-outdoor turf field complex facility type that was elevated to priority status within the new facility type option evaluation.

In this effort, Spicer Group, general construction and construction management specialists, was given a set of facility parameters that represented a ***base case*** construction project for a new indoor-outdoor turf field complex. As a *base case* project, the parameters established and provided to Spicer Group address a conservative construction scenario, and one that allows for either a phased or some other form of future expansion to either the indoor and/or outdoor facility component based on demonstrated and validated user group demand and revenue-generating capability.

Base Case Facility Parameters

Based on predominant user group needs, recommendations, and requirements that were generated through the market supply and demand sections interview process, a set of preliminary base case facility parameters were developed that reflected the indoor, outdoor, and support space construction specifications that would support a conservative construction scenario within the indoor-outdoor turf field facility type. These parameters were transferred to Spicer Group for construction cost estimating purposes, and are articulated as follows:

- One (1) 330’x210’ indoor turf field surface;
- Two (2) 180’x300’ outdoor field surfaces;
- Two (2) 240’x360’ outdoor field surfaces;
- Paved parking for 200 vehicles (@325 SF/space);
- Interior support space that includes retail, administration, food service, lavatories, and storage;
- Adequate interior circulation space;
- Basic Butler building-type metal clad structure and materials;
- HVAC system that allows for year-round utilization of indoor spaces;
- 50’ ceiling height over indoor playing surface;
- Security fencing around the footprint perimeter.

Construction Cost Methodology and Calculations

Spicer Group developed their facility cost estimates using separate CSI division designations. A 15% contingency cost was included in the overall cost at this preliminary pricing stage; this contingency number would be reduced as more accurate numbers became available through an actual facility design process.

The Spicer Group estimates also include some facility equipment (i.e. rolling grill for concessions, goal frames and nets) as well as some safety protection (pole padding, spectator netting), all of which would be typically included in an inventory of FF&E (furniture, fixtures, and equipment), which is not included in this estimate.

A cost of $26.00 per SF was utilized for the building structure, and bathrooms, HVAC, and electrical work and materials are priced so as to meet local building codes.

A complete preliminary construction cost estimation is provided below as Table Fifteen.

Table Fifteen: Preliminary Construction Cost Estimation

		Subcontract	Material	Labor	Equipment	Total
	General Conditions @5%	476,303				476,303
	Architectural Design	90,000				90,000
	Engineering & SWPP	60,000				60,000
	Infrastructure	67,500				67,500
	Site work incl. 2 small grass fields	436,500				436,500
	Fencing (4,120 LF @6' Chain Link + 2-24' Gates)	39,140				39,140
	Pavement and Walks	253,750				253,750
	AstroPlay Surface for 3 Fields	2,042,400				2,042,400
	Concrete Reinforcing	664,766				664.766
	Masonry Work	33,958				33,958
	Millwork	8,750				8,750
	Interior Plywood Liner	64,350				64,350
	Door Frames & Hardware	11,000				11,000
	Aluminum Storefronts	8,050				8,050
	Metal Studs-Drywall and Acoustic	30,500				30,500
	Floor Covering	5,500				5,500
	Painting	21,000				21,000
	Ceramic Tile	14,700				14,700
	Toilet Accessories and Partitions	2,450				2,450
	Rolling Grill (s) for Snack/Retail Area	3,000				3,000
	Sports Equipment (Frames and nets)	42,900				42,900
	Bleachers (8 sets of 4 rows by 21' long)	28,000				28,000
	Metal Building w/ Erection	2,355,000				2,355,000
	Spectator Netting	54,000				54,000
	Plumbing	54,000				54,000
	HVC	285,000				285,000
	Pole Padding	18,600				18,600
	Electrical	480,000				480,000
	Landscape Allowance	40,000				40,000
	Bond				88,507	88,507
	Subcontractor Bonds					
	Tax					
29641	Insurance Requirements	29,641				29,641
	Contingency 15%	1,574,802				1,574,802
A	**Subtotal**	**9,437,560**			**88,507**	**9,526,067**
B	Overhead (Percentage)	3.00%	3.00%	3.00%	3.00%	
B	Overhead (Amount)	283,127			2,655	285,782
C	Profit (Percentage)	7.00%	7.00%	7.00%	7.00%	
C	Profit (Amount)	680,448			6,381	686,829
B+C	Totals (Percentage)	10.21%	10.21%	10.21%	10.21%	
B+C	Totals (Amount)	963,575			9,037	972,611
A+B+C	**Totals (bond included)**	**$9,720,687**			**$91,162**	**$10,498,678**

Source: Spicer Group

Table Fifteen indicates that a total construction cost for the indoor-outdoor turf field facility is estimated to be $10,498,678, which includes some soft costs (design, engineering), insurance, bonding, as well as some equipment costs.

Geographic Footprint for Indoor-Outdoor Turf Field Complex

The size/dimension for the layout of the preliminary facility complex that includes an indoor building, parking areas, and four (4) outdoor fields is estimated to be a rectangle of 21 acres.

The 21-acre total includes approximately 13 acres for the building, parking lots, and outdoor fields, and an additional eight acres of outdoor circulation, landscaping, and auxiliary space.

Facility Expansion Opportunity and Considerations

Consideration was given in the facility construction to potential expansion of the indoor space so as to include over time additional turf areas. Addition of auxiliary indoor space could be accommodated in a second phase of construction, on either the long or short side of the primary indoor facility.

Consideration of additional construction would need to be applied in the first construction phase in determining a final layout of indoor and outdoor spaces on the geographic footprint, so as to allow for the most efficient attachment of a new space to the existing building. This would also impact the size and dimension of the geographic property footprint on which the original construction project takes place.

X. FINANCIAL OPERATIONS ANALYSIS

Based on the design program selected for the proposed indoor-outdoor turf and field sport center (one full-sized indoor turf field, four outdoor turf and natural grass fields), a set of assumptions were generated that provided the basis for a preliminary financial performance analysis for the proposed facility operation that is indicative of financial performance expectation using one set of key assumptions and operational expectations. Consistently-apparent characteristics of indoor facilities both inside and outside of Western New York were kept top of mind in developing the financial performance model and strategy. A summary of these key characteristics includes but is not limited to the following:

- A private legal structure and operation (either for-profit or not-for-profit) is preferred based on the almost exclusive appearance of this legal structure in other markets throughout the state, as well as in Western New York;

- The business operation essentially has a 6-month revenue period (November-April), with limited revenue generation occurring during the seasonal market's outdoor/warm weather period (May-October);

- As is the case with indoor field sports activity projects, and unlike indoor ice rink operations, the facility will be required to internally develop, market, and administer a variety of leagues and programs including but not limited to youth and adult soccer, flag football, and similar.

Other key characteristics for the cash flow model have been preliminarily selected for illustrative purposes, and are described as follows:

- Indoor utilization reflects a 90% utilization of available prime time hours;

- Not-for-profit legal status has been selected and applied, which allows for solicitation of grants, donations, and pledges. This also allows the facility to forego property tax payments and good and services taxes, eliminating those line items from the expense budget, which offers relief to the overall annual operating budget;

- A management company line item is included in the expense budget, which reflects the opportunity for experienced indoor/outdoor recreation facility operators to oversee day-to-day facility operation for ownership on a contract basis;

- Indoor field utilization is expected to include a combination of league and tournament play (run by the facility) and straight rentals by outside user groups. Also expected is high-to-low utilization volume with soccer as the high-volume sport, followed by lacrosse, field hockey, flag football, kickball, and softball training; and

- An 80% loan over 25 years on a construction budget of $10,498,678 at 6.5% has been factored in as an expense.

Cash Flow Model Summary

The preliminary cash flow model includes revenues from indoor and outdoor field utilization ("Total Usage Revenue"), as well as non-rental revenues that include concessions revenues (net), field sponsorship rights, revenues from grants, donations, and pledges, and sponsorship package revenues ("Ancillary Revenues").

The expense side of the cash flow model includes expense line items such as payroll (facility management, sports coordinators), utilities, management company fee, telephone/internet, insurance, building/grounds maintenance, equipment replacement fund, office expenses and supplies, contract services, legal and accounting fees, and marketing.

Total revenues are aligned against total expenses to generate a net cash flow figure. This net cash flow figure represents the cash that is available to the facility owner to make loan/mortgage payments that are incurred to purchase property and for building development/construction. For purposes of this financial performance modeling exercise, those payment obligations have not been estimated or included as line items in the expense side of the cash flow model.

Table 16 provides a summary of the facility's preliminary cash flow estimation. A full articulation of the 12-month cash flow model can be found in the report Appendix.

Table 16 – Summary – Preliminary Cash Flow Model

Revenue	
Indoor Fields	$686,098
Outdoor Fields	$396,000
Other Uses	$20,000
Ancillary Revenues	$72,000
Total Revenues =	**$1,174,098**
Expenses	
Total Expenses =	**$1,099,172**
Net Cash Flow =	**$74,926**

XI. ECONOMIC IMPACT ANALYSIS

Projected economic impact for a geographically-defined community can be an important consideration in the decision-making process utilized to consider the making of a significant economic development investment in a live entertainment/sports tourism-based development project and its long-term operation. At the funding stage of a proposed indoor sports-recreation facility development effort, a strategic objective expressed by the BUDC is to specifically ascertain the quantifiable benefits of the project, as determined by rigorous input-output economic impact analysis.

In that effort, Paradigm has undertaken a comprehensive analysis of the overall regional economic impact that a new indoor sports-recreation facility development/operations project might generate, so that this estimation could be integrated and measured against the estimation of projected economic self-sufficiency determined of the development and its ongoing operations.

Key Areas and Assumptions Test

The assessment of overall economic impact generated by a new development project and its operation contained the following key elements:

- Determination of economic impact generated by construction, operations, and generation of incremental visitors to the market; and

- Measurement of direct, indirect, and induced effects generated by the project.

Introduction and Impact Summary

Any economic impact generated by the proposed development project and business operation can be attributed to two distinct occurrences:

1. Construction – a one-time only event that we are assuming for purposes of this calculation would take place within the next 1-2 year period; and
2. Operation of the facility – ongoing business operation at relatively stabilized levels (i.e. consistent revenues, expenses).

Method of Analysis

The input-output multiplier approach was used to estimate the economic benefits related to the construction and operation of the proposed indoor sports-recreation facility. In performing these analyses, direct spending in the relevant economy (defined as Erie

County) was estimated. Then factors were used to estimate the multiplied effects of this spending on output and employment in the defined geographic economy. Economic impact or benefits are traditionally expressed in terms of increases in sales volume, employment, income and fiscal revenues.

The economic impacts estimated in this report consist of construction (temporary), operating (permanent), and on-going visitation (permanent) impact. For purposes of definition, economic *output* is the spending in the economy related to the proposed facility's operations and development. This measure of economic activity includes direct spending plus re-spending generated through the multiplier effect. Jobs created in the economy, measured in full-time equivalent jobs (FTEs), as a result of the economic output directly related to the proposed facility's stabilized operations and construction and indirectly related through the multiplier effect is *employment* impact. *Labor income* impact represents both employee salaries and wages plus business bonuses and commissions and the like.

Limitations of Input-Output Models

To quantify economic impact in each case, we utilized IMPLAN, an industry-accepted input-output model, to derive multipliers (see Appendix One). There are two fundamental limitations of input-output models:

- It is generally assumed that no substitution across expenditure categories occurs, when in fact, substitution does occur. If residents would otherwise have spent dollars on other local activities versus in association with the proposed facility, it could be argued that a facility would not be responsible for any increase in local spending.

  Conversely, if "facility dollars" spent by local residents would otherwise have been used for activities outside the local area, then these dollars do not merely represent displaced spending, but without the proposed facility, the area would continue to lose these funds. In other words, it is assumed that none of the spending amounts used as inputs for the models represent "displaced spending" or that without the proposed development, incremental business activity generated from events utilizing a new facility would take place outside of the State.

- Second, it is assumed that excess capacity in business employment does not exist. In other words, if area enterprises employ sufficient staff to accommodate a larger volume of sales, it is unlikely that a higher level of sales will cause additional employment.

Impact Levels

Economic impact is typically measured on three levels. As defined by the IMPLAN model, these are:

> *Direct Effects* – the impacts (e.g. changes in employment) for the expenditures and/or production values specified as direct final demand changes;
>
> *Indirect Effects* – the impacts caused by the iteration of industries purchasing from industries resulting from direct final demand changes; and
>
> *Induced Effects* – the impacts on all local industries caused by the expenditures of new household income generated by the direct and indirect effects resulting from direct final demand changes. Induced effects may also reflect government or investment expenditures."

Economic impacts or benefits are traditionally expressed in terms of increases in sales volume, employment and income resulting from the "export" of goods and services from and the "import" of new spending into an economy.

> *Economic output* is the spending in the economy related to the proposed facility's development and operations. It represents changes in sales volume or increases in a region's local aggregate economic activity resulting from new dollars "imported" into an economy. In other words, it is the total dollar flow of the major economic sectors (wholesale, retail, manufacturing and service) and is generally equivalent to the gross product of a given area. This measure of economic activity includes direct spending plus re-spending generated through the multiplier effect.
>
> Because of the changes in sales volume, local enterprises, depending on their excess capacity, may need to hire additional employees. Jobs created in the economy, measured in full-time equivalent jobs (FTEs), as a result of the economic output directly related to facility operations and construction and indirectly related through the multiplier effect is employment impact.
>
> *Labor impact (often referred to as "Personal Income")* represents changes in County residents' earnings resulting from increased employment and spending due to the "import" of new dollars into an economy.

The Multiplier Effect

Economic impacts from operations of the proposed indoor sports-recreation facility are defined as total expenditures generated from facility visitors ("direct spending") and the indirect benefits which result as these dollars are re-spent within the area. These indirect

benefits that result from subsequent rounds of spending are often referred to as the "multiplier" effect. All attendees to the subject facility are considered to generate economic impact.

The multiplier concept recognizes that income is spent in successive rounds within a community and that these "chain reactions" create an economic impact in excess of the original expenditure and employment levels. For example, each dollar collected by the proposed facility will eventually recycle, or multiply itself, creating many levels of economic activity in an area. As a prospective employer, the proposed race track facility pays wages; these wage earners, in turn, make purchases from local businesses. As taxpayers, all businesses and individuals benefiting from or adding incremental revenue to the economy also confer revenue to the community in terms of taxes. As a consumer, the proposed track project would buy goods and services from area businesses. Hence, the multiplier concept represents multi-level economic activity.

The multiplier effect is directly related to a region's geographic size, population and diversity of its industrial and commercial base. A larger population is generally able to support a more diverse economic base, and more products are likely to be manufactured and purchased locally rather than imported. Therefore, money injected into the economy is re-spent more often, causing greater changes in local business volume. In the case of the subject area, Erie County, the multiplier effects are somewhat more limited in that a significant portion of the impact might be felt by areas outside the County. For example, it is likely that, in large measure, the furniture, fixtures and equipment to be utilized for the proposed facility will be manufactured and shipped from areas outside of Erie County.

CALCULATIONS OF DIRECT AND INDIRECT IMPACT

Construction Impact

Significant non-recurring benefits will be generated by the construction of the facility due to major expenditures for labor and materials. Facility project development and construction cost documentation generated by Spicer Group estimates that total construction costs for the project (including site preparation, soft costs, but not land purchase) will be approximately $10,498,678 ($7,417,760 for construction, and $3,080,918 for bonding, soft costs and certain non-building equipment purchases).

The direct expenditures of $7,417,760 cause a “ripple” or “spin-off” effect, generating additional economic activity to numerous industries throughout the County. Using economic multipliers supplied by the federal government’s Bureau of Economic Analysis, and an input-output model derived by the IMPLAN Development and Applications (alternatively referred to as “Minnesota Implan Group”, abbreviated MIG), the total economic impact, which includes the “ripple” or “spin-off” effect from direct expenditures resulting from the development of the proposed facility was quantified. Multipliers were developed for every industry; the degree of impact within each sector is affected by its relationship and synergy with the economic impactor.

Applying the output, earnings and employment multipliers for the new construction expenditures across the various sectors of the Erie County economy yields the total direct and indirect impacts of the construction phase as shown in the table below.

IMPACT OF SITE PREP & CONSTRUCTION

Impact Summary

Impact Type	Employment	Labor Income	Output
Direct Effect	66.8	$3,196,756	$7,417,760
Indirect Effect	13.5	$772,878	$1,964,339
Induced Effect	21.0	$896,164	$2,651,473
Total Effect	101.3	$4,865,797	$12,033,572

Employment = Jobs
Labor Income = Employee Compensation + Proprietor Income (does not include benefits)
Output = Revenue (cost of consumption plus value added)

Notes

- These are annual figures. (Construction impacts would need to be adjusted to reflect the duration of the project if it was longer or shorter than a year).
- Site prep and construction were run as two separate models then aggregated. Sale/purchase of land was not included in construction model.
- Employment and income for the direct effect of the construction model are estimates derived by the program calculated from the project cost of $7,206,815 (does not include soft costs, i.e. bonding, contingencies, profit, other). If more accurate figures are available the model could be further refined.
- Site prep is considered separately, as it only generates indirect and induced impacts since it is essentially service and not product oriented.

Construction Impact Summary

- Based on the estimated hard construction project cost of $7,417,760 (including $436,500 in site prep), IMPLAN estimated the site prep and construction project will employ 66.8 FTEs, with a payroll of $3,196,756 **(direct effects).**

- Multiplied many times through levels of the supply chain, the site prep and construction creates a demand of $$1,964,339 worth of goods/services from the county economy. This requires 13.5 FTEs receiving a payroll of $772,878 (i**ndirect effects).**

- The spending from the direct & indirect FTEs' payroll creates a demand of $2,651,473 of goods and services from the local economy. This demand requires 21.0 FTEs, receiving a payroll of $896,164 (i**nduced effects).**

- The construction/site prep will have job impact of 101.3 FTEs with a payroll of $4,865,797 creating $12,033,572 of economic impact in Erie County (t**otal impact).**

Facility Operations Impact

Our calculation of impact related to operation of the facility was based, in large measure, upon the projected financial performance of the facility in operating year one as calculated by the Paradigm project team. Based on these financial projections, it was estimated that the facility would generate total revenues of $1,174,098 (expressed in current value dollars) in operating year one of the business operation. Output from the IMPLAN model based on these projections is as follows:

IMPACT OF FACILITY OPERATIONS

Impact Summary

Impact Type	Employment	Labor Income	Output
Direct Effect	6.0	$146,500	$1,174,098
Indirect Effect	2.1	$110,093	$314,420
Induced Effect	1.4	$57,729	$170,796
Total Effect	9.4	$317,322	$1,659,313

Facility Impact Summary

- The facility itself will employ 6.0 FTEs, with a payroll of $146,500. These employees create $1,174,098 worth of goods/services (**direct effects).**

- Multiplied through many times through levels of the supply chain, the facility creates a demand of $314,420 worth of goods/services from the county economy. This requires 2.1 FTEs receiving a payroll of $110,093 **(indirect effects).**

- The spending from the direct & indirect FTEs' payroll creates a demand of $170,796 of goods and services from the local economy. This demand requires 1.4 FTEs, receiving a payroll of $57,729 **(induced effects).**

- The facility will have job impact of 9.4 FTEs with a payroll of $317,322 creating a $1,659,313 economic impact in Erie County **(total impact).**

Non-Local Visitor Spending Impact

The area where additional economic impact can be expected will be related to “sports tourism” visitor spending if and as the existence of the facility draws new visitors to Erie County. Calculations of economic impact in this area would tie directly to the number of users estimated for the proposed facility, the percentage of those users who are likely to be from outside Erie County and the number of those who would be visiting the county with the proposed new facility as their primary destination.

Generated economic impact would result from the import of new dollars which are spent and retained locally. Spending by local residents would not be considered since it represents displaced spending.

As gathering of spending data from prospective outside users was not a component of this project scope, a “sports tourism” visitor spending impact calculation was not generated as a function of the overall project economic impact analyses. However, the project team did want to make known that this third area of economic impact exists that could be calculated once the proposed facility was up and running, and when spending habit details from non-local users and visitors could be determined.

XII. APPENDIX

A. Existing Conditions/Supply Analysis – Mapping Analysis

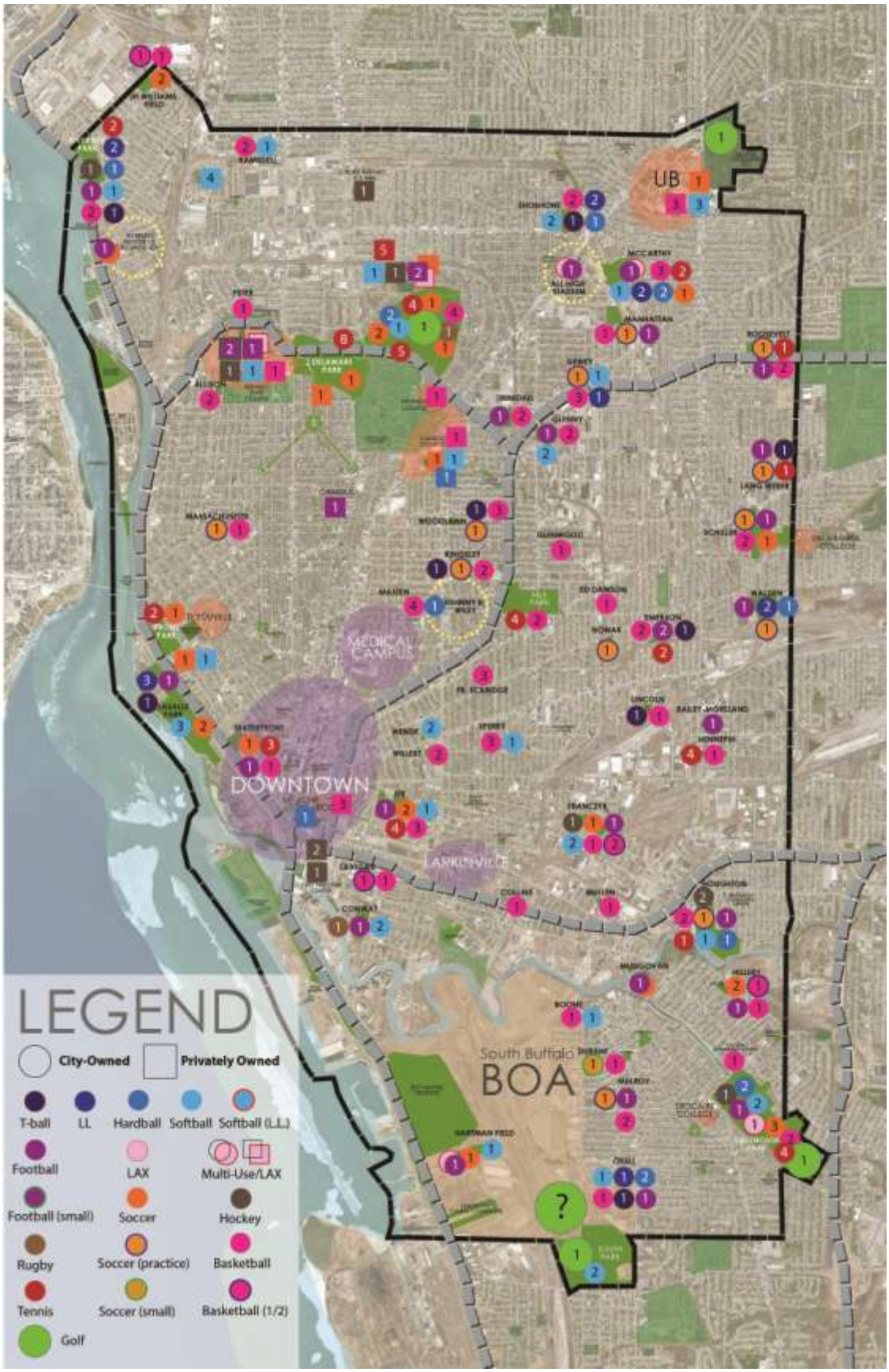
B. Cash Flow Model

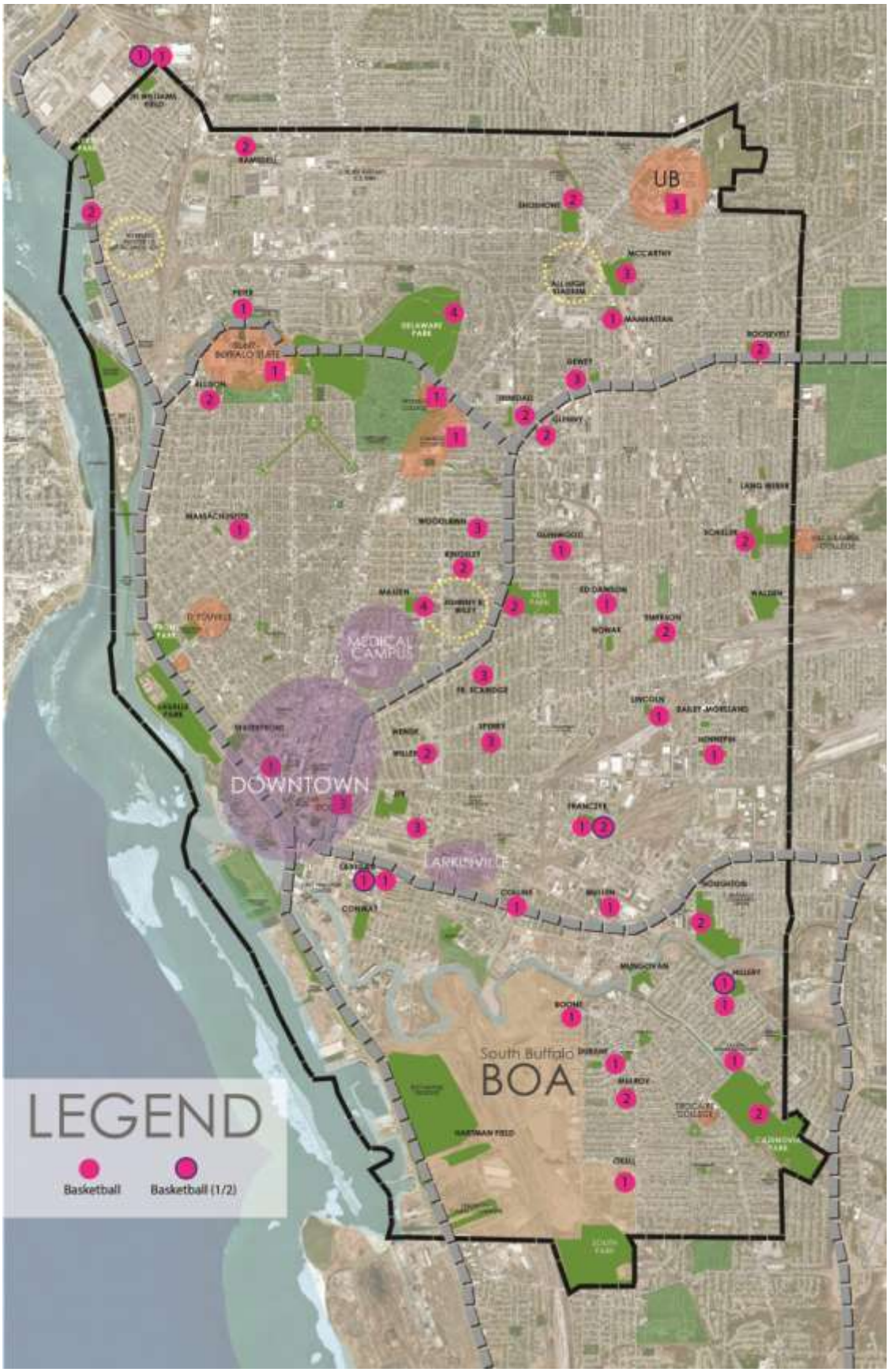
C. Economic Impact Analysis – Methodology Detail

E. Youth-Adult Soccer Field Requirements

D. Project Research – Information Source Summary

Appendix A. – Existing Conditions/Supply Analysis – Mapping Analysis


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
City-Owned
Privately Owned
T-ball
LL
Hardball
Softball
Softball (LL)
Football
LAX
Multi-Use/LAX
Football (small)
Soccer
Hockey
Rugby
Soccer (practice)
Basketball
Tennis
Soccer (small)
Basketball (1/2)
Golf


UB
DOWNTOWN
MEDICAL CAMPUS
LARKINVILLE
South Buffalo
BOA
LEGEND
Basketball
Basketball (1/2)


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Football
Football (small)


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Golf
?

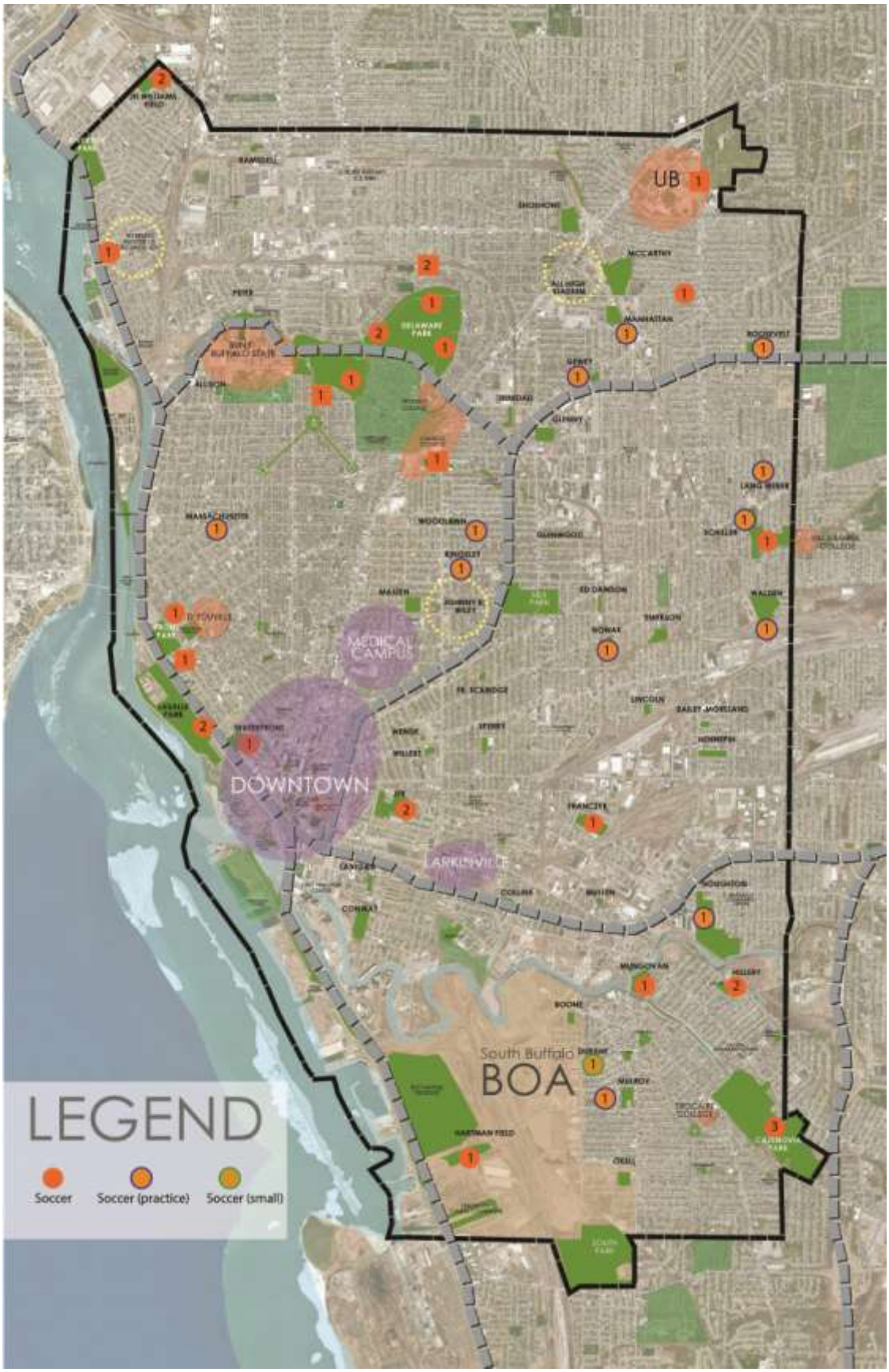

UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Hardball


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Hockey


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Lacrosse


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Little League


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Rugby


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Soccer
Soccer (practice)
Soccer (small)


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Softball
Softball (L.L.)


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
T-Ball


UB
MEDICAL CAMPUS
DOWNTOWN
LARKINVILLE
South Buffalo
BOA
LEGEND
Tennis

Appendix B. – Cash Flow Model

COB Turf Field Complex - Indicative Financial Performance Model

	Hours	Qty	Year 1	Year 2	Year 3	Year 1	Year 2	Year 3
IN SEASON:						OFF SEASON:		
Weekday Offtime (8-5)	9		20%			10%		
Weekday Primetime (5-11)	6		85%			25%		
Weekend (Sa 8-11, Su 8-6)	25		90%			25%		
Rates:								
Indoor Field Offtime	$80	3						
Indoor Field Primetime	$135							
Full Field	$275							
Cage	$25	4						

CASH FLOW MODEL - YEAR 1

REVENUE	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	**TOTAL**
Indoor Fields													
Weekday Primetime Usage	44,718	44,718	44,718	44,718	44,718	44,718	13,152	13,152	13,152	13,152	13,152	13,152	**347,223**
Weekday Offtime Usage	9,353	9,353	9,353	9,353	9,353	9,353	4,676	4,676	4,676	4,676	4,676	4,676	**84,175**
Weekend Usage	36,450	36,450	36,450	36,450	36,450	36,450	6,000	6,000	6,000	6,000	6,000	6,000	**254,700**
Outdoor Fields													
Weekday Usage	22,000	0	0	0	22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	**198,000**
Weekend Usage	22,000				22,000	22,000	22,000	22,000	22,000	22,000	22,000	22,000	**198,000**
Clinics	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**
Special Events	0	0	0	0	0	0	0	0	0	0	0	0	**0**
Summer Camps	0	0	0	0	0	0	0	0	4,000	4,000	0	0	**8,000**
TOTAL USAGE REVENUE	135,521	91,521	91,521	91,521	135,521	135,521	68,829	68,829	72,829	72,829	68,829	68,829	**1,102,098**
Net Food Concessions	4,000	4,000	4,000	4,000	4,000	4,000	0	0	0	0	0	0	**24,000**
Field Sponsorship Rights	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	2,000	**24,000**
Grants/Donations/Pledges	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**
Sponsorship Packages	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**
TOTAL REVENUE	143,521	99,521	99,521	99,521	143,521	143,521	72,829	72,829	76,829	76,829	72,829	72,829	**1,174,098**

EXPENSES													
Payroll - Facility Management	11,458	11,458	11,458	11,458	11,458	11,458	11,458	11,458	11,458	11,458	11,458	11,458	**137,500**
Payroll - Sports Coordinators	750	750	750	750	750	750	750	750	750	750	750	750	**9,000**
Management Company Fee	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	**30,000**
Utilities	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	12,500	**150,000**
Telephone/Internet	300	300	300	300	300	300	300	300	300	300	300	300	**3,600**
Insurance	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	2,500	**30,000**
Building/Grounds Maintenance	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	1,500	**18,000**
Equipment Replacement Fund	833	833	833	833	833	833	833	833	833	833	833	833	**10,000**
Office Expense/Supplies	300	300	300	300	300	300	300	300	300	300	300	300	**3,600**
Contract Services	750	750	750	750	750	750	750	750	750	750	750	750	**9,000**
Legal/Accounting Fees	500	500	500	500	500	500	500	500	500	500	500	500	**6,000**
Marketing	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	**12,000**
Loan Repayment - Construction (1)	56,706	56,706	56,706	56,706	56,706	56,706	56,706	56,706	56,706	56,706	56,706	56,706	**680,472**
TOTAL EXPENSES	91,598	91,598	91,598	91,598	91,598	91,598	91,598	91,598	91,598	91,598	91,598	91,598	**1,099,172**
NET CASH FLOW	51,923	7,923	7,923	7,923	51,923	51,923	(18,769)	(18,769)	(14,769)	(14,769)	(18,769)	(18,769)	**74,926**

(1) Assumes 80% of $10,498,000 at 6.5% over 25 years

Appendix C. – Economic Impact Analysis – Methodology Detail

The economic impact analysis estimating the economic and fiscal impacts of the CNYRP study was completed using the IMPLAN economic impact (or input-output) model. The IMPLAN model is used by more than 500 universities and government agencies to estimate the economic and fiscal impacts of investments and/or changes in industry, to forecast tax revenue and employment generation, and to conduct economic comparison studies of two or more geographic locations.

IMPLAN Economic Impact Analysis Description

IMPLAN is an input-output model. Input-output accounting describes commodity flows from producers to intermediate and final consumers. The total industry purchases of commodities, services, employment compensation, value added, and imports are equal to the value of the commodities produced.

An IMPLAN impact analysis involves specifying a series of expenditures and applying them to the region's economic multipliers. The expenditures are identified in terms of (1) the sectoring scheme for the model, (2) in producer prices, and (3) in historical dollars with the current year used as a base year. Only the dollars spent within the regional are multiplied to the model.

The notion of a multiplier rests upon the difference between the initial effect of a change in final demand and the total effects of that change. Total effects can be calculated either as direct and indirect effects, or as a combination of direct, indirect, and induced effects.

Direct effects are production changes associated with the immediate effects or final demand changes. Indirect effects are production changes in backward-linked industries caused by the changing input needs of directly affected industries (for example, additional purchases to produce additional output). Induced effects are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects.

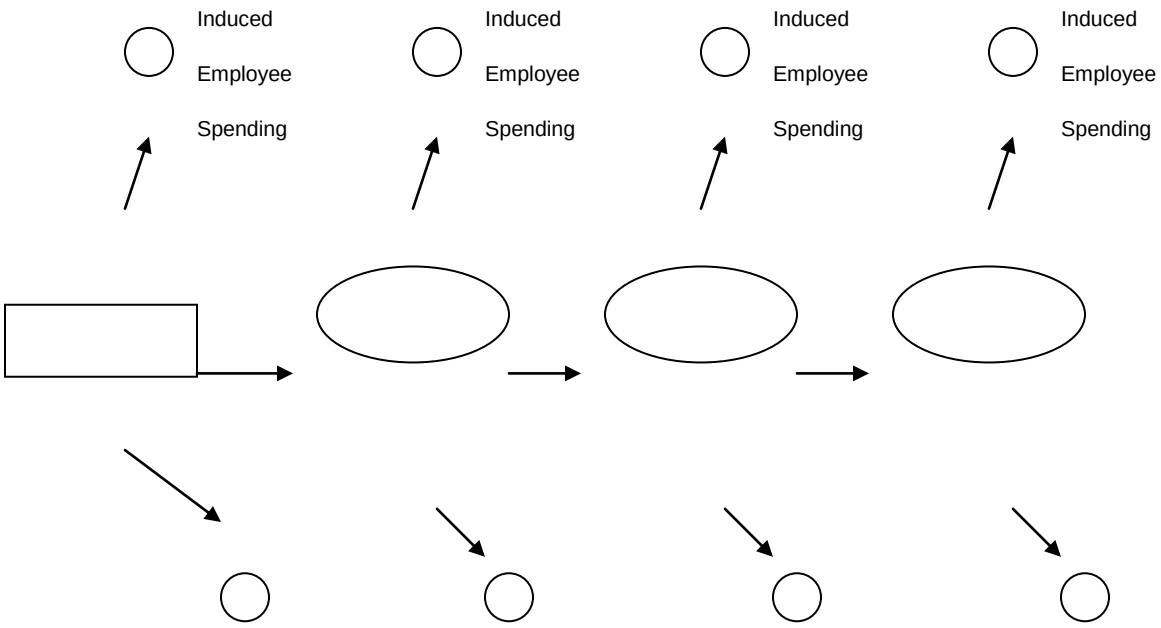
Purchases for final use (i.e. final demand) drive the model. Industries producing goods and services for final demand purchase goods and services from other producers. These other producers, in turn, purchase goods and services. This buying of goods and services (indirect purchases) continues until leakage from the region (imports and value added) stops the cycle.

These indirect and induced effects (i.e. the effects of household spending) can be mathematically derived. The resulting sets of multipliers describe the change of output for each and every regional industry caused by a one dollar change in final demand for any given industry.

Creating a regional input-output model requires a tremendous amount of data. The costs of surveying industries within each region to derive a list of commodity purchases (i.e. production functions) are prohibitive. IMPLAN was developed as a cost-effective means to develop regional input-output models. The IMPLAN data accounts closely follow the accounting conventions used in the “Input-Output Study of the U.S. Economy” by the Bureau of Economic Analysis (1980) and also the rectangular formula recommended by the United Nations.

To establish useful definitions, “economic impact” is also referred to as “economic output” or spending. This value represents all sales of goods or services either at the intermediate or final product (i.e. retail) level. Diagram One provides a graphical representation how direct spending, indirect spending, and induced spending occur as spent dollars flow through a designated geographic economy, and how jobs are created from this spending.

Diagram One



= Direct Spending and Effects

= Indirect Spending and Effects

= Induced Spending and Effects

Appendix D. – Youth-Adult Soccer Field Requirements

Adult Soccer Field Dimensions: The optimum size is 75 yards (68.58m) by 120 yards (109.73m).

Rules: The field of play shall be rectangular. Width shall not exceed the length. The width shall not be more than 80 yards (73.15M) nor less than 65 yards (59.44m)

The length shall not be more than 120 yards (109.72m) nor less than 110 yards (100.58m).

US Youth Soccer Field Dimensions

Age	Field Width	Field Length
Youth	**Min - Maximum**	**Min - Maximum**
U6 - U7	(15 - 20 yards)	(25 - 30 yards)
U8	(20 - 25 yards)	(30 - 40 yards)
U9	(30 - 35 yards)	(40 - 50 yards)
U10	(40 - 50 yards)	(60 - 70 yards)
U11	(40 - 50 yards)	(70 - 80 yards)
U12	(40 - 55 yards)	(100 - 105 yards)
U13	(50 - 60 yards)	(100 - 110 yards)
Adult	(65 - 80 yards)	(110 - 120 yards)
International	(70 - 80 yards)	(110 - 120 yards

Source: The Soccer Institute

Appendix E. - Project Research – Information Source Summary

1. Primary Research

○ *Public Sector Entities*

Buffalo Urban Development Corporation
City of Buffalo – Division of Parks & Recreation
City of Buffalo - Office of Strategic Planning
Empire State Development Corporation
Erie Canal Harbor Development Corporation
Erie County – Department of Planning
New York State

○ *Colleges and Private Schools*

Buffalo State College
Canisius College
Canisius High School
Daemen College
D'Youville College
Erie Community College
Medaille College
Nichols School
Tapestry Charter School

○ *Youth/Adult Recreational Sports*

Blackwatch Premier
Buffalo District Soccer League
Buffalo Soccer Council
Buffalo Social Club
Buffalo WNY Junior Soccer League
Delaware Soccer Club
Empire United
English Pork Pie Company
Fellowship of Christian Athletes/Niagara Power Baseball
FC Buffalo
Game On
M/ilesports

New York Premier Soccer
Police Athletic League (PAL)
Queen City Softball
Soccer Shots
South Buffalo Softball
UB Track
West Side Soccer
Youth Box Lacrosse

- ***Other***

The Buffalo Legacy Project/Pierce Field at Mulroy Park
Visit Buffalo Niagara/Greater Buffalo Sports Commission
The Wellness Institute

2. Secondary Research

- ***Documentation***

"American Fitness Index" (American College of Sports Medicine);
"City-Wide Parks Improvements Court Assessments" (Nussbaumer & Clarkee, Inc., 2012);
Lewiston (NY) Recreation & Senior Center – Program Plan;
"Park, Recreation, Open Space and Greenway Guidelines" (National Recreation and Park Association);
"Parks and Recreation National Database Report – 2012" (National Recreation and Park Association);
"Parks and Recreation National Database Report – 2014" (National Recreation and Park Association);
"Recreation, Park and Open Space Standards and Guidelines – 1983" (National Recreation and Park Association);
"Special Park District National Database Report " (National Recreation and Park Association);
"The Trust for Public Land, Center for City Park Excellence: 2014 City Park Facts";
"Time to Act: Investing in the Health of Our Children and Communities (Robert Woods Johnson Foundation, 2013);

- ***Websites***

American Fitness Index
Athletic Business
Buffalo District Soccer League
The Buffalo Legacy Project
The Buffalo News
Buffalo Rising
Buffalo School of Baseball
Buffalo Soccer Club
Buffalo Soccer Council
Buffalo State College
Buffalo Storm AAU Basketball
Buffalo Titans Basketball
Buffalo Wings Travel Baseball
Buffalo and WNY Junior Soccer League
Canisius High School
Canisius College
City of Buffalo (GIS maps section)
City-Data (City Top Lists)
City Parks Alliance
Daemen College
D'Youville College
Delaware Soccer Club
Empire United SA
Epic Center
Erie Canal Harbor Development Corporation
Erie Community College
Erie County
Go Bike Buffalo
Greater Buffalo Track Club
Medaille College
M/ilesports
National Recreation and Park Association
New Era Park
NYS West Youth Soccer Association
Nichols School
Pierce Field@Mulroy Park
Sahlens Sports Park
ShareRanks

Soccer Institute
SPIRE Sports Academy
Sport Center 481
Sports Performance Park
Tapestry Charter School
Total Sports Experience
Tournament Town (Brooklyn USA)
The Trust for Public Land
Visit Buffalo Niagara
Wallet Hub (2014 Best & Worst Cities for Recreation)
Wellness Institute

Section III

Property's Environmental History

Figure III-A – Site Sampling Locations

Figure III-B – VOC in Soil

Figure III-C – SVOC in Soil

Figure III-D – Metals in Soil

Figure III-E – Groundwater Concentrations

Table III-A – VOC Soil Analytical Testing Results

Table III-B – SVOC Soil Analytical Testing Results

Table III-C – Metals and PCB Soil Analytical Testing Results

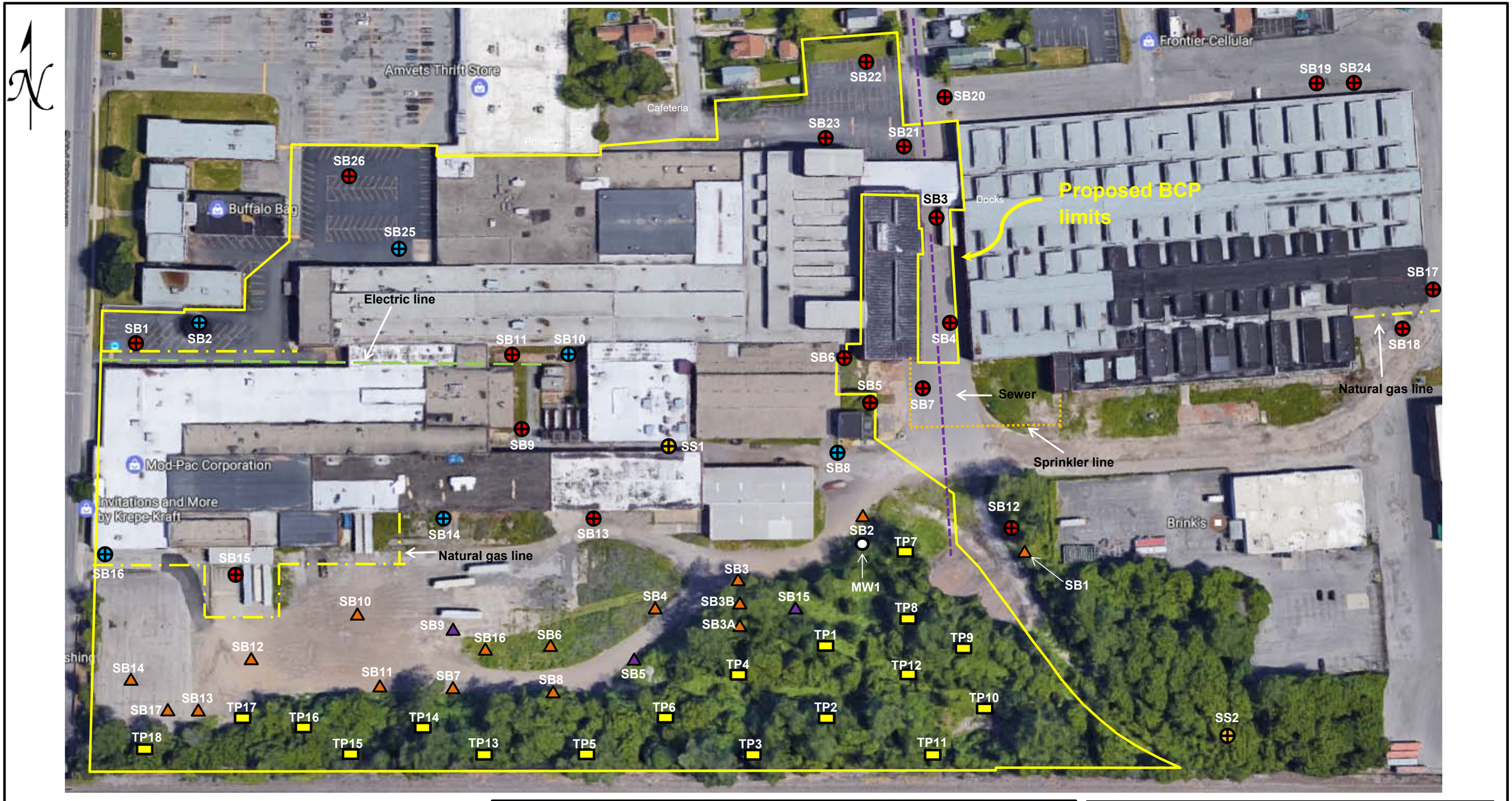
Table III-D – Groundwater Analytical Testing Results

Soil Boring and Test Pit Logs – October 2015 Locations

Soil Boring Logs – December 2016 Locations

Analytical Testing Results – October 2015 Locations

Analytical Testing Results – December 2016 Locations



KEY

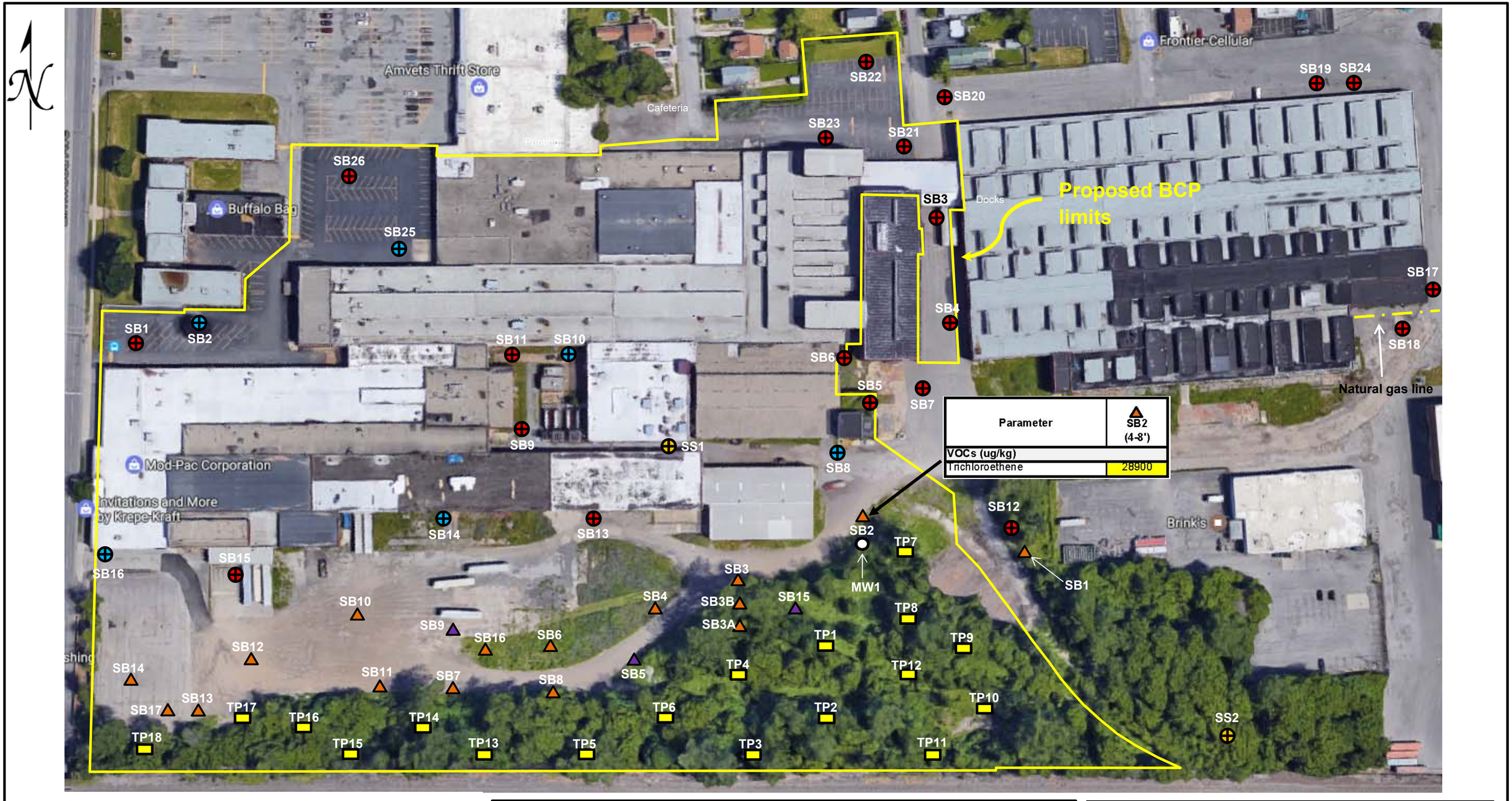
- Soil Boring Locations (12/21-12/23/16)
- Soil Boring & Piezometer Locations (12/21-12/23/16)
- Surface Soil Locations (12/21-12/23/16)
- Soil Boring & Micro Well Locations (10/15-10/16/15)
- Soil Boring Locations (10/15-10/16/15)
- Test Pit Locations (10/15-10/16/15)
- MW1 – Existing Monitoring Well

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

Site Sampling Locations
MOD-PAC CORP.
1801 ELMWOOD AVENUE
BUFFALO, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY: MMW	DATE: 2/17	FIGURE NO: III-A



Parameter	SB2 (4-8')
VOCs (ug/kg)	
Trichloroethene	28900

Notes:
1 – Detected concentrations for VOCs, SVOCs and PCB in ppb; metals in ppm
2 - Proposed Cleanup Standards = Restricted Residential in Southern Portion and Commercial in Central/Northern Portion
= exceeds Restricted Residential SCO
= exceeds Commercial SCO
= exceeds Industrial SCO

KEY

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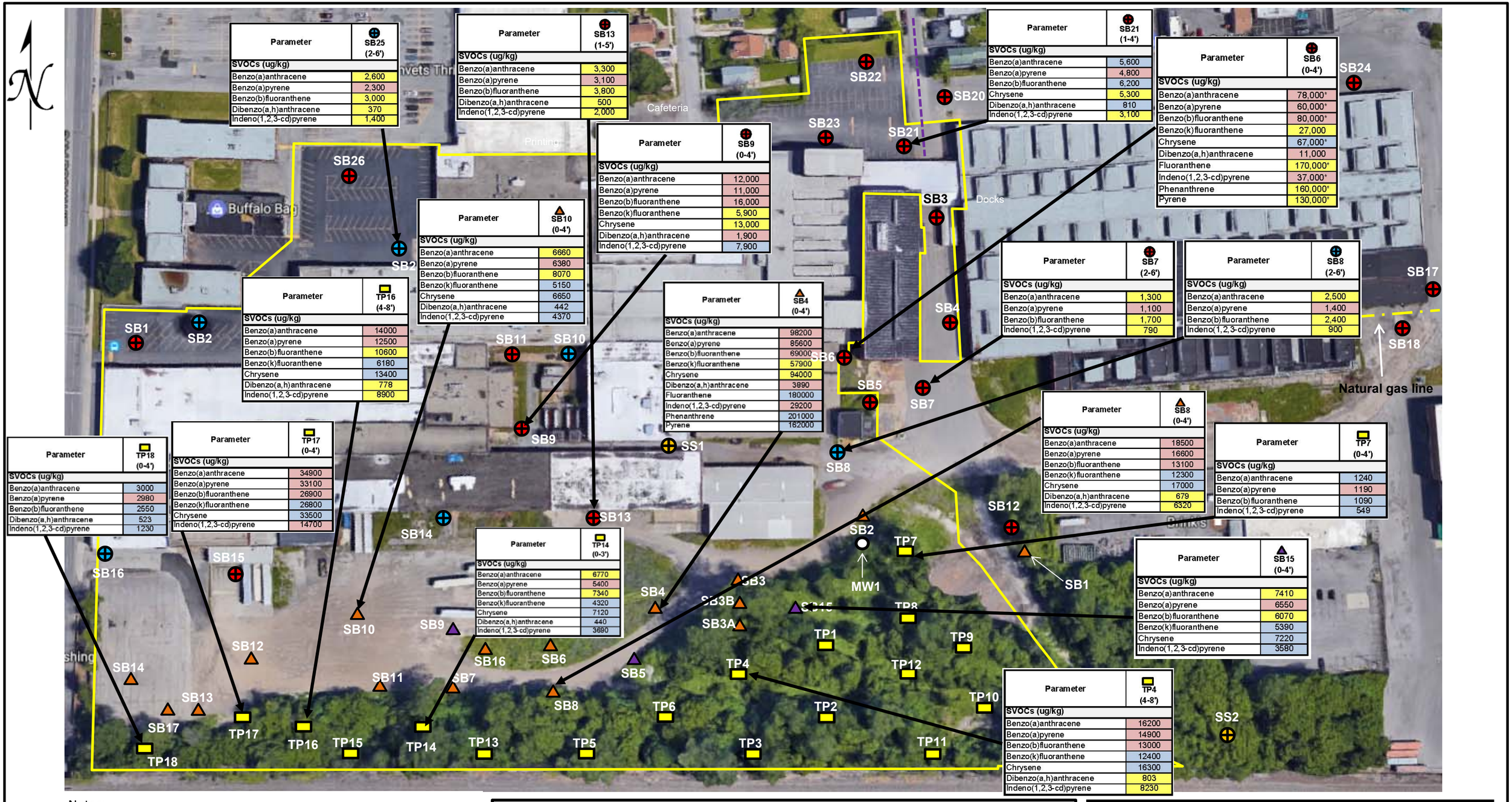
- MW1 – Existing Monitoring Well

HAZARD EVALUATIONS, INC.
Phase I/II Audits – Site Investigations – Facility Inspections

VOCs in Soil
MOD-PAC CORP.
1801 ELMWOOD AVENUE
BUFFALO, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY: MMW	DATE: 2/17	FIGURE NO: III-B



Parameter	SB25 (2-6')
SVOCs (ug/kg)	
Benzo(a)anthracene	2,600
Benzo(a)pyrene	2,300
Benzo(b)fluoranthene	3,000
Dibenzo(a,h)anthracene	370
Indeno(1,2,3-cd)pyrene	1,400

Parameter	SB13 (1-5')
SVOCs (ug/kg)	
Benzo(a)anthracene	3,300
Benzo(a)pyrene	3,100
Benzo(b)fluoranthene	3,800
Dibenzo(a,h)anthracene	500
Indeno(1,2,3-cd)pyrene	2,000

Parameter	SB21 (1-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	5,600
Benzo(a)pyrene	4,800
Benzo(b)fluoranthene	6,200
Chrysene	5,300
Dibenzo(a,h)anthracene	810
Indeno(1,2,3-cd)pyrene	3,100

Parameter	SB6 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	78,000*
Benzo(a)pyrene	60,000*
Benzo(b)fluoranthene	80,000*
Benzo(k)fluoranthene	27,000
Chrysene	67,000*
Dibenzo(a,h)anthracene	11,000
Fluoranthene	170,000*
Indeno(1,2,3-cd)pyrene	37,000*
Phenanthrene	160,000*
Pyrene	130,000*

Parameter	SB9 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	12,000
Benzo(a)pyrene	11,000
Benzo(b)fluoranthene	16,000
Benzo(k)fluoranthene	5,900
Chrysene	13,000
Dibenzo(a,h)anthracene	1,900
Indeno(1,2,3-cd)pyrene	7,900

Parameter	SB10 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	6660
Benzo(a)pyrene	6380
Benzo(b)fluoranthene	8070
Benzo(k)fluoranthene	5150
Chrysene	6650
Dibenzo(a,h)anthracene	442
Indeno(1,2,3-cd)pyrene	4370

Parameter	TP16 (4-8')
SVOCs (ug/kg)	
Benzo(a)anthracene	14000
Benzo(a)pyrene	12500
Benzo(b)fluoranthene	10600
Benzo(k)fluoranthene	6180
Chrysene	13400
Dibenzo(a,h)anthracene	778
Indeno(1,2,3-cd)pyrene	8900

Parameter	SB4 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	98200
Benzo(a)pyrene	85600
Benzo(b)fluoranthene	69000
Benzo(k)fluoranthene	57900
Chrysene	94000
Dibenzo(a,h)anthracene	3890
Fluoranthene	180000
Indeno(1,2,3-cd)pyrene	29200
Phenanthrene	201000
Pyrene	162000

Parameter	SB7 (2-6')
SVOCs (ug/kg)	
Benzo(a)anthracene	1,300
Benzo(a)pyrene	1,100
Benzo(b)fluoranthene	1,700
Indeno(1,2,3-cd)pyrene	790

Parameter	SB8 (2-6')
SVOCs (ug/kg)	
Benzo(a)anthracene	2,500
Benzo(a)pyrene	1,400
Benzo(b)fluoranthene	2,400
Indeno(1,2,3-cd)pyrene	900

Parameter	TP18 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	3000
Benzo(a)pyrene	2980
Benzo(b)fluoranthene	2550
Dibenzo(a,h)anthracene	523
Indeno(1,2,3-cd)pyrene	1230

Parameter	TP17 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	34900
Benzo(a)pyrene	33100
Benzo(b)fluoranthene	26900
Benzo(k)fluoranthene	26800
Chrysene	33500
Indeno(1,2,3-cd)pyrene	14700

Parameter	TP14 (0-3')
SVOCs (ug/kg)	
Benzo(a)anthracene	6770
Benzo(a)pyrene	5400
Benzo(b)fluoranthene	7340
Benzo(k)fluoranthene	4320
Chrysene	7120
Dibenzo(a,h)anthracene	440
Indeno(1,2,3-cd)pyrene	3690

Parameter	SB8 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	18500
Benzo(a)pyrene	16600
Benzo(b)fluoranthene	13100
Benzo(k)fluoranthene	12300
Chrysene	17000
Dibenzo(a,h)anthracene	679
Indeno(1,2,3-cd)pyrene	6320

Parameter	TP7 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	1240
Benzo(a)pyrene	1190
Benzo(b)fluoranthene	1090
Indeno(1,2,3-cd)pyrene	549

Parameter	SB15 (0-4')
SVOCs (ug/kg)	
Benzo(a)anthracene	7410
Benzo(a)pyrene	6550
Benzo(b)fluoranthene	6070
Benzo(k)fluoranthene	5390
Chrysene	7220
Indeno(1,2,3-cd)pyrene	3580

Parameter	TP4 (4-8')
SVOCs (ug/kg)	
Benzo(a)anthracene	16200
Benzo(a)pyrene	14900
Benzo(b)fluoranthene	13000
Benzo(k)fluoranthene	12400
Chrysene	16300
Dibenzo(a,h)anthracene	803
Indeno(1,2,3-cd)pyrene	8230

Notes:
1 – Detected concentrations for VOCs, SVOCs and PCB in ppb; metals in ppm
2 - Proposed Cleanup Standards = Restricted Residential in Southern Portion and Commercial in Central/Northern Portion
= exceeds Restricted Residential SCO
= exceeds Commercial SCO
= exceeds Industrial SCO

KEY

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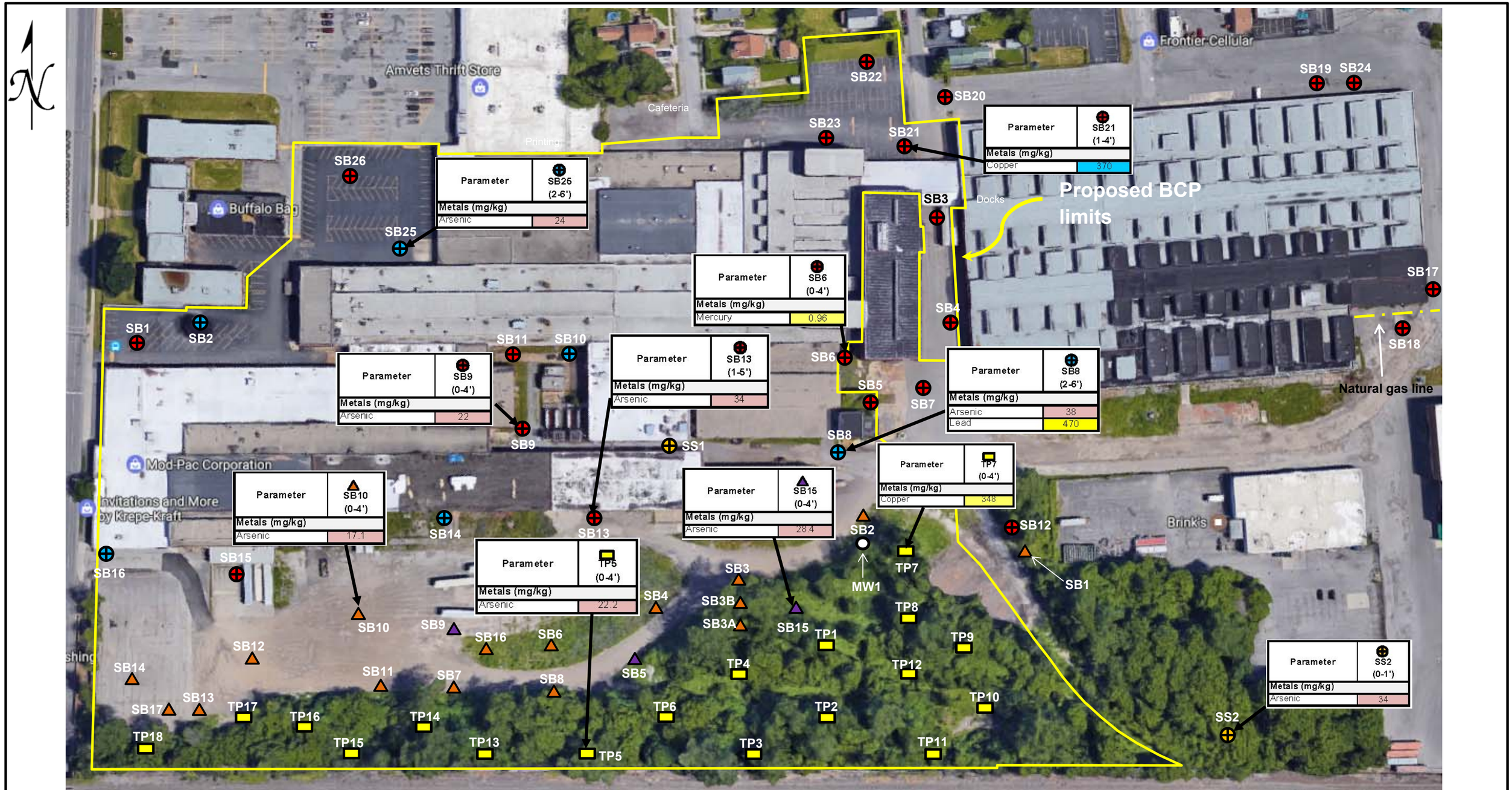
- Soil Boring Locations (10/15-10/16/15)
- Test Pit Locations (10/15-10/16/15)
- MW1 – Existing Monitoring Well

HAZARD EVALUATIONS, INC.
Phase I/II Audits – Site Investigations – Facility Inspections

SVOCs in Soil
MOD-PAC CORP.
1801 ELMWOOD AVENUE
BUFFALO, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY: MMW	DATE: 2/17	FIGURE NO: III-C



Notes:

1 – Detected concentrations for VOCs, SVOCs and PCB in ppb; metals in ppm

2 - Proposed Cleanup Standards = Restricted Residential in Southern Portion and Commercial in Central/Northern Portion

= exceeds Restricted Residential SCO

= exceeds Commercial SCO

= exceeds Industrial SCO

KEY

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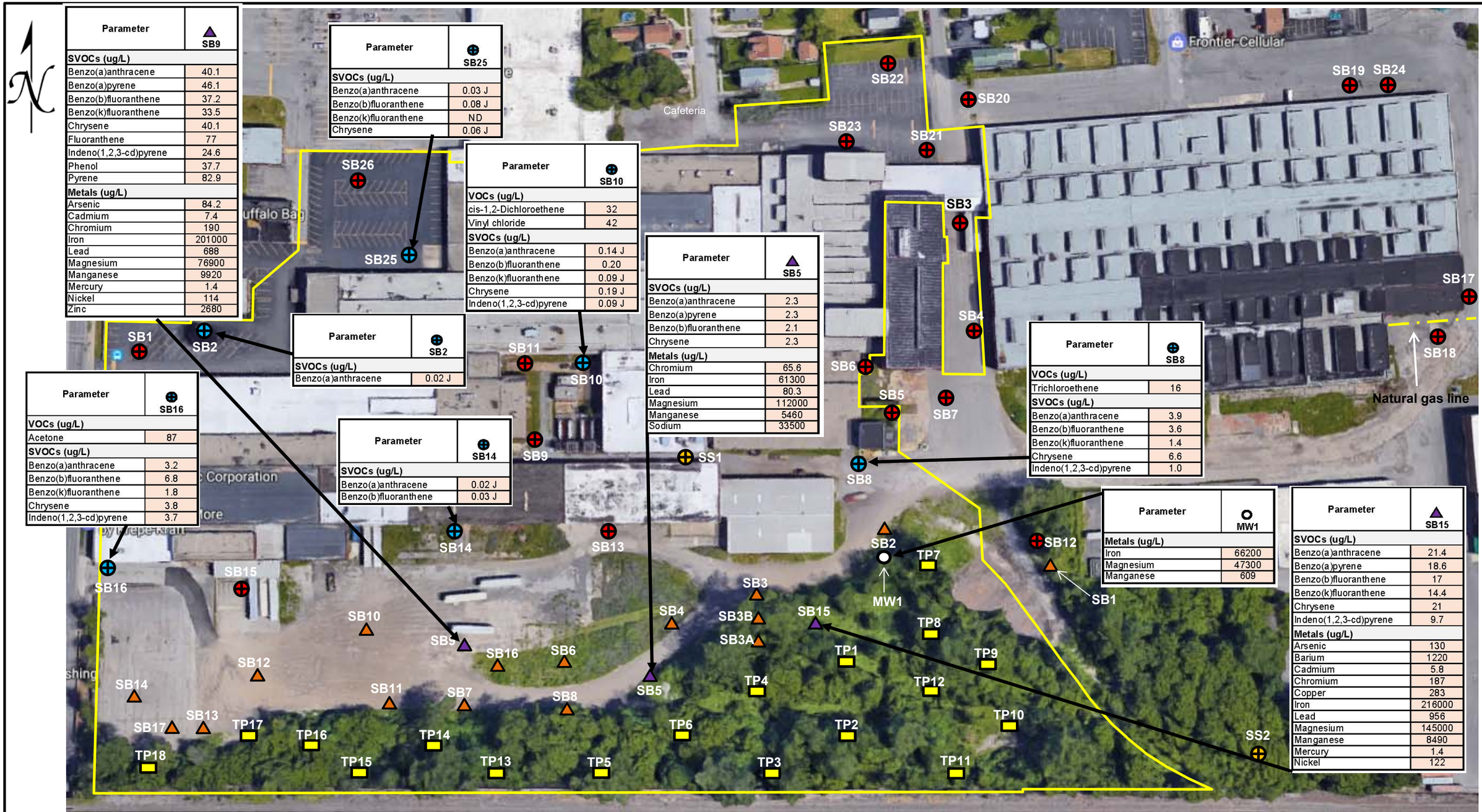
- Soil Boring Locations (10/15-10/16/15)
- Test Pit Locations (10/15-10/16/15)
- MW1 – Existing Monitoring Well

HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

Metals in Soil
MOD-PAC CORP.
1801 ELMWOOD AVENUE
BUFFALO, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY: MMW	DATE: 2/17	FIGURE NO: III-D



Parameter	SB9
SVOCs (ug/L)	
Benzo(a)anthracene	40.1
Benzo(a)pyrene	46.1
Benzo(b)fluoranthene	37.2
Benzo(k)fluoranthene	33.5
Chrysene	40.1
Fluoranthene	77
Indeno(1,2,3-cd)pyrene	24.6
Phenol	37.7
Pyrene	82.9
Metals (ug/L)	
Arsenic	84.2
Cadmium	7.4
Chromium	190
Iron	201000
Lead	688
Magnesium	76900
Manganese	9920
Mercury	1.4
Nickel	114
Zinc	2680

Parameter	SB25
SVOCs (ug/L)	
Benzo(a)anthracene	0.03 J
Benzo(b)fluoranthene	0.08 J
Benzo(k)fluoranthene	ND
Chrysene	0.06 J

Parameter	SB10
VOCs (ug/L)	
cis-1,2-Dichloroethene	32
Vinyl chloride	42
SVOCs (ug/L)	
Benzo(a)anthracene	0.14 J
Benzo(b)fluoranthene	0.20
Benzo(k)fluoranthene	0.09 J
Chrysene	0.19 J
Indeno(1,2,3-cd)pyrene	0.09 J

Parameter	SB5
SVOCs (ug/L)	
Benzo(a)anthracene	2.3
Benzo(a)pyrene	2.3
Benzo(b)fluoranthene	2.1
Chrysene	2.3
Metals (ug/L)	
Chromium	65.6
Iron	61300
Lead	80.3
Magnesium	112000
Manganese	5460
Sodium	33500

Parameter	SB2
SVOCs (ug/L)	
Benzo(a)anthracene	0.02 J

Parameter	SB8
VOCs (ug/L)	
Trichloroethene	16
SVOCs (ug/L)	
Benzo(a)anthracene	3.9
Benzo(b)fluoranthene	3.6
Benzo(k)fluoranthene	1.4
Chrysene	6.6
Indeno(1,2,3-cd)pyrene	1.0

Parameter	SB16
VOCs (ug/L)	
Acetone	87
SVOCs (ug/L)	
Benzo(a)anthracene	3.2
Benzo(b)fluoranthene	6.8
Benzo(k)fluoranthene	1.8
Chrysene	3.8
Indeno(1,2,3-cd)pyrene	3.7

Parameter	SB14
SVOCs (ug/L)	
Benzo(a)anthracene	0.02 J
Benzo(b)fluoranthene	0.03 J

Parameter	MW1
Metals (ug/L)	
Iron	66200
Magnesium	47300
Manganese	609

Parameter	SB15
SVOCs (ug/L)	
Benzo(a)anthracene	21.4
Benzo(a)pyrene	18.6
Benzo(b)fluoranthene	17
Benzo(k)fluoranthene	14.4
Chrysene	21
Indeno(1,2,3-cd)pyrene	9.7
Metals (ug/L)	
Arsenic	130
Barium	1220
Cadmium	5.8
Chromium	187
Copper	283
Iron	216000
Lead	956
Magnesium	145000
Manganese	8490
Mercury	1.4
Nickel	122

Notes:
1 – Detected concentrations for VOCs, SVOCs and metals in ppb;
2 - Proposed Cleanup Standards = Restricted Residential in Southern Portion and Commercial in Central/Northern Portion
= exceeds Groundwater Criteria

KEY

- Soil Boring Locations (12/21-12/23/16)
- Soil Boring & Piezometer Locations (12/21-12/23/16)
- Surface Soil Locations (12/21-12/23/16)
- Soil Boring & Micro Well Locations (10/15-10/16/15)
- Soil Boring Locations (10/15-10/16/15)
- Test Pit Locations (10/15-10/16/15)
- MW1 – Existing Monitoring Well

HAZARD EVALUATIONS, INC.
Phase I/II Audits – Site Investigations – Facility Inspections

Groundwater Concentrations
MOD-PAC CORP.
1801 ELMWOOD AVENUE
BUFFALO, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY: MMW	DATE: 1/17	FIGURE NO: III-E

Table III-A
Volatile Organic Compound - Soil Analytical Testing Results Summary
1801 Elmwood Avenue Buffalo, New York

	October 2015																			
Parameter	**SB1 (0-4')**	**SB2 (4-8')**	**SB4 (0-4')**	**SB8 (0-4')**	**SB10 (0-4')**	**SB12 (0-4')**	**SB14 (0-4')**	**SB15 (0-4')**	**TP4 (4-8')**	**TP4 (9-12')**	**TP5 (0-4')**	**TP7 (0-4')**	**TP10 (4-8')**	**TP11 (0-4')**	**TP14 (0-3')**	**TP16 (4-8')**	**TP17 (0-4')**	**TP18 (0-4')**	**UUSCO**	**RRUSCO**	**CUSCO**	**IUSCO**
GC/MS Volatiles 8260C Analysis (ug/kg)																						
1,2,4-Trimethylbenzene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	3,600	52,000	190,000	380,000
1,3,5-Trimethylbenzene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	8,400	52,000	190,000	380,000
Acetone	ND	ND	ND	ND	ND	ND	ND	ND	ND	219	ND	ND	95.5	NT	ND	ND	ND	ND	50	100,000	500,000	1,000,000
Benzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	60	4,800	44,000	89,000
2-Butanone (MEK)	ND	833	ND	ND	ND	ND	ND	ND	ND	28.1	ND	ND	ND	NT	ND	ND	ND	ND	120	100,000	500,000	1,000,000
cis-1,2-Dichloroethene	ND	10200	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	250	100,000	500,000	1,000,000
trans-1,2-Dichloroethene	ND	788	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	190	100,000	500,000	1,000,000
Ethylbenzene	ND	ND	ND	ND	6.2	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	1,000	41,000	390,000	780,000
Isopropylbenzene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	NV	NV	NV	NV
Methylene chloride	17.2	ND	ND	4.7 B	6.6	3.8 B	1.8	3.7 B	4.4	ND	8.0	ND	11.2	NT	ND	ND	ND	ND	50	100,000	500,000	1,000,000
n-Butylbenzene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	12,000	100,000	500,000	1,000,000
n-Propylbenzene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	3,900	100,000	500,000	1,000,000
Naphthalene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	12,000	100,000	500,000	1,000,000
o-Xylene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	260	100,000	500,000	1,000,000
p-Isopropyltoluene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	NV	NV	NV	NV
p/m-Xylene	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NT	NR	NR	NR	NR	260	100,000	500,000	1,000,000
sec-Butylbenzene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	11,000	100,000	500,000	1,000,000
Tetrachloroethene	ND	ND	ND	ND	ND	ND	ND	4.7	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	1,300	19,000	150,000	300,000
Toluene	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	700	100,000	500,000	1,000,000
Trichloroethene	ND	28900	ND	ND	ND	ND	ND	4.3	3.8	ND	2.2	ND	ND	NT	ND	ND	ND	ND	470	21,000	200,000	400,000
Vinyl chloride	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	20	900	13,000	27,000
Xylene (total)	ND	ND	ND	ND	47.1	ND	ND	ND	2.0	ND	ND	ND	ND	NT	519	ND	ND	ND	260	100,000	500,000	1,000,000

	December 2016																		
Parameter	**SB1 (2-6')**	**SB6 (0-4')**	**SB7 (2-6')**	**SB8 (2-6')**	**SB9 (0-2')**	**SB9 (0-4')**	**SB10 (1-3')**	**SB11 (1-3')**	**SB13 (1-5')**	**SB14 (0-4')**	**SB16 (.5-4.5')**	**SB21 (1-4')**	**SB25 (2-6')**	**SS1 (0-1')**	**SS2 (0-1')**	**UUSCO**	**RRUSCO**	**CUSCO**	**IUSCO**
GC/MS Volatiles 8260C Analysis (ug/kg)																			
1,2,4-Trimethylbenzene	NT	2.3 J	6.3	290 J	NT	1.9 J	NT	NT	13	NT	15	8.0	18	NT	NT	3,600	52,000	190,000	380,000
1,3,5-Trimethylbenzene	NT	4.6 J	2.4 J	79 J	NT	6.9	NT	NT	3.5 J	NT	4.2 J	2.6 J	6.4	NT	NT	8,400	52,000	190,000	380,000
Acetone	NT	4.0 J	14	ND	NT	2.7 J	NT	NT	6.1 J	NT	3.6 J	13	4.7 J	NT	NT	50	100,000	500,000	1,000,000
Benzene	NT	0.19 J	0.16 J	ND	NT	0.19 J	NT	NT	0.18 J	NT	ND	0.20 J	0.28 J	NT	NT	60	4,800	44,000	89,000
2-Butanone (MEK)	NT	ND	ND	ND	ND	ND	NT	NT	ND	NT	ND	ND	ND	NT	NT	120	100,000	500,000	1,000,000
cis-1,2-Dichloroethene	NT	ND	2.1	ND	NT	ND	NT	NT	ND	NT	ND	ND	ND	NT	NT	250	100,000	500,000	1,000,000
trans-1,2-Dichloroethene	NT	ND	ND	ND	ND	ND	NT	NT	ND	NT	ND	ND	ND	NT	NT	190	100,000	500,000	1,000,000
Ethylbenzene	NT	6.0	3.2	78	NT	11	NT	NT	5.1	NT	7.0	4.5	8.4	NT	NT	1,000	41,000	390,000	780,000
Isopropylbenzene	NT	0.46 J	0.30 J	9.9 J	NT	0.75 J	NT	NT	0.41 J	NT	0.52 J	0.38 J	0.88 J	NT	NT	NV	NV	NV	NV
Methylene chloride	NT	ND	ND	ND	ND	ND	NT	NT	ND	NT	ND	ND	ND	NT	NT	50	100,000	500,000	1,000,000
n-Butylbenzene	NT	0.62 J	0.17 J	31 J	NT	1.0 J	NT	NT	0.35 J	NT	0.33 J	0.16 J	0.50 J	NT	NT	12,000	100,000	500,000	1,000,000
n-Propylbenzene	NT	2.7	0.93 J	46 J	NT	6.0	NT	NT	2.0	NT	2.5	1.3	3.5	NT	NT	3,900	100,000	500,000	1,000,000
Naphthalene	NT	6.2	0.49 J	170 J	NT	3.4 J	NT	NT	0.74 J	NT	0.65 J	0.77 J	0.43 J	NT	NT	12,000	100,000	500,000	1,000,000
o-Xylene	NT	ND	ND	ND	NT	0.66 J	NT	NT	0.39 J	NT	0.40 J	ND	ND	NT	NT	260	100,000	500,000	1,000,000
p-Isopropyltoluene	NT	0.17 J	ND	ND	NT	0.17 J	NT	NT	ND	NT	ND	ND	0.15 J	NT	NT	NV	NV	NV	NV
p/m-Xylene	NT	2.9	12	340	NT	1.8 J	NT	NT	22	NT	32	18	36	NT	NT	260	100,000	500,000	1,000,000
sec-Butylbenzene	NT	0.14 J	ND	31 J	NT	0.17 J	NT	NT	ND	NT	ND	ND	0.18 J	NT	NT	11,000	100,000	500,000	1,000,000
Tetrachloroethene	NT	0.49 J	ND	ND	NT	11	NT	NT	ND	NT	0.50 J	ND	ND	NT	NT	1,300	19,000	150,000	300,000
Toluene	NT	0.35 J	ND	ND	NT	0.36 J	NT	NT	0.59 J	NT	0.45 J	ND	0.45 J	NT	NT	700	100,000	500,000	1,000,000
Trichloroethene	NT	8.5	2.5	3,300	NT	0.58 J	NT	NT	0.20 J	NT	0.49 J	ND	0.37 J	NT	NT	470	21,000	200,000	400,000
Vinyl chloride	NT	ND	0.25 J	ND	NT	ND	NT	NT	ND	NT	ND	ND	ND	NT	NT	20	900	13,000	27,000
Xylene (total)	NT	2.9	12	340	NT	2.46	NT	NT	22.39	NT	32.4	18	36	NT	NT	260	100,000	500,000	1,000,000

Notes:

1.October 2015 sample analysis completed by Accutest Laboratories; December 2016 sample analysis completed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.

2. ug/Kg = parts per billion; mg/kg= parts per million.

3. ND = not detected; NT= not tested; NV= no value; NR = not reported

4. Analytical results compared to NYSDEC Part 375-6; Remedial Program Soil Cleanup Objectives, Table 375-(a) Unrestricted Use Soil Cleanup Objective; and Table 375-6.8(b): Restricted Use Soil Cleanup Objectives.

5. * = Concentration of analyte exceeded range of the calibration curve, which required a re-analysis at a higher dilution factor.

6. Shading indicates:
- exceeds UUSCO - Unrestriced Use Soil Cleanup Objective
- exceeds RRUSCO - Restricted Residential Use Soil Cleanup Objective
- exceeds CUSCO - Commercial Use Soil Cleanup Objective
- exceeds IUSCO - Industrial Use Soil Cleanup Objective

Soil Boring & Micro Well Locations (10/15-10/16/16)
Soil Boring Locations (12/21-12/23/16)
Surface Soil Locations (12/21-12/23/16)
Test Pit Locations (10/15-10/16/16)
Soil Boring & Piezometer Locations (12/21-12/23/16)

Table III-B
Semi-Volatile Organic Compounds - Soil Analytical Testing Results Summary
1801 Elmwood Avenue Buffalo, New York

	October 2015																				
Parameter	**SB1 (0-4')**	**SB2 (4-8')**	**SB4 (0-4')**	**SB8 (0-4')**	**SB10 (0-4')**	**SB12 (0-4')**	**SB14 (0-4')**	**SB15 (0-4')**	**TP4 (4-8')**	**TP4 (9-12')**	**TP5 (0-4')**	**TP7 (0-4')**	**TP10 (4-8')**	**TP11 (0-4')**	**TP14 (0-3')**	**TP16 (4-8')**	**TP17 (0-4')**	**TP18 (0-4')**	**UUSCO**	**RRUSCO**	**CUSCO**	**IUSCO**
GC/MS Semi-volatiles 8270D Analysis (ug/kg)																						
2-Methylnaphthalene	565	ND	27600	1690	375	ND	ND	1010	1730	189	ND	ND	184	NT	2490	704	ND	ND	NV	NV	NV	NV
3&4-Methylphenol	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	330	100,000	500,000	1,000,000
Acenaphthene	ND	ND	14200	2970	859	ND	ND	964	2960	ND	143	265	132	NT	1450	1720	2980	246	20,000	100,000	500,000	1,000,000
Acenaphthylene	ND	ND	12900	2800	402	ND	ND	574	884	ND	ND	ND	ND	NT	248	593	2540	255	100,000	100,000	500,000	1,000,000
Acetophenone	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	NV	NV	NV	NV
Anthracene	ND	ND	66400	11100	3210	121	ND	3330	7700	155	381	515	337	NT	3210	6570	11200	1020	100,000	100,000	500,000	1,000,000
Benzo(a)anthracene	196	ND	98200	18500	6660	403	ND	7410	16200	582	891	1240	637	NT	6770	14000	34900	3000	1,000	1,000	5,600	11,000
Benzo(a)pyrene	175	ND	85600	16600	6380	389	ND	6550	14900	444	842	1190	681	NT	5400	12500	33100	2980	1,000	1,000	1,000	1,100
Benzo(b)fluoranthene	222	ND	69000	13100	8070	324	ND	6070	13000	389	730	1090	600	NT	7340	10600	26900	2550	1,000	1,000	5,600	11,000
Benzo(g,h,i)perylene	ND	ND	32100	7090	4950	207	ND	3690	8700	256	514	629	499	NT	3390	9040	14200	1400	100,000	100,000	500,000	1,000,000
Benzo(k)fluoranthene	155	ND	57900	12300	5150	303	ND	5390	12400	313	704	916	433	NT	4320	6180	26800	2330	800	3,900	56,000	110,000
Butyl benzyl phthalate	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	518	ND	NT	ND	ND	ND	1200	NV	NV	NV	NV
Biphenyl	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	NV	NV	NV	NV
Carbazole	ND	ND	21300	3840	1520	ND	ND	1490	4010	ND	200	275	168	NT	1830	2440	3960	432	NV	NV	NV	NV
Chrysene	239	ND	94000	17000	6650	393	ND	7220	16300	710	881	1270	724	NT	7120	13400	33500	2880	1,000	3,900	56,000	110,000
Dibenzo(a,h)anthracene	ND	ND	3890	679	442	ND	ND	ND	803	ND	ND	ND	ND	NT	440	778	ND	523	330	330	560	1,100
Dibenzofuran	165	ND	19300	3440	870	ND	ND	1140	2700	ND	ND	158	165	NT	1540	1410	ND	183	7,000	59,000	350,000	1,000,000
Fluoranthene	352	ND	180000	46000	15000	723	170	15000	37500	863	1880	2860	1580	NT	16400	28100	69800	7140	100,000	100,000	500,000	1,000,000
Fluorene	ND	ND	32800	4240	1130	ND	ND	1430	3890	ND	156	245	159	NT	1460	2040	3210	282	30,000	100,000	500,000	1,000,000
Indeno(1,2,3-cd)pyrene	ND	ND	29200	6320	4370	211	ND	3580	8230	221	471	549	298	NT	3690	8900	14700	1230	500	500	5,600	11,000
2-Methylnaphthalene	565	ND	27600	1690	375	ND	ND	1010	1730	189	ND	ND	184	NT	2490	704	ND	ND	NV	NV	NV	NV
Naphthalene	362	ND	33500	3230	597	ND	ND	991	3540	ND	ND	ND	203	NT	2680	1310	ND	ND	12,000	100,000	500,000	1,000,000
Phenanthrene	427	ND	201000	43400	13100	452	124	12300	32400	661	1440	2390	1490	NT	15100	22000	38000	3820	100,000	100,000	500,000	1,000,000
Pyrene	346	ND	162000	41800	13100	706	162	13300	32400	817	1600	2540	1650	NT	14000	23400	63500	6020	100,000	100,000	500,000	1,000,000

	December 2016																		
Parameter	**SB1 (2-6')**	**SB6 (0-4')**	**SB7 (2-6')**	**SB8 (2-6')**	**SB9 (0-2')**	**SB9 (0-4')**	**SB10 (1-3')**	**SB11 (1-3')**	**SB13 (1-5')**	**SB14 (0-4')**	**SB16 (.5-4.5')**	**SB21 (1-4')**	**SB25 (2-6')**	**SS1 (0-1')**	**SS2 (0-1')**	**UUSCO**	**RRUSCO**	**CUSCO**	**IUSCO**
GC/MS Semi-volatiles 8270D Analysis (ug/kg)																			
2-Methylnaphthalene	50 J	2,300	120 J	440	NT	700 J	NT	NT	80 J	NT	ND	450	250	NT	1,200	NV	NV	NV	NV
3&4-Methylphenol	ND	ND	ND	ND	NT	ND	NT	NT	ND	NT	ND	57 J	ND	NT	ND	330	100,000	500,000	1,000,000
Acenaphthene	ND	28,000	74 J	1,400	NT	2,800	NT	NT	580	NT	ND	980	290	NT	140 J	20,000	100,000	500,000	1,000,000
Acenaphthylene	ND	860	56 J	ND	NT	320 J	NT	NT	56 J	NT	ND	210	110 J	NT	98 J	100,000	100,000	500,000	1,000,000
Acetophenone	ND	ND	ND	ND	NT	ND	NT	NT	ND	NT	ND	ND	ND	NT	200	NV	NV	NV	NV
Anthracene	40 J	53,000*	210	2,200	NT	5,100	NT	NT	1,300	NT	ND	2,600	780	NT	280	100,000	100,000	500,000	1,000,000
Benzo(a)anthracene	140	78,000*	1,300	2,500	NT	12,000	NT	NT	3,300	NT	29 J	5,600	2,600	NT	610	1,000	1,000	5,600	11,000
Benzo(a)pyrene	150	60,000*	1,100	1,400	NT	11,000	NT	NT	3,100	NT	150	4,800	2,300	NT	540	1,000	1,000	1,000	1,100
Benzo(b)fluoranthene	230	80,000*	1,700	2,400	NT	16,000	NT	NT	3,800	NT	ND	6,200	3,000	NT	810	1,000	1,000	5,600	11,000
Benzo(g,h,i)perylene	140	32,000*	720	910	NT	6,500	NT	NT	1,800	NT	ND	2,700	1,200	NT	370	100,000	100,000	500,000	1,000,000
Benzo(k)fluoranthene	72 J	27,000	600	720	NT	5,900	NT	NT	1,200	NT	ND	2,300	980	NT	260	800	3,900	56,000	110,000
Butyl benzyl phthalate	ND	ND	ND	ND	NT	ND	NT	NT	ND	NT	ND	ND	ND	NT	ND	NV	NV	NV	NV
Biphenyl	ND	920 J	ND	ND	NT	ND	NT	NT	ND	NT	ND	90 J	49 J	NT	110 J	NV	NV	NV	NV
Carbazole	30 J	14,000	110 J	ND	NT	3,900	NT	NT	650	NT	ND	1,100	360	NT	160 J	NV	NV	NV	NV
Chrysene	180	67,000*	1,400	3,000	NT	13,000	NT	NT	3,400	NT	26 J	5,300	2,700	NT	710	1,000	3,900	56,000	110,000
Dibenzo(a,h)anthracene	32 J	11,000	180	300	NT	1,900	NT	NT	500	NT	ND	810	370	NT	110 J	330	330	560	1,100
Dibenzofuran	21 J	13,000	55 J	950	NT	1,600	NT	NT	300	NT	ND	610	180 J	NT	420	7,000	59,000	350,000	1,000,000
Fluoranthene	400	170,000*	2,800	6,800	NT	29,000	NT	NT	6,000	NT	55 J	13,000*	4,900	NT	1,200	100,000	100,000	500,000	1,000,000
Fluorene	ND	26,000	56 J	2,700	NT	2,600	NT	NT	540	NT	ND	1,000	290	NT	ND	30,000	100,000	500,000	1,000,000
Indeno(1,2,3-cd)pyrene	130 J	37,000*	790	900	NT	7,900	NT	NT	2,000	NT	ND	3,100	1,400	NT	380	500	500	5,600	11,000
2-Methylnaphthalene	ND	ND	ND	ND	NT	ND	NT	NT	ND	NT	ND	ND	ND	NT	ND	NV	NV	NV	NV
Naphthalene	80 J	1,500	140 J	350	NT	2,100	NT	NT	140 J	NT	ND	470	260	NT	910	12,000	100,000	500,000	1,000,000
Phenanthrene	190	160,000*	800	8,900*	NT	24,000	NT	NT	5,100	NT	47 J	9,600*	3,800	NT	1,500	100,000	100,000	500,000	1,000,000
Pyrene	320	130,000*	2,300	6,500	NT	21,000	NT	NT	5,300	NT	46 J	10,000*	4,300	NT	1,100	100,000	100,000	500,000	1,000,000

Notes:

1.October 2015 sample analysis completed by Accutest Laboratories; December 2016 sample analysis completed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
2. ug/Kg = parts per billion; mg/kg= parts per million.
3. ND = not detected; NT= not tested; NV= no value; NR = not reported
4. Analytical results compared to NYSDEC Part 375-6; Remedial Program Soil Cleanup Objectives, Table 375-(a) Unrestricted Use Soil Cleanup Objective; and Table 375-6.8(b): Restricted Use Soil Cleanup Objectives.
5. * = Concentration of analyte exceeded range of the calibration curve, which required a re-analysis at a higher dilution factor.
6. Shading indicates:
   - exceeds UUSCO - Unrestriced Use Soil Cleanup Objective
   - exceeds RRUSCO - Restricted Residential Use Soil Cleanup Objective
   - exceeds CUSCO - Commercial Use Soil Cleanup Objective
   - exceeds IUSCO - Industrial Use Soil Cleanup Objective

Soil Boring & Micro Well Locations (10/15-10/16/16)
Test Pit Locations (10/15-10/16/16)
Soil Boring Locations (12/21-12/23/16)
Soil Boring & Piezometer Locations (12/21-12/23/16)
Surface Soil Locations (12/21-12/23/16)

Table III-C
Metals and PCB - Soil Analytical Testing Results Summary
1801 Elmwood Avenue Buffalo, New York

	October 2015																				
Parameter	**SB1 (0-4')**	**SB2 (4-8')**	**SB4 (0-4')**	**SB8 (0-4')**	**SB10 (0-4')**	**SB12 (0-4')**	**SB14 (0-4')**	**SB15 (0-4')**	**TP4 (4-8')**	**TP4 (9-12')**	**TP5 (0-4')**	**TP7 (0-4')**	**TP10 (4-8')**	**TP11 (0-4')**	**TP14 (0-3')**	**TP16 (4-8')**	**TP17 (0-4')**	**TP18 (0-4')**	**UUSCO**	**RRUSCO**	**CUSCO**	**IUSCO**
Metals Analysis (mg/kg)																						
Aluminum	9780	5350	3080	19200	5780	3770	3420	9520	5610	23300	12500	5740	10000	NT	9010	7450	9860	5630	NV	NV	NV	NV
Antimony	ND	ND	ND	ND	ND	ND	ND	1.3	ND	ND	1.7	ND	ND	NT	ND	1.1	ND	ND	NV	NV	NV	NV
Arsenic	8.7	1.9	4.5	5.4	17.1	2.5	5.9	28.4	12.4	4.4	22.2	7.1	8.6	NT	11.1	14.9	8.6	6.1	13	16	16	16
Barium	68.9	19.7	32.5	207	93.4	19	17.4	144	85	162	131	139	55.1	NT	63.2	243	145	47.9	350	400	400	10,000
Beryllium	1.1	ND	ND	2.7	0.35	ND	ND	0.67	ND	1.2	1.1	0.42	0.42	NT	0.45	0.42	0.66	ND	7.2	72	590	2,700
Cadmium	ND	ND	ND	ND	0.65	ND	ND	1.7	0.46	0.4	0.93	1.2	ND	NT	0.64	0.9	0.54	0.4	2.5	4.3	9.3	60
Calcium	56300	34800	17700	104000	86400	39200	70900	29000	34600	2370	24700	72700	22200	NT	7050	48700	85700	47000	NV	NV	NV	NV
Chromium	10.7	4.8	16	9.9	18.5	6.9	25.3	41	11.3	25.9	20	27.4	11	NT	12.6	20.9	16.2	8.7	30	180	1,500	6,800
Cobalt	ND	ND	ND	ND	5.9	ND	ND	6.1	4.4	14.2	9.9	ND	ND	NT	6.4	6.5	7.4	5.4	NV	NV	NV	NV
Copper	16.1	2.7	15.3	8.1	43.1	4.9	4.4	73	23.1	20.6	66.6	348	24.2	NT	22	42.9	47.4	30.8	50	270	270	10,000
Cyanide, Total	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	27	27	27	10,000
Iron	28500	6510	10200	12200	56100	12800	21100	30100	30500	35000	33000	11200	18800	NT	58000	56400	27800	15200	NV	NV	NV	NV
Lead	32.8	11.7	31.4	52.1	63.2	99.4	101	190	95	15.9	156	159	87.7	NT	164	330	107	66.2	63	400	1,000	3,900
Magnesium	6950	4360	3470	10900	20400	4030	3810	6230	3890	5950	5470	17000	2630	NT	1210	6440	22800	7740	NV	NV	NV	NV
Manganese	1130	116	155	1820	520	478	278	921	486	444	561	313	1140	NT	891	605	441	331	1,600	2,000	10,000	10,000
Mercury	ND	ND	ND	0.045	0.045	ND	ND	ND	0.056	ND	0.18	0.081	ND	NT	0.28	0.26	0.21	0.043	0.18	0.81	2.8	5.7
Nickel	8.8	4.0	4.5	4.9	11.5	3.5	4.6	17.4	9.0	30.1	31.3	11.5	7.3	NT	12.8	21.4	19.2	18.9	30	310	310	10,000
Potassium	921	545	ND	1230	994	533	ND	1350	805	2790	1770	908	1550	NT	1350	1390	2160	950	NV	NV	NV	NV
Selenium	1.3	ND	ND	1.9	ND	ND	ND	ND	ND	ND	2.3	ND	ND	NT	ND	ND	ND	ND	3.9	180	1500	6800
Sodium	ND	ND	ND	525	ND	ND	ND	ND	ND	ND	ND	ND	ND	NT	ND	ND	ND	ND	NV	NV	NV	NV
Vanadium	18.7	10.4	13.2	12.7	40.7	16	16.1	26.2	17.4	33.9	28.4	13.4	21.8	NT	23.8	32.1	23.1	13.3	NV	NV	NV	NV
Zinc	55.4	16	44.6	48.4	146	18.3	10.5	270	150	108	277	198	141	NT	242	267	196	124	109	10,000	10,000	10,000
PCBs Analysis (ug/kg)																						
Aroclor 1254	NT	ND	NT	ND	NT	NT	NT	56.5	NT	ND	NT	NT	NT	NT	NT	NT	ND	NT	100	1,000	1,000	25,000
Aroclor 1260	NT	ND	NT	ND	NT	NT	NT	ND	NT	ND	NT	NT	NT	NT	NT	NT	ND	NT	100	1,000	1,000	25,000
Aroclor 1268	NT	ND	NT	ND	NT	NT	NT	ND	NT	ND	NT	NT	NT	NT	NT	NT	ND	NT	100	1,000	1,000	25,000
Total PCBs	NT	ND	NT	ND	NT	NT	NT	56.5	NT	ND	NT	NT	NT	NT	NT	NT	ND	NT	100	1,000	1,000	25,000
Hebicides Analysis (ug/kg)																						
Total Herbicides	ND	NT	NT	NT	NT	NT	NT	NT	NT	NT	ND	NT	NT	ND	NT	NT	NT	NT	-	-	-	-

	December 2016																		
Parameter	**SB1 (2-6')**	**SB6 (0-4')**	**SB7 (2-6')**	**SB8 (2-6')**	**SB9 (0-2')**	**SB9 (0-4')**	**SB10 (1-3')**	**SB11 (1-3')**	**SB13 (1-5')**	**SB14 (0-4')**	**SB16 (.5-4.5')**	**SB21 (1-4')**	**SB25 (2-6')**	**SS1 (0-1')**	**SS2 (0-1')**	**UUSCO**	**RRUSCO**	**CUSCO**	**IUSCO**
Metals Analysis (mg/kg)																			
Aluminum	7,300	5,300	4,400	4,900	NT	5,800	NT	NT	4,100	NT	2,300	14,000	5,200	NT	5,400	NV	NV	NV	NV
Antimony	ND	ND	1.6 J	0.64 J	NT	1.0 J	NT	NT	ND	NT	ND	3.3 J	0.36 J	NT	3.8 J	NV	NV	NV	NV
Arsenic	4.8	6.3	5.9	38	NT	22	NT	NT	34	NT	2.2	12	24	NT	34	13	16	16	16
Barium	41	33	40	33	NT	79	NT	NT	41	NT	15	77	78	NT	80	350	400	400	10,000
Beryllium	0.84	0.23 J	0.26 J	0.22 J	NT	0.46	NT	NT	0.23 J	NT	0.10 J	0.48 J	1.2	NT	0.44	7.2	72	590	2,700
Cadmium	ND	ND	ND	ND	NT	0.60 J	NT	NT	ND	NT	ND	ND	0.27 J	NT	ND	2.5	4.3	9.3	60
Calcium	40,000	28,000	110,000	22,000	NT	27,000	NT	NT	33,000	NT	38,000	8,600	19,000	NT	7,200	NV	NV	NV	NV
Chromium	7.1	8.4	9.8	6.8	NT	19	NT	NT	60	NT	2.7	15	7.0	NT	16	30	180	1,500	6,800
Cobalt	2.4	3.3	2.2	3.3	NT	5.6	NT	NT	14	NT	1.3 J	6.2	4.4	NT	6.8	NV	NV	NV	NV
Copper	12	15	24	11	NT	130	NT	NT	42	NT	2.2	370	39	NT	66	50	270	270	10,000
Cyanide, Total	0.35 J	0.36 J	0.29 J	0.49 J	NT	0.44 J	NT	NT	0.33 J	NT	ND	2.8	2.1	NT	0.53 J	27	27	27	10,000
Iron	10,000	15,000	16,000	35,000	NT	40,000	NT	NT	180,000	NT	5,200	37,000	16,000	NT	56,000	NV	NV	NV	NV
Lead	22	50	35	470	NT	250	NT	NT	31	NT	130	200	78	NT	160	63	400	1,000	3,900
Magnesium	7,100	3,200	44,000	2,700	NT	3,600	NT	NT	2,800	NT	4,600	3,300	1,800	NT	1,100	NV	NV	NV	NV
Manganese	390	290	740	400	NT	660	NT	NT	1,400	NT	150	570	340	NT	860	1,600	2,000	10,000	10,000
Mercury	ND	0.96	0.03 J	ND	NT	0.12	NT	NT	0.31	NT	ND	0.04 J	0.077 J	NT	0.26	0.18	0.81	2.8	5.7
Nickel	5.2	7.4	6.3	6.8	NT	19	NT	NT	24	NT	2.3	18	9.8	NT	27	30	310	310	10,000
Potassium	740	380	420	500	NT	510	NT	NT	390	NT	180 J	770	500	NT	660	NV	NV	NV	NV
Selenium	ND	ND	ND	ND	NT	ND	NT	NT	ND	NT	ND	ND	ND	NT	ND	3.9	180	1500	6800
Sodium	380	74 J	170 J	170 J	NT	140 J	NT	NT	120 J	NT	90 J	280	300	NT	100 J	NV	NV	NV	NV
Vanadium	13	18	10	15	NT	24	NT	NT	95	NT	6.0	24	14	NT	20	NV	NV	NV	NV
Zinc	29	88	61	50	NT	180	NT	NT	37	NT	11	170	77	NT	130	109	10,000	10,000	10,000
PCBs Analysis (ug/kg)																			
Aroclor 1254	NT	NT	NT	ND	ND	NT	ND	19.8 J	NT	ND	NT	NT	NT	10.9 J	NT	100	1,000	1,000	25,000
Aroclor 1260	NT	NT	NT	3.72 J	11.7 J	NT	69.5	28.8 J	NT	ND	NT	NT	NT	17.9 J	NT	100	1,000	1,000	25,000
Aroclor 1268	NT	NT	NT	ND	ND	NT	97.0	ND	NT	ND	NT	NT	NT	ND	NT	100	1,000	1,000	25,000
Total PCBs	NT	NT	NT	3.72 J	11.7 J	NT	167	48.6 J	NT	ND	NT	NT	NT	28.8 J	NT	100	1,000	1,000	25,000
Hebicides Analysis (ug/kg)																			
Total Herbicides	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	NT	-	-	-	-

Notes:
1.October 2015 sample analysis completed by Accutest Laboratories; December 2016 sample analysis completed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
2. ug/Kg = parts per billion; mg/kg= parts per million.
3. ND = not detected; NT= not tested; NV= no value; NR = not reported
4. Analytical results compared to NYSDEC Part 375-6; Remedial Program Soil Cleanup Objectives, Table 375-(a) Unrestricted Use Soil Cleanup Objective; and Table 375-6.8(b): Restricted Use Soil Cleanup Objectives.
5. * = Concentration of analyte exceeded range of the calibration curve, which required a re-analysis at a higher dilution factor.
6. Shading indicates: exceeds UUSCO - Unrestriced Use Soil Cleanup Objective; exceeds RRUSCO - Restricted Residential Use Soil Cleanup Objective; exceeds CUSCO - Commercial Use Soil Cleanup Objective; exceeds IUSCO - Industrial Use Soil Cleanup Objective

Soil Boring & Micro Well Locations (10/15-10/16/16)
Soil Boring Locations (12/21-12/23/16)
Surface Soil Locations (12/21-12/23/16)
Test Pit Locations (10/15-10/16/16)
Soil Boring & Piezometer Locations (12/21-12/23/16)

Table III-D
Groundwater Analytical Testing Results Summary
1801 Elmwood Avenue Buffalo, New York
January 2017

Parameter	October 2015				December 2016						
	▲ SB5	▲ SB9	▲ SB15	○ MW1	⊕ SB2	⊕ SB8	⊕ SB10	⊕ SB14	⊕ SB16	⊕ SB25	Class GA Criteria (ug/L)
Volatile Organic Compounds EPA Method 8260C TCL + STARS (ug/L)											
Acetone	ND	ND	ND	ND	16	3.5 J	ND	ND	87	21	50
Benzene	ND	ND	ND	ND	ND	0.24 J	ND	ND	ND	ND	1
cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	32	ND	ND	ND	5
Methyl cyclohexane	ND	ND	ND	ND	ND	0.43 J	ND	ND	ND	ND	NV
Trichloroethene	ND	ND	ND	ND	ND	16	0.22 J	ND	ND	ND	5
Vinyl chloride	ND	ND	ND	1.5	ND	0.74 J	42	ND	ND	ND	2
Xylene (total)	ND	1.3	ND	ND	ND	ND	ND	ND	ND	ND	5
Semi Volatile Organic Compounds EPA Method TCL (ug/L)											
2-Methylnaphthalene	ND	ND	ND	ND	ND	0.51 J	ND	ND	0.41	0.06 J	NV
Acenaphthene	ND	3.9	2.8	ND	ND	4.0	ND	ND	0.83	0.50	20
Acenaphthylene	ND	6.2	ND	ND	ND	0.95 J	ND	ND	0.54	0.05 J	NV
Anthracene	ND	11.9	9.7	ND	ND	3.0	0.05 J	ND	1.3	0.08 J	50
Benzo(a)anthracene	2.3	40.1	21.4	ND	0.02 J	3.9	0.14 J	0.02 J	3.2	0.03 J	0.002
Benzo(a)pyrene	2.3	46.1	18.6	ND	ND	2.3	0.13 J	ND	3.0	ND	ND
Benzo(b)fluoranthene	2.1	37.2	17	ND	ND	3.6	0.20	0.03 J	6.8	0.08 J	0.002
Benzo(ghi)perylene	ND	27.3	10.5	ND	ND	1.1	0.09 J	ND	4.2	0.05 J	NV
Benzo(k)fluoranthene	ND	33.5	14.4	ND	ND	1.4	0.09 J	ND	1.8	ND	0.002
Carbazole	ND	2.7	3.7	ND	ND	ND	ND	ND	1.3 J	ND	NV
Chrysene	2.3	40.1	21	ND	ND	6.6	0.19 J	ND	3.8	0.06 J	0.002
Dibenzo(a,h)anthracene	ND	8.8	4	ND	ND	0.40 J	ND	ND	1.2	ND	NV
Dibenzofuran	ND	2.6	2.2	ND	ND	ND	ND	ND	1.0 J	ND	NV
Fluoranthene	4.3	77	41.5	ND	ND	11	0.32	ND	7.7	0.25	50
Fluorene	ND	4.2	4	ND	ND	6.9	ND	ND	1.2	0.20	50
Indeno(1,2,3-cd)pyrene	ND	24.6	9.7	ND	ND	1.0	0.09 J	ND	3.7	ND	0.002
Naphthalene	ND	2.2	2.4	ND	ND	0.70 J	ND	ND	1.4	0.11 J	10
Phenanthrene	2.1	33.8	35.5	ND	0.02 J	ND	0.20	ND	6.8	0.48	50
Phenol	ND	37.7	ND	ND	ND	ND	ND	ND	ND	ND	1
Pyrene	4	82.9	37.8	ND	ND	12	0.28	ND	6.3	0.15 J	50
Metals Analysis (ug/L)											
Aluminum	53300	80300	129000	777	NT	NT	NT	NT	NT	NT	-
Antimony	<6.0	<6.0	<6.0	<6.0	NT	NT	NT	NT	NT	NT	3
Arsenic	12.2	84.2	130	18.5	NT	NT	NT	NT	NT	NT	25
Barium	403	819	1220	107	NT	NT	NT	NT	NT	NT	1,000
Beryllium	ND	ND	4.9	ND	NT	NT	NT	NT	NT	NT	-
Cadmium	ND	7.4	5.8	ND	NT	NT	NT	NT	NT	NT	5
Calcium	244000	1050000	899000	185000	NT	NT	NT	NT	NT	NT	-
Chromium	65.6	190	187	ND	NT	NT	NT	NT	NT	NT	50
Cobalt	ND	58.5	63.5	ND	NT	NT	NT	NT	NT	NT	-
Copper	59.9	198	283	ND	NT	NT	NT	NT	NT	NT	200
Iron	61300	201000	216000	66200	NT	NT	NT	NT	NT	NT	300
Lead	80.3	688	956	5	NT	NT	NT	NT	NT	NT	25
Magnesium	112000	76900	145000	47300	NT	NT	NT	NT	NT	NT	35,000
Manganese	5460	9920	8490	609	NT	NT	NT	NT	NT	NT	300
Mercury	0.23	1.4	1.4	ND	NT	NT	NT	NT	NT	NT	0.7
Nickel	69.7	114	122	ND	NT	NT	NT	NT	NT	NT	100
Potassium	8470	11800	21200	6450	NT	NT	NT	NT	NT	NT	-
Selenium	ND	ND	ND	ND	NT	NT	NT	NT	NT	NT	10
Silver	<5.0	<5.0	<5.0	<5.0	NT	NT	NT	NT	NT	NT	50
Sodium	33500	18600	11500	14500	NT	NT	NT	NT	NT	NT	20,000
Thallium	<5.0	<5.0	<5.0	<5.0	NT	NT	NT	NT	NT	NT	-
Vanadium	88	169	256	ND	NT	NT	NT	NT	NT	NT	-
Zinc	273	2680	1050	ND	NT	NT	NT	NT	NT	NT	2,000

Notes:
1.October 2015 sample analysis completed by Accutest Laboratories; December 2016 sample analysis completed by Alpha Analytical. Compounds detected in one or more samples are presented in this table. Refer to Appendix for the full analytical report.
2. ug/L = part per billion
3. Analytical results compared to NYSDEC Class GA criteria obtained from the Division of Water Technical and Operational Guidance Series (TOGS 1.1.1), dated October 1993, revised June 1999, January 1999 errata sheet, and April 2000 addendum.
4. Gray shading indicates exceedance of NYSDEC Class GA Criteria.

▲ **Soil Boring & Micro Well Locations (10/15-10/16/16)**

○ **MW1 – Existing Monitoring Well**

⊕ **Soil Boring & Piezometer Locations (12/21-12/23/16)**

Soil Boring and Test Pit Logs – October 2015 Locations

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB1

Project Name & Location	1801 Elmwood Avenue; Donation Parcel	HEI Representative:	EB
Project Number:	e1459		
Start Date	10/15/2015	End Date 10/15/2015	Type of Drill Rig: Track Mounted Geoprobe Rig
GW Depth While Drilling	5.0'		Drilling Contractor: Matrix Env.
GW Depth at Completion	NWAC		Sampler Type: MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Brown f/c Sand and Gravel, trace Silt, moist (FILL)	ND
1					
2					
				Grades to … Black, some Slag, trace Gravel	3.2
3					
4				Grades to …. trace Slag, wet	5.8
	2	4-8	40	Dark gray Clay & Silt, trace Gravel, trace f/c Sand, trace Wood, wet (FILL)	
				Grades to … saturated	
5				Red/Brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
6					
7					
8					
	3	8-12	48		ND
9					
10					
11					
12					ND
				Bottom of boring 12' bgs	
13				Microwell installed to 12' bgs	
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB2

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/15/2015	End Date	10/15/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	7.0'			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	12	Brown Clayey Silt, some f/c Sand, trace Gravel, moist (FILL)	ND
1					
2				Grades to … and f/c Sand	ND
3				Black f/c Sand, traceSlag, moist (FILL)	ND
4	2	4-8	48		ND
5					
6				Grades to …. wet	ND
7					
8	3	8-12	48	Grades to … saturated	ND
9					
10					0.1
11				Dark gray Clay & Silt, some Gravel, trace f/c Sand, saturated (FILL)	
12				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	
	4	12-16	48		ND
13					
14					
15					
16				Bottom of boring 16' bgs	ND
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB3

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/15/2015	End Date	10/15/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	24	Gravel	
1				Brown f/c Sand, some Gravel, little Brick, trace Slag, moist (FILL)	ND
2				Grades to … black, little Slag, little Concrete, Brick	
3					
4	2	4-6	10		ND
5					
6				Grades to … and Concrete	
				Refusal encountered at 6' bgs	
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:	SB3A and SB3B were completed in the wooded area. Spoon refusal was encountered at 3' bgs. SB3 third attempt completed 40 feet North.
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB4

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/15/2015	End Date	10/15/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Brown Topsoil, little Brick, trace Slag, moist (FILL)	ND
1				Red Brick and Concrete (FILL)	
2				Brown Clay & Silt, little Slag, trace Brick, trace Gravel, moist (FILL)	
3				Grades to …. some Slag, some Concrete	ND
4				Dark brown f/c Sand, trace Gravel, moist (FILL)	
	2	4-8	40		ND
5					
6					
7					
8					
	3	8-12	48		
9					ND
10				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	
11					
12					ND
13				Bottom of boring 12' bgs	
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB5

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/15/2015	End Date	10/15/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	5.0'			Drilling Contractor	Matrix Env.
GW Depth at Completion	3.5'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Dark brown Clay & Silt, little Gravel, trace Brick, trace f/c Sand, moist (FILL)	ND
1					
				Grades to… and f/c Sand, some Brick, trace Gravel	
2					
				Grades to … Red/brown, trace f/c Sand, trace Brick	
3					
4	2	4-8	40		ND
				Grades to … gray, little f/c Sand, trace Organic Matter, wet	
5					
6				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	
7					
8	3	8-12	48		ND
9					
10					
11					
12					ND
				Bottom of boring 12' bgs	
13				Microwell installed 11' bgs	
14					
15					
16					
18					
20					
22					
24					

Notes:	
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB6

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/15/2015	End Date	10/15/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	3.5'			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
1	1	0-4	40	Dark brown Clay & Silt, some Slag, little Brick, trace Gravel, trace f/c Sand, moist (FILL)	ND
2				Grades to … and Brick	
3				Black f/c Sand, wet	ND
4				Red/brown Clay & Silt, trace Gravel, trace f/c Sand, wet (FILL)	
5	2	4-8	40		ND
6				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
7					
8					
9	3	8-12	40		ND
10					
11					
12					ND
13				Bottom of boring 12' bgs	
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB7

Project Name & Location	1801 Elmwood Avenue; Donation Parcel	HEI Representative:	EB
Project Number:	e1459		
Start Date	10/15/2015	End Date 10/15/2015	Type of Drill Rig: Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD		Drilling Contractor: Matrix Env.
GW Depth at Completion	NWAC		Sampler Type: MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	18	Gray Concrete and Brick, little Slag, little Asphalt, dry (FILL)	ND
1					ND
2				Grades to … trace Slag, trace Asphalt	
3				Grades to … trace Concrete	
4	2	4-8	36		ND
5				Red/brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)	
6				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
7					
8	3	8-12	48		
9					ND
10					
11					
12				Bottom of boring 12' bgs	ND
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB8

Project Name & Location	1801 Elmwood Avenue; Donation Parcel	HEI Representative:	EB
Project Number:	e1459		
Start Date	10/15/2015	End Date 10/15/2015	Type of Drill Rig: Track Mounted Geoprobe Rig
GW Depth While Drilling	6.0'		Drilling Contractor: Matrix Env.
GW Depth at Completion	NWAC		Sampler Type: MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
0	1	0-4	18	Dark brown Clay & Silt, little Slag, little f/c Sand, trace Wood, moist (FILL)	ND
2				Grades to … and Slag, some Brick	ND
3				Grades to … and Brick	
4				Black f/c Sand, some Clay & Silt, trace Gravel, trace Brick, moist (FILL)	
4	2	4-8	36		ND
6				Grades to … wet	ND
8					
8	3	8-12	48	Red/brown Clay & Silt, trace Gravel, trace f/c Sand, moist	
10					ND
12					ND
12				Bottom of boring 12' bgs	
24					

Notes:	Slag/brick layer at 2-3' bgs
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB9

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/15/2015	End Date	10/15/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	7.0'			Drilling Contractor	Matrix Env.
GW Depth at Completion	5.8'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	24	Concrete	
1				Black f/c Sand, and Slag, little Silt, trace Gravel, moist (FILL)	ND
2					ND
3				Grades to … light brown, little Brick, trace Slag	
4	2	4-8	24	Grades to … black, trace Brick	ND
5					
6					
7				Grades to … some Gravel, wet	
8	3	8-12	48	Red/brown CLAY & SILT, trace Gravel, f/c Sand, wet	ND
9					
10				Grades to … moist	
11					
12				Bottom of boring 12' bgs	
13				Microwell installed to 9' bgs	
14					
15					
16					
18					
20					
22					
24					

Notes:	Slag and Brick layer (2-3') bgs
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB10

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	8.5'			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Brown f/c Sand, some Gravel, trace Silt, moist (FILL)	2.5
1				Grades to … and Gravel	
2					ND
3				Red/brown Clay & Silt, some f/c Sand, little Slag, little Brick, trace Gravel, moist (FILL)	
				Grades to … and Concrete	
4				Dark brown f/c Sand, some Brick, some Slag, trace Gravel, moist (FILL)	
	2	4-8	12		ND
5					
6					
7					
8					
	3	8-11	12	Grades to … wet	
9				Grades to … and Gravel, little Brick	
10					ND
11				Refusal encountered at 11' bgs	
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB11

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Brown f/c Sand, some Gravel, trace Slag, trace Concrete, moist (FILL)	ND
1				Grades to … little Slag	
2				Grades to …. black, trace Gravel	ND
3				Red/brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)	
4	2	4-8	48	Grades to … trace Brick	ND
5					
6				Red CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
7					
8	3	8-12	48		ND
9					
10					
11					
12				Bottom of boring 12' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:	First 3 attempts resulted in refusal at 1' bgs. Moved 10 ft to the west to reach native soil.
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB12

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	3.5'			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Brown f/c Sand, some Gravel, little Silt, moist (FILL)	0.7
1					
				Grades to … black, little Slag, moist	0.7
2					
				Grades to …. wet	
3					
4	2	4-8	40		ND
				Red/brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)	
5					
					ND
6				Red CLAY & SILT, trace Gravel, trace f/c Sand, moist	
7					
8	3	8-12	48		ND
9					
10					
11					
12				Bottom of boring 12' bgs	
				Microwell installed to 9' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:	
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB13

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	24	Brown f/c Sand, some Silt, some Gravel, moist (FILL)	ND
1					
				Grades to … little Brick	
2				Grades to … and Concrete	ND
				Grades to …. wet	
3					
				Grades to … black, trace Slag	0.1
4	2	4-8	48	Red/brown Clay & Silt, trace Gravel, trace Brick, trace f/c Sand, moist (FILL)	ND
5					
6				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
7					ND
8	3	8-12	48		ND
9					
10					
11					
12				Bottom of boring 12' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB14

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	18	Asphalt	
				Gravel sub base, moist (FILL)	ND
1				Dark brown f/c Sand, trace Slag, trace Gravel, moist (FILL)	ND
2					
3				Red/brown Silt & Clay, trace Gravel, trace f/c Sand, moist (FILL)	
4	2	4-8	48		ND
5					
6					
				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
7					
8	3	8-12	48		ND
9					
10					
11					
12				Bottom of boring 12' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS

3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB15

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	12.0'			Drilling Contractor	Matrix Env.
GW Depth at Completion	12.3'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Topsoil, moist	ND
1				Dark brown f/c Sand, little Slag, little Gravel, trace Brick, moist (FILL)	
2				Grades to … some Brick	ND
				Grades to … and Concrete	
3				Dark brown Clay & Silt, trace Brick, trace Gravel, trace f/c Sand, moist (FILL)	ND
4	2	4-8	30	Brown f/c Sand, little Brick, little Gravel, trace Slag, moist (FILL)	ND
5					
6				Grades to … and Brick, trace Gravel	ND
7				Grades to … trace Brick	
8	3	8-12	48	Grades to … some Brick	0.2
9					
10				Grades to … black, some Slag	
11					0.2
12	4	12-16	48	Grades to … trace Slag, saturated	
13					
14				Grades to … wet	
15					
16				Bottom of boring 16' bgs	
18				Microwell installed to 15' bgs	
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB16

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Topsoil	ND
1				Brown Clayey Silt, some f/c Sand, little Slag, trace Brick, moist (FILL)	
2				Grades to … some Brick, some Wood	ND
3				Black f/c Sand, trace Slag, moist (FILL)	
4				Red/brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)	
	2	4-8	40		
5					ND
6				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
7					
8					
	3	8-12	48		ND
9					
10					
11					
12				Bottom of boring 12' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB17

Project Name & Location	1801 Elmwood Avenue; Donation Parcel			HEI Representative:	EB
Project Number:	e1459				
Start Date	10/16/2015	End Date	10/16/2015	Type of Drill Rig	Track Mounted Geoprobe Rig
GW Depth While Drilling	NWWD			Drilling Contractor	Matrix Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Asphalt	
1				Gravel sub base	ND
2				Light brown f/c Sand, some Brick, some Slag, little Gravel, moist (FILL)	
3				Grades to … dark brown, trace Brick, trace Slag, trace Gravel	0.7
4				Grades to … some Concrete	
	2	4-8	40	Red/brown Clay & Silt, little Slag, little Gravel, little f/c Sand, moist (FILL)	
5					
6				Grades to …. trace Slag, trace Gravel, trace f/c Sand	
7				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist	ND
8					
	3	8-12	48		ND
9					
10					
11					
12					
13				Bottom of boring 12' bgs	
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP1

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/13/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-3	2.6	Dark brown f/c Sand, little fine gravel size Slag, staining, moist (FILL)
1				
2				
3				Grades to… and boulder size Concrete
4				Refusal encountered at 3' bgs
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP2

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/13/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	1.5	
1				Dark gray f/c Sand, little sand size Slag, little gravel size Brick, trace Gravel, staining, moist (FILL)
2				Red/brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)
3				
4	2	4-6.5'	0.5	Gray f/c Sand, and full size Brick, little Gravel, moist (FILL)
5				
6				Grades to… and boulder size Concrete
7				Refusal encountered at 6.5 ft bgs
8				
9				
10				
11				
12				
13				
14				
15				

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP3

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/13/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	0.2	Red/brown Clay & Silt, little Gravel, trace f/c Sand, moist (FILL)
1				
2				
3				
				Black f/c Sand, some gravel size Brick, trace Gravel, trace sand size Slag, staining, moist (FILL)
4	2	4-8	0.8	Red/brown Clay & Silt, trace Gravel, trace Silt, moist (FILL)
5				Red/brown f/c Sand, some sand size Slag, trace Gravel, moist (FILL)
6				
				Red/brown CLAY & SILT, trace Gravel, trace Silt, moist
7				
8				
				Bottom of excavation 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP4

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/13/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
1	1	0-4	ND	Black f/c Sand, little Gravel, little f gravel size Slag, little full and gravel size Brick, trace gravel size Concrete, trace Organic Matter, moist (FILL)
2				
3				Grades to… trace metal strips
4	2	4-8	ND	Grades to … some full size Brick
5				
6				Grades to… little full size Brick
7				
8	3	8-9	4.6	Red Clay & Silt, trace Gravel, trace Silt, moist
9	4	9-12	51	Grades to … gray, staining, odor detected
10				
11				
12				Bottom of excavation 12' bgs
13				
14				
15				

Notes: Increase in brick quantity from 4-8' bgs.
Metal strips generally 4 to 6 inch wide pieces of metal that were 5-10 feet long.

General Notes:
1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP5

Project Name & Location	1801 Elmwood Avenue; Donation Parcel	HEI Representative:	EB
Project Number:	e1459		
Start Date	10/13/2015	End Date 10/13/2015	Type of Excavator: Track mounted
		Contractor:	DirtWorks
		Sampler Type:	Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	0.6	Red/brown Clay & Silt, little f/c Sand, little Gravel, moist (FILL)
1				
2				
3				
				Black f/c Sand, moist (FILL)
4	2	4-8	1.5	Red/brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)
5				
6				Grades to … and f/c Sand
7				Grades to … trace f/c Sand
8				
	3	8-12	ND	Brown CLAY & SILT, trace f/c Sand, trace Gravel, moist
9				
10				
11				
12				
				Bottom of excavation 12' bgs
13				
14				
15				

Notes:

General Notes:	
	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
	2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
	3 - f=fine; m=medium; c=coarse
	4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP6

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/13/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	3.2	Black f/c Sand, little gravel size Brick, little Gravel, trace Silt, moist (FILL)
1				
				Brown Clay & Silt, f/c Sand, trace Gravel, moist (FILL)
2				
3				Grades to … little f/c Sand
4				
	2	4-6	0.8	
5				
	3	5-6	3.2	Black f/c Sand and Slag, some metal pieces, trace Gravel, moist (FILL)
6				
				Refusal encountered at 6' bgs
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes:

During the first attempt, a metal plate was encountered at 3' bgs; the extent of the metal piece was not identified. The test pit was moved 10' north. Refusal was encountered at 6' bgs due to buried metal pieces.

The metal pieces generally included several 3-5 inch wide pieces; however the length of the pieces were not identified.

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP7

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/13/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Black f/c Sand, trace Gravel, moist (FILL)
1				Grades to … light brown, little Gravel
2				Grades to … some full size Brick
3				Concrete slab
4				Black f/c Sand and Fly Ash, trace Gravel (FILL)
	2	4-8	ND	
5				
6				Grades to … dark brown, trace Fly Ash
7				
8				
	3	8-10	ND	Red/brown CLAY & SILT, trace f/c Sand, trace Gravel, moist
9				
10				Bottom of excavation 10' bgs
11				
12				
13				
14				
15				

Notes: At 3 ft. bgs. excavator was used to break through concrete slab. The concrete slab was approximatley 6 inches thick. The extent of the slab was not determined.

General Notes:
1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP8

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/13/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Black f/c Sand, trace Gravel, trace Silt, moist (FILL)
1				
2				Grades to … light brown
3				
				Red/brown Clay & Silt, trace Gravel, trace Silt, moist (FILL)
4				
	2	4-8	ND	Red/brown CLAY & SILT, trace Gravel, trace Silt, moist
5				
6				
7				
8				
				Bottom of excavation 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes:

General Notes:	
	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
	2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
	3 - f=fine; m=medium; c=coarse
	4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP9

Project Name & Location	1801 Elmwood Avenue; Donation Parcel	HEI Representative:	EB
Project Number:	e1459		
Start Date	10/14/2015 End Date 10/14/2015	Type of Excavator:	Track mounted
		Contractor:	DirtWorks
		Sampler Type:	Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)
1				
2				
				Black f/c Sand, little gravel size Brick, trace Gravel, moist (FILL)
3				
				Red/brown Clay & Silt, little Gravel, trace f/c Sand, moist (FILL)
4				
	2	4-6	ND	
5				
				Black f/c Sand, trace Gravel, trace Silt, moist (FILL)
6				
	3	6-9	ND	Red/brown CLAY & SILT, trace Gravel, trace Silt, moist
7				
8				
9				Bottom of excavation 9' bgs
10				
11				
12				
13				
14				
15				

Notes:

General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP10

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/14/2015 End Date: 10/14/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)
1				Asphalt
2				Gravel sub base (FILL)
3				Red/brown f/c Sand, little Silt, trace Gravel, moist (FILL)
4	2	4-8	ND	
5				Grades to … and cobble size Slag, some gravel and sand size Slag
6				Grades to …Gray, wet
7				Grades to … Black, trace gravel and sand size Slag
8	3	8-11	ND	Gray Clay & Silt, trace f/c Sand, trace Wood, moist (FILL)
9				Gray CLAY & SILT, trace f/c Sand, trace Gravel, moist
10				
11				Bottom of excavation 11' bgs
12				
13				
14				
15				

Notes: Excavater was used to break through the asphalt layer at 1' bgs.

General Notes:
1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
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Test Pit No: TP11

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/14/2015 End Date: 10/14/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Brown Clay & Silt, little Gravel, trace f/c Sand, moist (FILL)
1				
2				
				Black f/c Sand, moist (FILL)
3				
				Grades to …. brown
				Brown Clay & Silt, some gravel size Brick, little gravel size Concrete, trace f/c Sand, moist (FILL)
4	2	4-6	ND	
				Grades to … trace gravel size Brick, trace Concrete
5				
				Gray CLAY & SILT, trace Gravel, trace f/c Sand, wet
6	3	6-8	ND	
7				Grades to … saturated
8				Bedrock encountered at 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes: A historical building foundation slab was located north of test pit location.

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP12

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/14/2015 End Date: 10/14/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Brown Clay & Silt, some gravel size Brick, little Gravel, trace f/c Sand, moist (FILL)
1				Grades to … some f/c Sand, little Slag
2				
3				Concrete slab
				Sub base gravel (FILL)
4	2	4-7	ND	Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, moist
5				
6				
7				Bottom of excavation 7' bgs
8				
9				
10				
11				
12				
13				
14				
15				

Notes: A 6 inch thick concrete slab was encountered at 2.5 feet bgs. HEI broke through concrete to access soil below, however only a small area of concrete could be broken which restricted the depth of excavation.

General Notes:
1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP13

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/14/2015 End Date: 10/14/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	0.3	Dark brown Topsoil, trace gravel size Brick, moist (FILL)
1				Brown f/c Sand, trace Gravel, trace Silt, moist (FILL)
				Grades to … light brown
2				Red/brown CLAY & SILT, trace Gravel, trace f/c Sand, trace Organic matter, moist
3				
4				
	2	4-8	ND	
5				
				Grades to …. gray
6				
7				
8				
				Bottom of excacation 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes:

General Notes:	
	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
	2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
	3 - f=fine; m=medium; c=coarse
	4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP14

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/14/2015 End Date: 10/14/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-3	ND	Topsoil and roofing shingles, little full to gravel size Brick, moist (FILL)
1				Light brown f/c Sand, little full to gravel size Brick, trace Gravel to sand size Slag (FILL)
2				Grades to … gray, some full to gravel size Brick, little gravel to sand size Slag, little Cinders
3				Unknown metal plate
4				Refusal at 3' bgs
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Notes:
Pockets of slag/cinders at 2.5'-3' bgs
Railroad rail encountered at 2.5' bgs; (6 inches above the unknown metal plate)
Unknown metal plate <10 feet long encontered at 3' bgs

General Notes:
1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP15

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/14/2015 End Date: 10/14/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-2	0.1	Brown Clay & Silt, trace f/c Sand, trace full gravel size Brick, moist (FILL)
1				Brown f/c Sand, little full size Brick, little f gravel size Slag, trace Gravel, moist (FILL)
2	2	2-4	ND	
3				Grades to … and full size Brick (fire brick, white color)
4				Grades to … trace gravel size Brick
	3	4-8	ND	
5				Brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)
6				Brown/gray CLAY & SILT, trace Silt, trace Gravel, moist
7				
8				Bottom of excavation 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes:

Excavator refusal encountered during first attempt at 3' bgs due to a buried concrete slab. Moved 10' north to complete excavation.

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP16

Project Name & Location: 1801 Elmwood Avenue; Donation Parcel
HEI Representative: EB
Project Number: e1459
Start Date: 10/13/2015 End Date: 10/14/2015
Type of Excavator: Track mounted
Contractor: DirtWorks
Sampler Type: Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Brown Clay & Silt, trace Gravel, trace f/c Sand, moist (FILL)
1				Brown f/c Sand, little Brick, trace f gravel size Slag, moist (FILL)
2				
3				Concrete tunnel; filled with full size Brick
4	2	4-8	ND	
5				
6				
7				
8				Bottom of excavation 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes:

Concrete tunnel encountered at 3' bgs. TP 16 was excavated at the southern extent of the tunnel. The tunnel appeared to extend in a north to south direction.

Excavation was stop due to the brick within the tunnel would collaspe after each bucket scoop.

Concrete tunnel appeared to be approximatley 2.5 feet wide by 5 feet high.

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP17

Project Name & Location	1801 Elmwood Avenue; Donation Parcel	HEI Representative:	EB
Project Number:	e1459		
Start Date	10/14/2015 End Date 10/14/2015	Type of Excavator:	Track mounted
		Contractor:	DirtWorks
		Sampler Type:	Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Brown f/c Sand, little Gravel, trace sand size Slag, moist (FILL)
1				
				Concrete slab or possible tunnel
2				Black f/c Sand, little f gravel Slag, little Gravel, little Silt, little gravel size Brick, moist
3				
4	2	4-8	ND	
				Red/brown Clay & Silt, little f gravel size Slag, trace f/c Sand, trace gravel size Brick, moist (FILL)
5				
6				Grades to … trace f gravel size Slag
7				
				Iron pipe
8				Refusal at 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes:

A concrete slab was encountered at 2' bgs. Excavator broke through the slab and encountered varoius fill material. Unknown if the slab was possibly an historical tunnel.

6 inch iron pipe encountered in a east to west orientation.

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Test Pit No: TP18

Project Name & Location	1801 Elmwood Avenue; Donation Parcel	HEI Representative:	EB
Project Number:	e1459		
Start Date	10/14/2015 End Date 10/14/2015	Type of Excavator:	Track mounted
		Contractor:	DirtWorks
		Sampler Type:	Bucket

Test Pit Depth (ft)	Sample No.	Sample Interval (feet)	OVM Reading (ppm)	SAMPLE DESCRIPTION
	1	0-4	ND	Light brown f/c Sand, some Gravel, little full and gravel size Brick, moist (FILL)
1				
2				
3				Grades to … black, some f gravel size Slag, little f gravel size Cinders
4				
	2	4-8	ND	
5				
6				
7				Red/brown CLAY & SILT, trace Gravel, trace Silt, moist
8				
				Bottom of excavation 8' bgs
9				
10				
11				
12				
13				
14				
15				

Notes:

General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of test pit completion. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

Soil Boring Logs – December 2016 Locations

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB1

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/21/2016	End Date	12/21/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	8.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Asphalt	
1				Sub-base Gravel, moist. (FILL)	0
				Brown f/c Sand, some Silt, little Gravel, little Slag, moist. (FILL)	
2				Grades to… and Concrete.	0
				Grades to… Dk. Brown, tr. Concrete, tr. Gravel, tr. Slag.	
3					0
	2	4-8	48		
4					0
5					0
6					0
7					0
				Grades to… little Brick, wet.	
8	3	8-12	40		0
				Grades to… tr. Brick, saturated.	
9					0
10					0
11					0
				Grades to… some Slag.	
12	4	12-15.5	40	Grades to… tr. Slag.	0
13					0
14					0
				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	
15					0
16				Refusal encountered at 15.5' bgs	
18					
20					
22					
24					

Notes:	
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS

3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB2

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	11/29/2016	End Date	11/29/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	7'			Drilling Contractor	TREC Env.
GW Depth at Completion	6.1'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Brown Clay & Silt, little Gravel, tr. f/c Sand, moist. (FILL)	0
1					0
				Dk. Brown f/c Sand, some Silt, tr. Slag, tr. Gravel, moist. (FILL)	
2					0
3					0
	2	4-8	40		
4					0
5				Grades to… tr. Tree roots, wet.	0
6					0
7				Grades to… saturated.	0
	3	8-12	40		
8					0
9					0
10					0
11					0
	4	12-14.5	40	Grades to… some Slag.	
12				Grades to… little Slag.	0
13				Grades to… some Slag.	0
14				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
15				Refusal encountered at 14.5' bgs Temporary well installed to 14' bgs	
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB3

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/21/2016	End Date	12/21/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Asphalt	
1				Sub-base Gravel, tr Slag, moist. (FILL)	0
				Brown Clay & Silt, some Gravel, tr. f/c Sand, tr. Concrete, moist. (FILL)	
2					0
				Red/Brown CLAY & SILT, some Gravel, tr. f/c Sand, tr. Concrete, moist.	
3					0
	2	4-8	48		
4					0
5					0
6					0
7					0
8					0
				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB4

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/21/2016	End Date	12/21/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Asphalt	
1				Sub-base Gravel, tr. Slag, moist. (FILL)	0
				Brown Clay & Silt, some Gravel, tr. f/c Sand, tr. Concrete, moist. (FILL)	
2					0
3				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
	2	4-8	48		0
4					
5					0
6					0
7					0
8					0
				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB5

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/21/2016	End Date	12/21/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	5.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Brown f/c Sand, some Silt, little Brick, little Gravel, tr. Slag, moist. (FILL)	0
1				Grades to… some Brick.	0
2				Grades to… Dk. Brown, tr. Brick, tr. Gravel.	0
3					0
4	2	4-8	48	Grades to… wet.	0
5				Grades to… saturated.	0
6				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
7				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
8	3	8-12	48		0
9					0
10					0
11					0
12				Bottom of Boring 12' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB6

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/21/2016	End Date	12/21/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	5'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Brown f/c Sand, some Silt, little Slag, little Concrete, little Gravel, moist. (FILL)	0
1				Grades to… tr. Slag, tr. Concrete, tr. Gravel.	0
2					0
3				Grades to… some Slag.	0
4	2	4-8	48	Grades to… tr. Slag.	0
5				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
6				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
7					0
8				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB7

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/21/2016	End Date	12/21/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	5'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Asphalt	0
1				Sub-base Gravel and Concrete, wet. (FILL)	0
2				Brown f/c Sand, little Gravel, tr. Slag, tr. Concrete, moist. (FILL)	0
3				Grades to… Dk. Brown, tr. Gravel.	0.3
4	2	4-8	48	Grades to… and Brick.	0
5				Grades to… some Slag, tr. Brick, wet.	0
6				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
7				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
8				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS

3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB8

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	5.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	5'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Asphalt	
1				Sub-base Gravel, moist. (FILL)	0
				Brown f/c Sand, some Gravel, little Silt, little Slag, tr. Brick, moist. (FILL)	
2					0.3
				Grades to… Dk. Brown.	
3					0.5
				Grades to… some Slag.	
4	2	4-8	48		0.5
				Grades to… tr. Slag.	
5				Grades to… odor, wet.	3
				Grades to… sheen, saturated.	
6					8
				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist, odor. (FILL)	
7				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0.5
8					0
				Bottom of Boring 8' bgs	
9				Temporary Well installed to 8' bgs	
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS

3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB9

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	6'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	30	Brown f/c Sand, some Gravel, little Slag, tr. Concrete, moist. (FILL)	0
1					0
2				Grades to… Dk. Brown, some Slag, tr. Gravel.	0.2
3				Grades to… some Brick, tr. Slag.	0.2
	2	4-8	30		
4				Grades to… Brown, some Gravel.	0
5				Grades to… wet.	0
6				Dk. Brown Silt & Clay, little f/c Sand, little Gravel, saturated. (FILL)	0.2
7					0
	3	8-9.5	20	Grades to… and f/c Sand.	0
8					
9				Grades to… little f/c Sand.	0
10				Refusal encountered at 9.5' bgs	
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB10

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	5.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	5.5'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Brown Topsoil, moist.	0
1				Dk. Brown f/c Sand, some Silt, little Slag, tr. Gravel, moist. (FILL)	0
2					0
3					0
4	2	4-8	30		0
5				Grades to… and Slag, wet.	0
6				Grades to… saturated.	0
7					0.5
8	3	8-12	12		0.5
9				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0.5
10					0
11					0
12	4	12-15	40		0
13				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
14					0
15					
16				Refusal encountered at 15' bgs Temporary well installed to 14.5' bgs	
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB11

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	6.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Brown Topsoil, moist.	0
1				Brown f/c Sand, some Silt, little Gravel, tr. Slag, tr. Concrete, moist. (FILL)	0
2				Grades to… Dk. Brown, little Slag.	0
3				Grades to… tr. Slag, tr. Gravel.	0
4	2	4-8	40		0
5					0
6				Grades to… wet.	0
7				Grades to… saturated.	0
8	3	8-12	48		0
9				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
10				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
11					0
12				Bottom of Boring 12' bgs	0
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB12

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	6.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Brown Clay & Silt, little Gravel, tr. f/c Sand, tr. Concrete, moist. (FILL)	0
1					0
2				Grades to… some Gravel.	0
3				Grades to… some Concrete, little Gravel.	0
4	2	4-8	40		0
5				Brown f/c Sand, little Slag, little Silt, tr. Gravel, moist. (FILL)	
				Grades to… Dk. Brown, some Slag, wet.	0
6				Grades to… tr. Slag, saturated.	0
7				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
8	3	8-12	48	Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
9					0
10					0
11				Refusal encountered at 10.5' bgs	
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS

3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB13

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	6'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Asphalt	0
				Sub-base Gravel, moist. (FILL)	
1				Brown f/c Sand, little Silt, little Gravel, tr. Brick, tr. Concrete, moist. (FILL)	0
2				Grades to… Dk. Brown, tr. Slag.	0.5
3				Grades to… little Slag, slight odor.	0.7
	2	4-8	40		
4				Grades to… Brown, some Slag.	0
5					0
				Grades to… wet.	
6				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
7				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
8				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB14

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	7.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	8.2'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Brown f/c Sand, some Slag, little Silt, little Gravel, moist. (FILL)	0
1					0
2				Grades to… Dk. Brown, little Slag, tr. Gravel.	0
3				Grades to… Some Brick, tr. Slag.	0
4	2	4-8	30	Grades to… little Slag, tr. Brick.	0.5
5				Grades to… some Slag.	1.5
6				Grades to… wet.	2
7				Grades to… saturated.	0.5
8	3	8-12	48		0
9				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
10				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
11					0
12				Bottom of Boring 12' bgs Temporary well installed to 11.5' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB15

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Asphalt	
1				Sub-base Gravel, moist. (FILL)	0
				Brown f/c Sand, some Gravel, tr. Silt, wet. (FILL)	
2					0
3				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
	2	4-8	40		0
4					
5					0
6					0
7					0
8					0
				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB16

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	4'			Drilling Contractor	TREC Env.
GW Depth at Completion	3.1'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Gravel	
1				Dk. Brown f/c Sand, little Silt, tr. Gravel, moist. (FILL)	0
2					0
3					0
				Grades to… wet.	
4	2	4-8	40		0
				Grades to… saturated.	
5				Gray Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
				Grades to… Brown	
6				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
7					0
8					0
				Bottom of Boring 8' bgs	
9				Temporary well installed to 8' bgs	
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB17

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-0.5	0	Asphalt	
1				Refusal encountered at 0.5' bgs	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:	SB17A was completed 5' north. Refusal was encountered at 0.5' bgs.
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB18

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Gravel	
1				Brown f/c Sand, some Gravel, little Silt, tr. Slag, moist. (FILL)	0
2				Grades to… Dk. Brown, little Slag.	0
3				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
4	2	4-8	40	Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
5					0
6					0
7					0
8					0
9				Bottom of Boring 8' bgs	
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB19

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/22/2016	End Date	12/22/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	0	Asphalt	
1				Refusal encountered at 0.5' bgs	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:	SB19A was completed 5' north. Refusal was encountered at 0.5' bgs.
General Notes:	1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate. 2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur. 3 - f=fine; m=medium; c=coarse 4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB20

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/23/2016	End Date	12/23/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Asphalt	
1				Sub-base Gravel, moist. (FILL)	0
				Brown f/c Sand, some Gravel, little Silt, moist. (FILL)	
2				Grades to... wet.	0
				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	
3					0
				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	
	2	4-8	40		
4					0
5					0
6					0
7					0
8					0
				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB21

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/23/2016	End Date	12/23/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Asphalt	
1				Sub-base Gravel, moist (FILL)	0
				Brown Clay & Silt, some Gravel, tr. f/c Sand, tr. Slag, moist. (FILL)	
2					0
				Grades to… some f/c Sand, little Gravel, little Slag, wet.	
3					0
				Grades to… little Brick, tr. f/c Sand, tr. Gravel, moist.	
4	2	4-8	40	Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
5					0
6					0
7					0
8					0
9				Bottom of Boring 8' bgs	
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB22

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/23/2016	End Date	12/23/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Asphalt	
1				Brown Clay & Silt, little Gravel, tr. f/c Sand, moist. (FILL)	0
				Grades to… some Gravel.	
2					0
				Grades to… little Slag.	
3					0
	2	4-8	48	Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	
4					0
5					0
6					0
7					0
8					0
				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS

3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB23

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/23/2016	End Date	12/23/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	36	Asphalt	
1				Sub-base Gravel, moist. (FILL)	0
				Brown f/c Sand, some Gravel, little Slag, moist. (FILL)	
2				Grades to… some Slag.	0
				Grades to… Dk. Brown, little Slag.	
3					0
				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	
4	2	4-8	40		0
				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	
5					0
6					0
7					0
8					0
				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB24

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/23/2016	End Date	12/23/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	NWWD			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
				Asphalt	
1				Concrete	0
2	1	2-4	36		0
				Red/Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	
3					0
4	2	4-8	48		0
				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	
5					0
6					0
7					0
8					0
				Bottom of Boring 8' bgs	
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB25

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/23/2016	End Date	12/23/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	5.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	4.75'			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-4	40	Asphalt	
1				Sub-base Gravel, moist (FILL)	0
				Brown f/c Sand, some Gravel, tr. Slag, moist. (FILL)	
2					0
				Grades to… Dk. Brown, little Slag.	
3					0
	2	4-8	48	Grades to… tr. Slag.	0
4					
				Grades to… wet.	0
5				Grades to… saturated.	
				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL)	0
6					
					0
7				Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	
	3	8-12	24		0
8					
					0
9					
					0
10					
					0
11					
					0
12				Bottom of Boring 12' bgs	
				Temporary well installed to 11.5' bgs	
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: SB26

Project Name & Location	Mod-Pac Phase II 1801 Elmwood Ave. Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1609				
Start Date	12/23/2016	End Date	12/23/2016	Type of Drill Rig	Truck Mount Geoprobe
GW Depth While Drilling	3.5'			Drilling Contractor	TREC Env.
GW Depth at Completion	NWAC			Sampler Type:	MC

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
1	1	0-4	30	Asphalt Sub-base Gravel, moist. (FILL) Brown f/c Sand, some Slag, little Gravel, moist. (FILL)	0
2					0
3				Grades to… wet.	0
4	2	4-8	36		0
5				Brown Clay & Silt, tr. f/c Sand, tr. Gravel, moist. (FILL) Red/Brown CLAY & SILT, tr. f/c Sand, tr. Gravel, moist.	0
6					0
7					0
8					0
9				Bottom of Boring 8' bgs	
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS

3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: HA-1

Project Name & Location	Signature Dev. Phase II 166 Chandler Street Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1604				
Start Date	11/29/2016	End Date	11/29/2016	Type of Drill Rig	Hand Auger
GW Depth While Drilling	NWWD			Drilling Contractor	HEI
GW Depth at Completion	NWAC			Sampler Type:	Hand Auger

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0-0.5	6	Dk Brown Clay Absorbant Material, oily sheen, odor, moist. (FILL)	0
1				Bottom of Hand Auger 0.5' bgs	
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

HAZARD EVALUATIONS
3752 N. Buffalo Road
Orchard Park, NY 14127
716-667-3130

Boring No: HA-2

Project Name & Location	Signature Dev. Phase II 166 Chandler Street Buffalo, NY			HEI Representative:	E. Betzold
Project Number:	e1604				
Start Date	11/29/2016	End Date	11/29/2016	Type of Drill Rig	Hand Auger
GW Depth While Drilling	NWWD			Drilling Contractor	HEI
GW Depth at Completion	1.5'			Sampler Type:	Hand Auger

Sample Depth (ft)	Sample No.	Sample Interval (feet)	Recovery (inches)	SAMPLE DESCRIPTION	OVM Reading (ppm)
	1	0.5-1.5	12	Concrete	
1				Brown Silt & Clay, some Concrete, little Gravel, moist. (FILL)	0
				Grades to… wet.	
2				Bottom of Hand Auger 1.5' bgs	
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
18					
20					
22					
24					

Notes:

General Notes:

1 - Boundary between soil types represented with stratification line. Transitions may be gradual. Depths are approximate.
2 - Groundwater (GW) depths approximate at time of sampling. Fluctuations in groundwater may occur.
3 - f=fine; m=medium; c=coarse
4 - and (36-50%); some (21-35%); little (11-20%); trace (1-10%)

MC - Geoprobe Macrocore SS - Split Spoon SH - Shelby Tube BC - Bedrock Core

Analytical Testing Results – October 2015 Locations

New England ACCUTEST LABORATORIES

10/29/15

Technical Report for

Hazard Evaluations, Inc.

Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

E1459

Accutest Job Number: MC42297

Sampling Dates: 10/13/15 - 10/16/15

Report to:

Hazard Evaluations Inc
3752 N. Buffalo Rd.
Orchard Park, NY 14127
mwittman@hazardevaluations.com; ebetzold@hazardevaluations.com

ATTN: Michele Wittman

Total number of pages in report: **160**

Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Program and/or state specific certification programs as applicable.

Reza Tand
Lab Director

Client Service contact: Frank DAgostino 508-481-6200

Certifications: MA (M-MA136,SW846 NELAC) CT (PH-0109) NH (250210) RI (00071) ME (MA00136) FL (E87579) NY (11791) NJ (MA926) PA (6801121) ND (R-188) CO MN (11546AA) NC (653) IL (002337) WI (399080220) DoD ELAP (L-A-B L2235)

Test results relate only to samples analyzed.

Sections: 1 2 3 4

Table of Contents

Accutest Laboratories

Sample Summary

Hazard Evaluations, Inc.

Job No: MC42297

Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Project No: E1459

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC42297-1	10/13/15	11:45	EB	10/20/15	SO	Soil	TP4 (9-12')
MC42297-2	10/15/15	09:45	EB	10/20/15	SO	Soil	SB2 (4-8')
MC42297-3	10/13/15	11:45	EB	10/20/15	SO	Soil	TP4 (4-8')
MC42297-4	10/15/15	08:50	EB	10/20/15	SO	Soil	SB1 (0-4')
MC42297-5	10/14/15	09:10	EB	10/20/15	SO	Soil	TP11 (0-4')
MC42297-6	10/13/15	13:20	EB	10/20/15	SO	Soil	TP5 (0-4')
MC42297-7	10/16/15	12:00	EB	10/20/15	SO	Soil	SB15 (0-4')
MC42297-8	10/14/15	08:45	EB	10/20/15	SO	Soil	TP10 (4-8')
MC42297-9	10/13/15	14:40	EB	10/20/15	SO	Soil	TP7 (0-4')
MC42297-10	10/14/15	13:10	EB	10/20/15	SO	Soil	TP14 (0-3')
MC42297-11	10/14/15	14:30	EB	10/20/15	SO	Soil	TP16 (4-8')
MC42297-12	10/14/15	15:30	EB	10/20/15	SO	Soil	TP18 (0-4')
MC42297-13	10/15/15	11:15	EB	10/20/15	SO	Soil	SB4 (0-4')

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Sample Summary
(continued)

Hazard Evaluations, Inc.

Job No: MC42297

Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Project No: E1459

Sample Number	Collected Date	Time	By	Received	Matrix Code	Type	Client Sample ID
MC42297-14	10/14/15	15:15	EB	10/20/15	SO	Soil	TP17 (0-4')
MC42297-15	10/16/15	08:45	EB	10/20/15	SO	Soil	SB10 (0-4')
MC42297-16	10/16/15	10:30	EB	10/20/15	SO	Soil	SB14 (0-4')
MC42297-17	10/15/15	14:30	EB	10/20/15	SO	Soil	SB8 (0-4')
MC42297-18	10/16/15	10:00	EB	10/20/15	SO	Soil	SB12 (0-4')
MC42297-19	10/16/15	15:15	EB	10/20/15	AQ	Ground Water	MW1
MC42297-20	10/15/15	16:15	EB	10/20/15	AQ	Ground Water	SB5
MC42297-21	10/15/15	15:45	EB	10/20/15	AQ	Ground Water	SB9
MC42297-22	10/16/15	15:00	EB	10/20/15	AQ	Ground Water	SB15

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC42297-1	**TP4 (9-12')**					
Acetone		219	13		ug/kg	SW846 8260C
2-Butanone (MEK)		28.1	13		ug/kg	SW846 8260C
Anthracene		155	130		ug/kg	SW846 8270D
Benzo(a)anthracene		582	130		ug/kg	SW846 8270D
Benzo(a)pyrene		444	130		ug/kg	SW846 8270D
Benzo(b)fluoranthene		389	130		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		256	130		ug/kg	SW846 8270D
Benzo(k)fluoranthene		313	130		ug/kg	SW846 8270D
Chrysene		710	130		ug/kg	SW846 8270D
Fluoranthene		863	130		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		221	130		ug/kg	SW846 8270D
2-Methylnaphthalene		189	130		ug/kg	SW846 8270D
Phenanthrene		661	130		ug/kg	SW846 8270D
Pyrene		817	130		ug/kg	SW846 8270D
Aluminum		23300	20		mg/kg	SW846 6010C
Arsenic		4.4	1.0		mg/kg	SW846 6010C
Barium		162	5.0		mg/kg	SW846 6010C
Beryllium		1.2	0.40		mg/kg	SW846 6010C
Cadmium		0.40	0.40		mg/kg	SW846 6010C
Calcium		2370	500		mg/kg	SW846 6010C
Chromium		25.9	1.0		mg/kg	SW846 6010C
Cobalt		14.2	5.0		mg/kg	SW846 6010C
Copper		20.6	2.5		mg/kg	SW846 6010C
Iron		35000	10		mg/kg	SW846 6010C
Lead		15.9	1.0		mg/kg	SW846 6010C
Magnesium		5950	500		mg/kg	SW846 6010C
Manganese		444	1.5		mg/kg	SW846 6010C
Nickel		30.1	4.0		mg/kg	SW846 6010C
Potassium		2790	500		mg/kg	SW846 6010C
Vanadium		33.9	1.0		mg/kg	SW846 6010C
Zinc		108	2.0		mg/kg	SW846 6010C
MC42297-2	**SB2 (4-8')**					
2-Butanone (MEK)		833	780		ug/kg	SW846 8260C
cis-1,2-Dichloroethene		10200	160		ug/kg	SW846 8260C
trans-1,2-Dichloroethene		788	160		ug/kg	SW846 8260C
Trichloroethene		28900	160		ug/kg	SW846 8260C
Aluminum		5350	18		mg/kg	SW846 6010C
Arsenic		1.9	0.89		mg/kg	SW846 6010C
Barium		19.7	4.5		mg/kg	SW846 6010C
Calcium		34800	450		mg/kg	SW846 6010C
Chromium		4.8	0.89		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Copper		2.7	2.2		mg/kg	SW846 6010C
Iron		6510	8.9		mg/kg	SW846 6010C
Lead		11.7	0.89		mg/kg	SW846 6010C
Magnesium		4360	450		mg/kg	SW846 6010C
Manganese		116	1.3		mg/kg	SW846 6010C
Nickel		4.0	3.6		mg/kg	SW846 6010C
Potassium		545	450		mg/kg	SW846 6010C
Vanadium		10.4	0.89		mg/kg	SW846 6010C
Zinc		16.0	1.8		mg/kg	SW846 6010C
MC42297-3	**TP4 (4-8')**					
Methylene chloride		4.4	2.0		ug/kg	SW846 8260C
Trichloroethene		3.8	2.0		ug/kg	SW846 8260C
Xylene (total)		2.0	2.0		ug/kg	SW846 8260C
Acenaphthene		2960	540		ug/kg	SW846 8270D
Acenaphthylene		884	540		ug/kg	SW846 8270D
Anthracene		7700	540		ug/kg	SW846 8270D
Benzo(a)anthracene		16200	540		ug/kg	SW846 8270D
Benzo(a)pyrene		14900	540		ug/kg	SW846 8270D
Benzo(b)fluoranthene		13000	540		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		8700	540		ug/kg	SW846 8270D
Benzo(k)fluoranthene		12400	540		ug/kg	SW846 8270D
Carbazole		4010	540		ug/kg	SW846 8270D
Chrysene		16300	540		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		803	540		ug/kg	SW846 8270D
Dibenzofuran		2700	540		ug/kg	SW846 8270D
Fluoranthene		37500	540		ug/kg	SW846 8270D
Fluorene		3890	540		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		8230	540		ug/kg	SW846 8270D
2-Methylnaphthalene		1730	540		ug/kg	SW846 8270D
Naphthalene		3540	540		ug/kg	SW846 8270D
Phenanthrene		32400	540		ug/kg	SW846 8270D
Pyrene		32400	540		ug/kg	SW846 8270D
Aluminum		5610	17		mg/kg	SW846 6010C
Arsenic		12.4	0.85		mg/kg	SW846 6010C
Barium		85.0	4.2		mg/kg	SW846 6010C
Cadmium		0.46	0.34		mg/kg	SW846 6010C
Calcium		34600	420		mg/kg	SW846 6010C
Chromium		11.3	0.85		mg/kg	SW846 6010C
Cobalt		4.4	4.2		mg/kg	SW846 6010C
Copper		23.1	2.1		mg/kg	SW846 6010C
Iron		30500	8.5		mg/kg	SW846 6010C
Lead		95.0	0.85		mg/kg	SW846 6010C
Magnesium		3890	420		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Manganese		486	1.3		mg/kg	SW846 6010C
Mercury		0.056	0.032		mg/kg	SW846 7471B
Nickel		9.0	3.4		mg/kg	SW846 6010C
Potassium		805	420		mg/kg	SW846 6010C
Vanadium		17.4	0.85		mg/kg	SW846 6010C
Zinc		150	1.7		mg/kg	SW846 6010C
MC42297-4	**SB1 (0-4')**					
Methylene chloride		17.2	2.7		ug/kg	SW846 8260C
Benzo(a)anthracene		196	120		ug/kg	SW846 8270D
Benzo(a)pyrene		175	120		ug/kg	SW846 8270D
Benzo(b)fluoranthene		222	120		ug/kg	SW846 8270D
Benzo(k)fluoranthene		155	120		ug/kg	SW846 8270D
Chrysene		239	120		ug/kg	SW846 8270D
Dibenzofuran		165	120		ug/kg	SW846 8270D
Fluoranthene		352	120		ug/kg	SW846 8270D
2-Methylnaphthalene		565	120		ug/kg	SW846 8270D
Naphthalene		362	120		ug/kg	SW846 8270D
Phenanthrene		427	120		ug/kg	SW846 8270D
Pyrene		346	120		ug/kg	SW846 8270D
Aluminum		9780	19		mg/kg	SW846 6010C
Arsenic		8.7	0.95		mg/kg	SW846 6010C
Barium		68.9	4.7		mg/kg	SW846 6010C
Beryllium		1.1	0.38		mg/kg	SW846 6010C
Calcium		56300	2400		mg/kg	SW846 6010C
Chromium		10.7	0.95		mg/kg	SW846 6010C
Copper		16.1	2.4		mg/kg	SW846 6010C
Iron		28500	9.5		mg/kg	SW846 6010C
Lead		32.8	0.95		mg/kg	SW846 6010C
Magnesium		6950	470		mg/kg	SW846 6010C
Manganese		1130	1.4		mg/kg	SW846 6010C
Nickel		8.8	3.8		mg/kg	SW846 6010C
Potassium		921	470		mg/kg	SW846 6010C
Selenium		1.3	0.95		mg/kg	SW846 6010C
Vanadium		18.7	0.95		mg/kg	SW846 6010C
Zinc		55.4	1.9		mg/kg	SW846 6010C
MC42297-5	**TP11 (0-4')**					
No hits reported in this sample.						
MC42297-6	**TP5 (0-4')**					
Methylene chloride		8.0	2.2		ug/kg	SW846 8260C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Trichloroethene		2.2	2.2		ug/kg	SW846 8260C
Acenaphthene		143	110		ug/kg	SW846 8270D
Anthracene		381	110		ug/kg	SW846 8270D
Benzo(a)anthracene		891	110		ug/kg	SW846 8270D
Benzo(a)pyrene		842	110		ug/kg	SW846 8270D
Benzo(b)fluoranthene		730	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		514	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		704	110		ug/kg	SW846 8270D
Carbazole		200	110		ug/kg	SW846 8270D
Chrysene		881	110		ug/kg	SW846 8270D
Fluoranthene		1880	110		ug/kg	SW846 8270D
Fluorene		156	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		471	110		ug/kg	SW846 8270D
Phenanthrene		1440	110		ug/kg	SW846 8270D
Pyrene		1600	110		ug/kg	SW846 8270D
Aluminum		12500	18		mg/kg	SW846 6010C
Antimony		1.7	0.92		mg/kg	SW846 6010C
Arsenic		22.2	0.92		mg/kg	SW846 6010C
Barium		131	4.6		mg/kg	SW846 6010C
Beryllium		1.1	0.37		mg/kg	SW846 6010C
Cadmium		0.93	0.37		mg/kg	SW846 6010C
Calcium		24700	460		mg/kg	SW846 6010C
Chromium		20.0	0.92		mg/kg	SW846 6010C
Cobalt		9.9	4.6		mg/kg	SW846 6010C
Copper		66.6	2.3		mg/kg	SW846 6010C
Iron		33000	9.2		mg/kg	SW846 6010C
Lead		156	0.92		mg/kg	SW846 6010C
Magnesium		5470	460		mg/kg	SW846 6010C
Manganese		561	1.4		mg/kg	SW846 6010C
Mercury		0.18	0.035		mg/kg	SW846 7471B
Nickel		31.3	3.7		mg/kg	SW846 6010C
Potassium		1770	460		mg/kg	SW846 6010C
Selenium		2.3	0.92		mg/kg	SW846 6010C
Vanadium		28.4	0.92		mg/kg	SW846 6010C
Zinc		277	1.8		mg/kg	SW846 6010C
MC42297-7	**SB15 (0-4')**					
Methylene chloride		3.7 B	2.3		ug/kg	SW846 8260C
Tetrachloroethene		4.7	2.3		ug/kg	SW846 8260C
Trichloroethene		4.3	2.3		ug/kg	SW846 8260C
Acenaphthene		964	560		ug/kg	SW846 8270D
Acenaphthylene		574	560		ug/kg	SW846 8270D
Anthracene		3330	560		ug/kg	SW846 8270D
Benzo(a)anthracene		7410	560		ug/kg	SW846 8270D

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Client Sample ID / Analyte	Result/ Qual	RL	MDL	Units	Method
Benzo(a)pyrene	6550	560		ug/kg	SW846 8270D
Benzo(b)fluoranthene	6070	560		ug/kg	SW846 8270D
Benzo(g,h,i)perylene	3690	560		ug/kg	SW846 8270D
Benzo(k)fluoranthene	5390	560		ug/kg	SW846 8270D
Carbazole	1490	560		ug/kg	SW846 8270D
Chrysene	7220	560		ug/kg	SW846 8270D
Dibenzofuran	1140	560		ug/kg	SW846 8270D
Fluoranthene	15000	560		ug/kg	SW846 8270D
Fluorene	1430	560		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene	3580	560		ug/kg	SW846 8270D
2-Methylnaphthalene	1010	560		ug/kg	SW846 8270D
Naphthalene	991	560		ug/kg	SW846 8270D
Phenanthrene	12300	560		ug/kg	SW846 8270D
Pyrene	13300	560		ug/kg	SW846 8270D
Aroclor 1254	56.5	36		ug/kg	SW846 8082A
Aluminum	9520	18		mg/kg	SW846 6010C
Antimony	1.3	0.90		mg/kg	SW846 6010C
Arsenic	28.4	0.90		mg/kg	SW846 6010C
Barium	144	4.5		mg/kg	SW846 6010C
Beryllium	0.67	0.36		mg/kg	SW846 6010C
Cadmium	1.7	0.36		mg/kg	SW846 6010C
Calcium	29000	450		mg/kg	SW846 6010C
Chromium	41.0	0.90		mg/kg	SW846 6010C
Cobalt	6.1	4.5		mg/kg	SW846 6010C
Copper	73.0	2.2		mg/kg	SW846 6010C
Iron	30100	9.0		mg/kg	SW846 6010C
Lead	190	0.90		mg/kg	SW846 6010C
Magnesium	6230	450		mg/kg	SW846 6010C
Manganese	921	1.3		mg/kg	SW846 6010C
Nickel	17.4	3.6		mg/kg	SW846 6010C
Potassium	1350	450		mg/kg	SW846 6010C
Vanadium	26.2	0.90		mg/kg	SW846 6010C
Zinc	270	1.8		mg/kg	SW846 6010C
MC42297-8 TP10 (4-8')					
Acetone	95.5	12		ug/kg	SW846 8260C
Methylene chloride	11.2	2.5		ug/kg	SW846 8260C
Acenaphthene	132	120		ug/kg	SW846 8270D
Anthracene	337	120		ug/kg	SW846 8270D
Benzo(a)anthracene	637	120		ug/kg	SW846 8270D
Benzo(a)pyrene	681	120		ug/kg	SW846 8270D
Benzo(b)fluoranthene	600	120		ug/kg	SW846 8270D
Benzo(g,h,i)perylene	499	120		ug/kg	SW846 8270D
Benzo(k)fluoranthene	433	120		ug/kg	SW846 8270D

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Carbazole		168	120		ug/kg	SW846 8270D
Chrysene		724	120		ug/kg	SW846 8270D
Dibenzofuran		165	120		ug/kg	SW846 8270D
Fluoranthene		1580	120		ug/kg	SW846 8270D
Fluorene		159	120		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		298	120		ug/kg	SW846 8270D
2-Methylnaphthalene		184	120		ug/kg	SW846 8270D
Naphthalene		203	120		ug/kg	SW846 8270D
Phenanthrene		1490	120		ug/kg	SW846 8270D
Pyrene		1650	120		ug/kg	SW846 8270D
Aluminum		10000	19		mg/kg	SW846 6010C
Arsenic		8.6	0.97		mg/kg	SW846 6010C
Barium		55.1	4.9		mg/kg	SW846 6010C
Beryllium		0.42	0.39		mg/kg	SW846 6010C
Calcium		22200	490		mg/kg	SW846 6010C
Chromium		11.0	0.97		mg/kg	SW846 6010C
Copper		24.2	2.4		mg/kg	SW846 6010C
Iron		18800	9.7		mg/kg	SW846 6010C
Lead		87.7	0.97		mg/kg	SW846 6010C
Magnesium		2630	490		mg/kg	SW846 6010C
Manganese		1140	1.5		mg/kg	SW846 6010C
Nickel		7.3	3.9		mg/kg	SW846 6010C
Potassium		1550	490		mg/kg	SW846 6010C
Vanadium		21.8	0.97		mg/kg	SW846 6010C
Zinc		141	1.9		mg/kg	SW846 6010C
MC42297-9	**TP7 (0-4')**					
Acenaphthene		265	110		ug/kg	SW846 8270D
Anthracene		515	110		ug/kg	SW846 8270D
Benzo(a)anthracene		1240	110		ug/kg	SW846 8270D
Benzo(a)pyrene		1190	110		ug/kg	SW846 8270D
Benzo(b)fluoranthene		1090	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		629	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		916	110		ug/kg	SW846 8270D
Butyl benzyl phthalate		518	270		ug/kg	SW846 8270D
Carbazole		275	110		ug/kg	SW846 8270D
Chrysene		1270	110		ug/kg	SW846 8270D
Dibenzofuran		158	110		ug/kg	SW846 8270D
Fluoranthene		2860	110		ug/kg	SW846 8270D
Fluorene		245	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		549	110		ug/kg	SW846 8270D
Phenanthrene		2390	110		ug/kg	SW846 8270D
Pyrene		2540	110		ug/kg	SW846 8270D
Aluminum		5740	17		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Arsenic		7.1	0.87		mg/kg	SW846 6010C
Barium		139	4.3		mg/kg	SW846 6010C
Beryllium		0.42	0.35		mg/kg	SW846 6010C
Cadmium		1.2	0.35		mg/kg	SW846 6010C
Calcium		72700	2200		mg/kg	SW846 6010C
Chromium		27.4	0.87		mg/kg	SW846 6010C
Copper		348	2.2		mg/kg	SW846 6010C
Iron		11200	8.7		mg/kg	SW846 6010C
Lead		159	0.87		mg/kg	SW846 6010C
Magnesium		17000	430		mg/kg	SW846 6010C
Manganese		313	1.3		mg/kg	SW846 6010C
Mercury		0.081	0.035		mg/kg	SW846 7471B
Nickel		11.5	3.5		mg/kg	SW846 6010C
Potassium		908	430		mg/kg	SW846 6010C
Vanadium		13.4	0.87		mg/kg	SW846 6010C
Zinc		198	1.7		mg/kg	SW846 6010C
MC42297-10	**TP14 (0-3')**					
Xylene (total)		519	110		ug/kg	SW846 8260C
Acenaphthene		1450	100		ug/kg	SW846 8270D
Acenaphthylene		248	100		ug/kg	SW846 8270D
Anthracene		3210	100		ug/kg	SW846 8270D
Benzo(a)anthracene		6770	100		ug/kg	SW846 8270D
Benzo(a)pyrene		5400	100		ug/kg	SW846 8270D
Benzo(b)fluoranthene		7340	100		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		3390	100		ug/kg	SW846 8270D
Benzo(k)fluoranthene		4320	100		ug/kg	SW846 8270D
Carbazole		1830	100		ug/kg	SW846 8270D
Chrysene		7120	100		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		440	100		ug/kg	SW846 8270D
Dibenzofuran		1540	100		ug/kg	SW846 8270D
Fluoranthene		16400	2100		ug/kg	SW846 8270D
Fluorene		1460	100		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		3690	100		ug/kg	SW846 8270D
2-Methylnaphthalene		2490	100		ug/kg	SW846 8270D
Naphthalene		2680	100		ug/kg	SW846 8270D
Phenanthrene		15100	2100		ug/kg	SW846 8270D
Pyrene		14000	2100		ug/kg	SW846 8270D
Aluminum		9010	17		mg/kg	SW846 6010C
Arsenic		11.1	0.85		mg/kg	SW846 6010C
Barium		63.2	4.2		mg/kg	SW846 6010C
Beryllium		0.45	0.34		mg/kg	SW846 6010C
Cadmium		0.64	0.34		mg/kg	SW846 6010C
Calcium		7050	420		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chromium		12.6	0.85		mg/kg	SW846 6010C
Cobalt		6.4	4.2		mg/kg	SW846 6010C
Copper		22.0	2.1		mg/kg	SW846 6010C
Iron		58000	85		mg/kg	SW846 6010C
Lead		164	0.85		mg/kg	SW846 6010C
Magnesium		1210	420		mg/kg	SW846 6010C
Manganese		891	1.3		mg/kg	SW846 6010C
Mercury		0.28	0.035		mg/kg	SW846 7471B
Nickel		12.8	3.4		mg/kg	SW846 6010C
Potassium		1350	420		mg/kg	SW846 6010C
Vanadium		23.8	0.85		mg/kg	SW846 6010C
Zinc		242	1.7		mg/kg	SW846 6010C
MC42297-11	**TP16 (4-8')**					
Acenaphthene		1720	110		ug/kg	SW846 8270D
Acenaphthylene		593	110		ug/kg	SW846 8270D
Anthracene		6570	110		ug/kg	SW846 8270D
Benzo(a)anthracene		14000	2300		ug/kg	SW846 8270D
Benzo(a)pyrene		12500	2300		ug/kg	SW846 8270D
Benzo(b)fluoranthene		10600	2300		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		9040	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		6180	110		ug/kg	SW846 8270D
Carbazole		2440	110		ug/kg	SW846 8270D
Chrysene		13400	2300		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		778	110		ug/kg	SW846 8270D
Dibenzofuran		1410	110		ug/kg	SW846 8270D
Fluoranthene		28100	2300		ug/kg	SW846 8270D
Fluorene		2040	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		8900	110		ug/kg	SW846 8270D
2-Methylnaphthalene		704	110		ug/kg	SW846 8270D
Naphthalene		1310	110		ug/kg	SW846 8270D
Phenanthrene		22000	2300		ug/kg	SW846 8270D
Pyrene		23400	2300		ug/kg	SW846 8270D
Aluminum		7450	18		mg/kg	SW846 6010C
Antimony		1.1	0.89		mg/kg	SW846 6010C
Arsenic		14.9	0.89		mg/kg	SW846 6010C
Barium		243	4.4		mg/kg	SW846 6010C
Beryllium		0.42	0.35		mg/kg	SW846 6010C
Cadmium		0.90	0.35		mg/kg	SW846 6010C
Calcium		48700	2200		mg/kg	SW846 6010C
Chromium		20.9	0.89		mg/kg	SW846 6010C
Cobalt		6.5	4.4		mg/kg	SW846 6010C
Copper		42.9	2.2		mg/kg	SW846 6010C
Iron		56400	44		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Lead		330	0.89		mg/kg	SW846 6010C
Magnesium		6440	440		mg/kg	SW846 6010C
Manganese		605	1.3		mg/kg	SW846 6010C
Mercury		0.26	0.036		mg/kg	SW846 7471B
Nickel		21.4	3.5		mg/kg	SW846 6010C
Potassium		1390	440		mg/kg	SW846 6010C
Vanadium		32.1	0.89		mg/kg	SW846 6010C
Zinc		267	1.8		mg/kg	SW846 6010C
MC42297-12	**TP18 (0-4')**					
Acenaphthene		246	110		ug/kg	SW846 8270D
Acenaphthylene		255	110		ug/kg	SW846 8270D
Anthracene		1020	110		ug/kg	SW846 8270D
Benzo(a)anthracene		3000	110		ug/kg	SW846 8270D
Benzo(a)pyrene		2980	110		ug/kg	SW846 8270D
Benzo(b)fluoranthene		2550	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		1400	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		2330	110		ug/kg	SW846 8270D
Butyl benzyl phthalate		1200	280		ug/kg	SW846 8270D
Carbazole		432	110		ug/kg	SW846 8270D
Chrysene		2880	110		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		523	110		ug/kg	SW846 8270D
Dibenzofuran		183	110		ug/kg	SW846 8270D
Fluoranthene		7140	110		ug/kg	SW846 8270D
Fluorene		282	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		1230	110		ug/kg	SW846 8270D
Phenanthrene		3820	110		ug/kg	SW846 8270D
Pyrene		6020	110		ug/kg	SW846 8270D
Aluminum		5630	18		mg/kg	SW846 6010C
Arsenic		6.1	0.89		mg/kg	SW846 6010C
Barium		47.9	4.4		mg/kg	SW846 6010C
Cadmium		0.40	0.35		mg/kg	SW846 6010C
Calcium		47000	2200		mg/kg	SW846 6010C
Chromium		8.7	0.89		mg/kg	SW846 6010C
Cobalt		5.4	4.4		mg/kg	SW846 6010C
Copper		30.8	2.2		mg/kg	SW846 6010C
Iron		15200	8.9		mg/kg	SW846 6010C
Lead		66.2	0.89		mg/kg	SW846 6010C
Magnesium		7740	440		mg/kg	SW846 6010C
Manganese		331	1.3		mg/kg	SW846 6010C
Mercury		0.043	0.034		mg/kg	SW846 7471B
Nickel		18.9	3.5		mg/kg	SW846 6010C
Potassium		950	440		mg/kg	SW846 6010C
Vanadium		13.3	0.89		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Zinc		124	1.8		mg/kg	SW846 6010C
MC42297-13	**SB4 (0-4')**					
Acenaphthene		14200	2100		ug/kg	SW846 8270D
Acenaphthylene		12900	2100		ug/kg	SW846 8270D
Anthracene		66400	2100		ug/kg	SW846 8270D
Benzo(a)anthracene		98200	2100		ug/kg	SW846 8270D
Benzo(a)pyrene		85600	2100		ug/kg	SW846 8270D
Benzo(b)fluoranthene		69000	2100		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		32100	2100		ug/kg	SW846 8270D
Benzo(k)fluoranthene		57900	2100		ug/kg	SW846 8270D
Carbazole		21300	2100		ug/kg	SW846 8270D
Chrysene		94000	2100		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		3890	2100		ug/kg	SW846 8270D
Dibenzofuran		19300	2100		ug/kg	SW846 8270D
Fluoranthene		180000	10000		ug/kg	SW846 8270D
Fluorene		32800	2100		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		29200	2100		ug/kg	SW846 8270D
2-Methylnaphthalene		27600	2100		ug/kg	SW846 8270D
Naphthalene		33500	2100		ug/kg	SW846 8270D
Phenanthrene		201000	10000		ug/kg	SW846 8270D
Pyrene		162000	10000		ug/kg	SW846 8270D
Aluminum		3080	16		mg/kg	SW846 6010C
Arsenic		4.5	0.80		mg/kg	SW846 6010C
Barium		32.5	4.0		mg/kg	SW846 6010C
Calcium		17700	400		mg/kg	SW846 6010C
Chromium		16.0	0.80		mg/kg	SW846 6010C
Copper		15.3	2.0		mg/kg	SW846 6010C
Iron		10200	8.0		mg/kg	SW846 6010C
Lead		31.4	0.80		mg/kg	SW846 6010C
Magnesium		3470	400		mg/kg	SW846 6010C
Manganese		155	1.2		mg/kg	SW846 6010C
Nickel		4.5	3.2		mg/kg	SW846 6010C
Vanadium		13.2	0.80		mg/kg	SW846 6010C
Zinc		44.6	1.6		mg/kg	SW846 6010C
MC42297-14	**TP17 (0-4')**					
Acenaphthene		2980	2300		ug/kg	SW846 8270D
Acenaphthylene		2540	2300		ug/kg	SW846 8270D
Anthracene		11200	2300		ug/kg	SW846 8270D
Benzo(a)anthracene		34900	2300		ug/kg	SW846 8270D
Benzo(a)pyrene		33100	2300		ug/kg	SW846 8270D
Benzo(b)fluoranthene		26900	2300		ug/kg	SW846 8270D

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Benzo(g,h,i)perylene		14200	2300		ug/kg	SW846 8270D
Benzo(k)fluoranthene		26800	2300		ug/kg	SW846 8270D
Carbazole		3960	2300		ug/kg	SW846 8270D
Chrysene		33500	2300		ug/kg	SW846 8270D
Fluoranthene		69800	2300		ug/kg	SW846 8270D
Fluorene		3210	2300		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		14700	2300		ug/kg	SW846 8270D
Phenanthrene		38000	2300		ug/kg	SW846 8270D
Pyrene		63500	2300		ug/kg	SW846 8270D
Aluminum		9860	18		mg/kg	SW846 6010C
Arsenic		8.6	0.91		mg/kg	SW846 6010C
Barium		145	4.5		mg/kg	SW846 6010C
Beryllium		0.66	0.36		mg/kg	SW846 6010C
Cadmium		0.54	0.36		mg/kg	SW846 6010C
Calcium		85700	2300		mg/kg	SW846 6010C
Chromium		16.2	0.91		mg/kg	SW846 6010C
Cobalt		7.4	4.5		mg/kg	SW846 6010C
Copper		47.4	2.3		mg/kg	SW846 6010C
Iron		27800	9.1		mg/kg	SW846 6010C
Lead		107	0.91		mg/kg	SW846 6010C
Magnesium		22800	450		mg/kg	SW846 6010C
Manganese		441	1.4		mg/kg	SW846 6010C
Mercury		0.21	0.035		mg/kg	SW846 7471B
Nickel		19.2	3.6		mg/kg	SW846 6010C
Potassium		2160	450		mg/kg	SW846 6010C
Vanadium		23.1	0.91		mg/kg	SW846 6010C
Zinc		196	1.8		mg/kg	SW846 6010C
MC42297-15	**SB10 (0-4')**					
Ethylbenzene		6.2	2.3		ug/kg	SW846 8260C
Methylene chloride		6.6	2.3		ug/kg	SW846 8260C
Xylene (total)		47.1	2.3		ug/kg	SW846 8260C
Acenaphthene		859	100		ug/kg	SW846 8270D
Acenaphthylene		402	100		ug/kg	SW846 8270D
Anthracene		3210	100		ug/kg	SW846 8270D
Benzo(a)anthracene		6660	100		ug/kg	SW846 8270D
Benzo(a)pyrene		6380	100		ug/kg	SW846 8270D
Benzo(b)fluoranthene		8070	100		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		4950	100		ug/kg	SW846 8270D
Benzo(k)fluoranthene		5150	100		ug/kg	SW846 8270D
Carbazole		1520	100		ug/kg	SW846 8270D
Chrysene		6650	100		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		442	100		ug/kg	SW846 8270D
Dibenzofuran		870	100		ug/kg	SW846 8270D

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Fluoranthene		15000	2100		ug/kg	SW846 8270D
Fluorene		1130	100		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		4370	100		ug/kg	SW846 8270D
2-Methylnaphthalene		375	100		ug/kg	SW846 8270D
Naphthalene		597	100		ug/kg	SW846 8270D
Phenanthrene		13100	2100		ug/kg	SW846 8270D
Pyrene		13100	2100		ug/kg	SW846 8270D
Aluminum		5780	17		mg/kg	SW846 6010C
Arsenic		17.1	0.86		mg/kg	SW846 6010C
Barium		93.4	4.3		mg/kg	SW846 6010C
Beryllium		0.35	0.34		mg/kg	SW846 6010C
Cadmium		0.65	0.34		mg/kg	SW846 6010C
Calcium		86400	4300		mg/kg	SW846 6010C
Chromium		18.5	0.86		mg/kg	SW846 6010C
Cobalt		5.9	4.3		mg/kg	SW846 6010C
Copper		43.1	2.1		mg/kg	SW846 6010C
Iron		56100	86		mg/kg	SW846 6010C
Lead		63.2	0.86		mg/kg	SW846 6010C
Magnesium		20400	430		mg/kg	SW846 6010C
Manganese		520	1.3		mg/kg	SW846 6010C
Mercury		0.045	0.032		mg/kg	SW846 7471B
Nickel		11.5	3.4		mg/kg	SW846 6010C
Potassium		994	430		mg/kg	SW846 6010C
Vanadium		40.7	0.86		mg/kg	SW846 6010C
Zinc		146	1.7		mg/kg	SW846 6010C
MC42297-16	**SB14 (0-4')**					
Methylene chloride		1.8	1.4		ug/kg	SW846 8260C
Fluoranthene		170	100		ug/kg	SW846 8270D
Phenanthrene		124	100		ug/kg	SW846 8270D
Pyrene		162	100		ug/kg	SW846 8270D
Aluminum		3420	17		mg/kg	SW846 6010C
Arsenic		5.9	0.87		mg/kg	SW846 6010C
Barium		17.4	4.3		mg/kg	SW846 6010C
Calcium		70900	4300		mg/kg	SW846 6010C
Chromium		25.3	0.87		mg/kg	SW846 6010C
Copper		4.4	2.2		mg/kg	SW846 6010C
Iron		21100	8.7		mg/kg	SW846 6010C
Lead		101	0.87		mg/kg	SW846 6010C
Magnesium		3810	430		mg/kg	SW846 6010C
Manganese		278	1.3		mg/kg	SW846 6010C
Nickel		4.6	3.5		mg/kg	SW846 6010C
Vanadium		16.1	0.87		mg/kg	SW846 6010C
Zinc		10.5	1.7		mg/kg	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
MC42297-17	**SB8 (0-4')**					
Methylene chloride		4.7 B	2.6		ug/kg	SW846 8260C
Acenaphthene		2970	530		ug/kg	SW846 8270D
Acenaphthylene		2800	530		ug/kg	SW846 8270D
Anthracene		11100	530		ug/kg	SW846 8270D
Benzo(a)anthracene		18500	530		ug/kg	SW846 8270D
Benzo(a)pyrene		16600	530		ug/kg	SW846 8270D
Benzo(b)fluoranthene		13100	530		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		7090	530		ug/kg	SW846 8270D
Benzo(k)fluoranthene		12300	530		ug/kg	SW846 8270D
Carbazole		3840	530		ug/kg	SW846 8270D
Chrysene		17000	530		ug/kg	SW846 8270D
Dibenzo(a,h)anthracene		679	530		ug/kg	SW846 8270D
Dibenzofuran		3440	530		ug/kg	SW846 8270D
Fluoranthene		46000	5300		ug/kg	SW846 8270D
Fluorene		4240	530		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		6320	530		ug/kg	SW846 8270D
2-Methylnaphthalene		1690	530		ug/kg	SW846 8270D
Naphthalene		3230	530		ug/kg	SW846 8270D
Phenanthrene		43400	5300		ug/kg	SW846 8270D
Pyrene		41800	530		ug/kg	SW846 8270D
Aluminum		19200	17		mg/kg	SW846 6010C
Arsenic		5.4	0.86		mg/kg	SW846 6010C
Barium		207	4.3		mg/kg	SW846 6010C
Beryllium		2.7	0.35		mg/kg	SW846 6010C
Calcium		104000	4300		mg/kg	SW846 6010C
Chromium		9.9	0.86		mg/kg	SW846 6010C
Copper		8.1	2.2		mg/kg	SW846 6010C
Iron		12200	8.6		mg/kg	SW846 6010C
Lead		52.1	0.86		mg/kg	SW846 6010C
Magnesium		10900	430		mg/kg	SW846 6010C
Manganese		1820	13		mg/kg	SW846 6010C
Mercury		0.045	0.035		mg/kg	SW846 7471B
Nickel		4.9	3.5		mg/kg	SW846 6010C
Potassium		1230	430		mg/kg	SW846 6010C
Selenium		1.9	0.86		mg/kg	SW846 6010C
Sodium		525	430		mg/kg	SW846 6010C
Vanadium		12.7	0.86		mg/kg	SW846 6010C
Zinc		48.4	1.7		mg/kg	SW846 6010C
MC42297-18	**SB12 (0-4')**					
Methylene chloride		3.8 B	2.2		ug/kg	SW846 8260C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Anthracene		121	110		ug/kg	SW846 8270D
Benzo(a)anthracene		403	110		ug/kg	SW846 8270D
Benzo(a)pyrene		389	110		ug/kg	SW846 8270D
Benzo(b)fluoranthene		324	110		ug/kg	SW846 8270D
Benzo(g,h,i)perylene		207	110		ug/kg	SW846 8270D
Benzo(k)fluoranthene		303	110		ug/kg	SW846 8270D
Chrysene		393	110		ug/kg	SW846 8270D
Fluoranthene		723	110		ug/kg	SW846 8270D
Indeno(1,2,3-cd)pyrene		211	110		ug/kg	SW846 8270D
Phenanthrene		452	110		ug/kg	SW846 8270D
Pyrene		706	110		ug/kg	SW846 8270D
Aluminum		3770	15		mg/kg	SW846 6010C
Arsenic		2.5	0.74		mg/kg	SW846 6010C
Barium		19.0	3.7		mg/kg	SW846 6010C
Calcium		39200	3700		mg/kg	SW846 6010C
Chromium		6.9	0.74		mg/kg	SW846 6010C
Copper		4.9	1.9		mg/kg	SW846 6010C
Iron		12800	7.4		mg/kg	SW846 6010C
Lead		99.4	0.74		mg/kg	SW846 6010C
Magnesium		4030	370		mg/kg	SW846 6010C
Manganese		478	1.1		mg/kg	SW846 6010C
Nickel		3.5	3.0		mg/kg	SW846 6010C
Potassium		533	370		mg/kg	SW846 6010C
Vanadium		16.0	0.74		mg/kg	SW846 6010C
Zinc		18.3	1.5		mg/kg	SW846 6010C
MC42297-19	**MW1**					
Vinyl chloride		1.5	1.0		ug/l	SW846 8260C
Aluminum		777	200		ug/l	SW846 6010C
Arsenic		18.5	4.0		ug/l	SW846 6010C
Barium		107	50		ug/l	SW846 6010C
Calcium		185000	5000		ug/l	SW846 6010C
Iron		66200	100		ug/l	SW846 6010C
Lead		5.0	5.0		ug/l	SW846 6010C
Magnesium		47300	5000		ug/l	SW846 6010C
Manganese		609	15		ug/l	SW846 6010C
Potassium		6450	5000		ug/l	SW846 6010C
Sodium		14500	5000		ug/l	SW846 6010C
MC42297-20	**SB5**					
Benzo(a)anthracene		2.3	2.0		ug/l	SW846 8270D
Benzo(a)pyrene		2.3	2.0		ug/l	SW846 8270D
Benzo(b)fluoranthene		2.1	2.0		ug/l	SW846 8270D

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Chrysene		2.3	2.0		ug/l	SW846 8270D
Fluoranthene		4.3	2.0		ug/l	SW846 8270D
Phenanthrene		2.1	2.0		ug/l	SW846 8270D
Pyrene		4.0	2.0		ug/l	SW846 8270D
Aluminum		53300	200		ug/l	SW846 6010C
Arsenic		12.2	4.0		ug/l	SW846 6010C
Barium		403	50		ug/l	SW846 6010C
Calcium		244000	5000		ug/l	SW846 6010C
Chromium		65.6	10		ug/l	SW846 6010C
Copper		59.9	25		ug/l	SW846 6010C
Iron		61300	100		ug/l	SW846 6010C
Lead		80.3	5.0		ug/l	SW846 6010C
Magnesium		112000	5000		ug/l	SW846 6010C
Manganese		5460	15		ug/l	SW846 6010C
Mercury		0.23	0.20		ug/l	SW846 7470A
Nickel		69.7	40		ug/l	SW846 6010C
Potassium		8470	5000		ug/l	SW846 6010C
Sodium		33500	5000		ug/l	SW846 6010C
Vanadium		88.0	10		ug/l	SW846 6010C
Zinc		273	20		ug/l	SW846 6010C
MC42297-21	**SB9**					
Xylene (total)		1.3	1.0		ug/l	SW846 8260C
3&4-Methylphenol		12.0	11		ug/l	SW846 8270D
Phenol		37.7	5.3		ug/l	SW846 8270D
Acenaphthene		3.9	2.1		ug/l	SW846 8270D
Acenaphthylene		6.2	2.1		ug/l	SW846 8270D
Anthracene		11.9	2.1		ug/l	SW846 8270D
Benzo(a)anthracene		40.1	2.1		ug/l	SW846 8270D
Benzo(a)pyrene		46.1	2.1		ug/l	SW846 8270D
Benzo(b)fluoranthene		37.2	2.1		ug/l	SW846 8270D
Benzo(g,h,i)perylene		27.3	2.1		ug/l	SW846 8270D
Benzo(k)fluoranthene		33.5	2.1		ug/l	SW846 8270D
Carbazole		2.7	2.1		ug/l	SW846 8270D
Chrysene		40.1	2.1		ug/l	SW846 8270D
Dibenzo(a,h)anthracene		8.8	2.1		ug/l	SW846 8270D
Dibenzofuran		2.6	2.1		ug/l	SW846 8270D
Fluoranthene		77.0	2.1		ug/l	SW846 8270D
Fluorene		4.2	2.1		ug/l	SW846 8270D
Indeno(1,2,3-cd)pyrene		24.6	2.1		ug/l	SW846 8270D
Naphthalene		2.2	2.1		ug/l	SW846 8270D
Phenanthrene		33.8	2.1		ug/l	SW846 8270D
Pyrene		82.9	2.1		ug/l	SW846 8270D
Aluminum		80300	200		ug/l	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Arsenic		84.2	4.0		ug/l	SW846 6010C
Barium		819	50		ug/l	SW846 6010C
Cadmium		7.4	4.0		ug/l	SW846 6010C
Calcium		1050000	25000		ug/l	SW846 6010C
Chromium		190	10		ug/l	SW846 6010C
Cobalt		58.5	50		ug/l	SW846 6010C
Copper		198	25		ug/l	SW846 6010C
Iron		201000	100		ug/l	SW846 6010C
Lead		688	5.0		ug/l	SW846 6010C
Magnesium		76900	5000		ug/l	SW846 6010C
Manganese		9920	15		ug/l	SW846 6010C
Mercury		1.4	0.20		ug/l	SW846 7470A
Nickel		114	40		ug/l	SW846 6010C
Potassium		11800	5000		ug/l	SW846 6010C
Sodium		18600	5000		ug/l	SW846 6010C
Vanadium		169	10		ug/l	SW846 6010C
Zinc		2680	20		ug/l	SW846 6010C
MC42297-22	**SB15**					
Acenaphthene		2.8	2.0		ug/l	SW846 8270D
Anthracene		9.7	2.0		ug/l	SW846 8270D
Benzo(a)anthracene		21.4	2.0		ug/l	SW846 8270D
Benzo(a)pyrene		18.6	2.0		ug/l	SW846 8270D
Benzo(b)fluoranthene		17.0	2.0		ug/l	SW846 8270D
Benzo(g,h,i)perylene		10.5	2.0		ug/l	SW846 8270D
Benzo(k)fluoranthene		14.4	2.0		ug/l	SW846 8270D
Carbazole		3.7	2.0		ug/l	SW846 8270D
Chrysene		21.0	2.0		ug/l	SW846 8270D
Dibenzo(a,h)anthracene		4.0	2.0		ug/l	SW846 8270D
Dibenzofuran		2.2	2.0		ug/l	SW846 8270D
Fluoranthene		41.5	2.0		ug/l	SW846 8270D
Fluorene		4.0	2.0		ug/l	SW846 8270D
Indeno(1,2,3-cd)pyrene		9.7	2.0		ug/l	SW846 8270D
Naphthalene		2.4	2.0		ug/l	SW846 8270D
Phenanthrene		35.5	2.0		ug/l	SW846 8270D
Pyrene		37.8	2.0		ug/l	SW846 8270D
Aluminum		129000	200		ug/l	SW846 6010C
Arsenic		130	4.0		ug/l	SW846 6010C
Barium		1220	50		ug/l	SW846 6010C
Beryllium		4.9	4.0		ug/l	SW846 6010C
Cadmium		5.8	4.0		ug/l	SW846 6010C
Calcium		899000	10000		ug/l	SW846 6010C
Chromium		187	10		ug/l	SW846 6010C
Cobalt		63.5	50		ug/l	SW846 6010C

Summary of Hits

Job Number: MC42297
Account: Hazard Evaluations, Inc.
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Collected: 10/13/15 thru 10/16/15

Lab Sample ID / Analyte	Client Sample ID	Result/ Qual	RL	MDL	Units	Method
Copper		283	25		ug/l	SW846 6010C
Iron		216000	100		ug/l	SW846 6010C
Lead		956	5.0		ug/l	SW846 6010C
Magnesium		145000	5000		ug/l	SW846 6010C
Manganese		8490	15		ug/l	SW846 6010C
Mercury		1.4	0.20		ug/l	SW846 7470A
Nickel		122	40		ug/l	SW846 6010C
Potassium		21200	5000		ug/l	SW846 6010C
Sodium		11500	5000		ug/l	SW846 6010C
Vanadium		256	10		ug/l	SW846 6010C
Zinc		1050	20		ug/l	SW846 6010C

Sample Results

Report of Analysis

Report of Analysis

Client Sample ID:	TP4 (9-12')		
Lab Sample ID:	MC42297-1	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	76.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43270.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2							

	Initial Weight	Final Volume
Run #1	4.85 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	219	13	ug/kg	
71-43-2	Benzene	ND	0.67	ug/kg	
75-27-4	Bromodichloromethane	ND	2.7	ug/kg	
75-25-2	Bromoform	ND	2.7	ug/kg	
74-83-9	Bromomethane	ND	2.7	ug/kg	
78-93-3	2-Butanone (MEK)	28.1	13	ug/kg	
75-15-0	Carbon disulfide	ND	6.7	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.7	ug/kg	
108-90-7	Chlorobenzene	ND	2.7	ug/kg	
75-00-3	Chloroethane	ND	6.7	ug/kg	
67-66-3	Chloroform	ND	2.7	ug/kg	
74-87-3	Chloromethane	ND	6.7	ug/kg	
124-48-1	Dibromochloromethane	ND	2.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.7	ug/kg	
100-41-4	Ethylbenzene	ND	2.7	ug/kg	
591-78-6	2-Hexanone	ND	13	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	6.7	ug/kg	
75-09-2	Methylene chloride	ND	2.7	ug/kg	
100-42-5	Styrene	ND	6.7	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.7	ug/kg	
127-18-4	Tetrachloroethene	ND	2.7	ug/kg	
108-88-3	Toluene	ND	6.7	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.7	ug/kg	
79-01-6	Trichloroethene	ND	2.7	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP4 (9-12')		
Lab Sample ID:	MC42297-1	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	76.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.7	ug/kg	
1330-20-7	Xylene (total)	ND	2.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		65-141%
2037-26-5	Toluene-D8	101%		65-129%
460-00-4	4-Bromofluorobenzene	109%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP4 (9-12')		
Lab Sample ID:	MC42297-1	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24505.D	1	10/26/15	NE	10/21/15	OP45098	MSW1026
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	320	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	650	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	650	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	650	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	650	ug/kg	
95-48-7	2-Methylphenol	ND	650	ug/kg	
	3&4-Methylphenol	ND	650	ug/kg	
88-75-5	2-Nitrophenol	ND	650	ug/kg	
100-02-7	4-Nitrophenol	ND	1300	ug/kg	
87-86-5	Pentachlorophenol	ND	650	ug/kg	
108-95-2	Phenol	ND	320	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	650	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	650	ug/kg	
83-32-9	Acenaphthene	ND	130	ug/kg	
208-96-8	Acenaphthylene	ND	130	ug/kg	
120-12-7	Anthracene	155	130	ug/kg	
56-55-3	Benzo(a)anthracene	582	130	ug/kg	
50-32-8	Benzo(a)pyrene	444	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	389	130	ug/kg	
191-24-2	Benzo(g,h,i)perylene	256	130	ug/kg	
207-08-9	Benzo(k)fluoranthene	313	130	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	320	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	320	ug/kg	
91-58-7	2-Chloronaphthalene	ND	320	ug/kg	
106-47-8	4-Chloroaniline	ND	650	ug/kg	
86-74-8	Carbazole	ND	130	ug/kg	
218-01-9	Chrysene	710	130	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	320	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	320	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	320	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	320	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP4 (9-12')		
Lab Sample ID:	MC42297-1	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	320	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	320	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	320	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	650	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	650	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	320	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	130	ug/kg	
132-64-9	Dibenzofuran	ND	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	320	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	320	ug/kg	
84-66-2	Diethyl phthalate	ND	320	ug/kg	
131-11-3	Dimethyl phthalate	ND	320	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	320	ug/kg	
206-44-0	Fluoranthene	863	130	ug/kg	
86-73-7	Fluorene	ND	130	ug/kg	
118-74-1	Hexachlorobenzene	ND	320	ug/kg	
87-68-3	Hexachlorobutadiene	ND	320	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	650	ug/kg	
67-72-1	Hexachloroethane	ND	320	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	221	130	ug/kg	
78-59-1	Isophorone	ND	320	ug/kg	
91-57-6	2-Methylnaphthalene	189	130	ug/kg	
88-74-4	2-Nitroaniline	ND	650	ug/kg	
99-09-2	3-Nitroaniline	ND	650	ug/kg	
100-01-6	4-Nitroaniline	ND	650	ug/kg	
91-20-3	Naphthalene	ND	130	ug/kg	
98-95-3	Nitrobenzene	ND	320	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	320	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	320	ug/kg	
85-01-8	Phenanthrene	661	130	ug/kg	
129-00-0	Pyrene	817	130	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	320	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	59%		24-110%
4165-62-2	Phenol-d5	68%		30-114%
118-79-6	2,4,6-Tribromophenol	86%		20-139%
4165-60-0	Nitrobenzene-d5	64%		27-112%
321-60-8	2-Fluorobiphenyl	69%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP4 (9-12')		
Lab Sample ID:	MC42297-1	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	76.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	86%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP4 (9-12')		
Lab Sample ID:	MC42297-1	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	76.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK52585.D	1	10/26/15	NK	10/21/15	OP45099	GBK1645
Run #2							

	Initial Weight	Final Volume
Run #1	15.1 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	43	ug/kg	
11104-28-2	Aroclor 1221	ND	43	ug/kg	
11141-16-5	Aroclor 1232	ND	43	ug/kg	
53469-21-9	Aroclor 1242	ND	43	ug/kg	
12672-29-6	Aroclor 1248	ND	43	ug/kg	
11097-69-1	Aroclor 1254	ND	43	ug/kg	
11096-82-5	Aroclor 1260	ND	43	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	95%		35-136%
877-09-8	Tetrachloro-m-xylene	83%		35-136%
2051-24-3	Decachlorobiphenyl	117%		24-171%
2051-24-3	Decachlorobiphenyl	95%		24-171%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP4 (9-12')
Lab Sample ID: MC42297-1
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/13/15
Date Received: 10/20/15
Percent Solids: 76.7

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	23300	20	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 1.0	1.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Arsenic	4.4	1.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Barium	162	5.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Beryllium	1.2	0.40	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cadmium	0.40	0.40	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Calcium	2370	500	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Chromium	25.9	1.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cobalt	14.2	5.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Copper	20.6	2.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Iron	35000	10	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Lead	15.9	1.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Magnesium	5950	500	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Manganese	444	1.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.039	0.039	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [4]
Nickel	30.1	4.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Potassium	2790	500	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 1.0	1.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.50	0.50	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 500	500	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 1.0	1.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Vanadium	33.9	1.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Zinc	108	2.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Prep QC Batch: MP25349
(4) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB2 (4-8')		
Lab Sample ID:	MC42297-2	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	79.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K92070.D	1	10/26/15	KD	n/a	n/a	MSK2848
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.67 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	780	ug/kg	
71-43-2	Benzene	ND	39	ug/kg	
75-27-4	Bromodichloromethane	ND	160	ug/kg	
75-25-2	Bromoform	ND	160	ug/kg	
74-83-9	Bromomethane	ND	160	ug/kg	
78-93-3	2-Butanone (MEK)	833	780	ug/kg	
75-15-0	Carbon disulfide	ND	390	ug/kg	
56-23-5	Carbon tetrachloride	ND	160	ug/kg	
108-90-7	Chlorobenzene	ND	160	ug/kg	
75-00-3	Chloroethane	ND	390	ug/kg	
67-66-3	Chloroform	ND	160	ug/kg	
74-87-3	Chloromethane	ND	390	ug/kg	
124-48-1	Dibromochloromethane	ND	160	ug/kg	
75-34-3	1,1-Dichloroethane	ND	160	ug/kg	
107-06-2	1,2-Dichloroethane	ND	160	ug/kg	
75-35-4	1,1-Dichloroethene	ND	160	ug/kg	
156-59-2	cis-1,2-Dichloroethene	10200	160	ug/kg	
156-60-5	trans-1,2-Dichloroethene	788	160	ug/kg	
78-87-5	1,2-Dichloropropane	ND	160	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	160	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	160	ug/kg	
100-41-4	Ethylbenzene	ND	160	ug/kg	
591-78-6	2-Hexanone	ND	780	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	390	ug/kg	
75-09-2	Methylene chloride	ND	160	ug/kg	
100-42-5	Styrene	ND	390	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	160	ug/kg	
127-18-4	Tetrachloroethene	ND	160	ug/kg	
108-88-3	Toluene	ND	390	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	160	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	160	ug/kg	
79-01-6	Trichloroethene	28900	160	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB2 (4-8')		
Lab Sample ID:	MC42297-2	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	79.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	160	ug/kg	
1330-20-7	Xylene (total)	ND	160	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		65-141%
2037-26-5	Toluene-D8	97%		65-129%
460-00-4	4-Bromofluorobenzene	96%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB2 (4-8')		
Lab Sample ID:	MC42297-2	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24506.D	1	10/26/15	NE	10/21/15	OP45098	MSW1026
Run #2							

	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	310	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	630	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	630	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	630	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1300	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	630	ug/kg	
95-48-7	2-Methylphenol	ND	630	ug/kg	
	3&4-Methylphenol	ND	630	ug/kg	
88-75-5	2-Nitrophenol	ND	630	ug/kg	
100-02-7	4-Nitrophenol	ND	1300	ug/kg	
87-86-5	Pentachlorophenol	ND	630	ug/kg	
108-95-2	Phenol	ND	310	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	630	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	630	ug/kg	
83-32-9	Acenaphthene	ND	130	ug/kg	
208-96-8	Acenaphthylene	ND	130	ug/kg	
120-12-7	Anthracene	ND	130	ug/kg	
56-55-3	Benzo(a)anthracene	ND	130	ug/kg	
50-32-8	Benzo(a)pyrene	ND	130	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	130	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	130	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	130	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	310	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	310	ug/kg	
91-58-7	2-Chloronaphthalene	ND	310	ug/kg	
106-47-8	4-Chloroaniline	ND	630	ug/kg	
86-74-8	Carbazole	ND	130	ug/kg	
218-01-9	Chrysene	ND	130	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	310	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	310	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	310	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	310	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB2 (4-8')		
Lab Sample ID:	MC42297-2	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	310	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	310	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	310	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	630	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	630	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	310	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	130	ug/kg	
132-64-9	Dibenzofuran	ND	130	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	310	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	310	ug/kg	
84-66-2	Diethyl phthalate	ND	310	ug/kg	
131-11-3	Dimethyl phthalate	ND	310	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	310	ug/kg	
206-44-0	Fluoranthene	ND	130	ug/kg	
86-73-7	Fluorene	ND	130	ug/kg	
118-74-1	Hexachlorobenzene	ND	310	ug/kg	
87-68-3	Hexachlorobutadiene	ND	310	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	630	ug/kg	
67-72-1	Hexachloroethane	ND	310	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	130	ug/kg	
78-59-1	Isophorone	ND	310	ug/kg	
91-57-6	2-Methylnaphthalene	ND	130	ug/kg	
88-74-4	2-Nitroaniline	ND	630	ug/kg	
99-09-2	3-Nitroaniline	ND	630	ug/kg	
100-01-6	4-Nitroaniline	ND	630	ug/kg	
91-20-3	Naphthalene	ND	130	ug/kg	
98-95-3	Nitrobenzene	ND	310	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	310	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	310	ug/kg	
85-01-8	Phenanthrene	ND	130	ug/kg	
129-00-0	Pyrene	ND	130	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	310	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	62%		24-110%
4165-62-2	Phenol-d5	70%		30-114%
118-79-6	2,4,6-Tribromophenol	84%		20-139%
4165-60-0	Nitrobenzene-d5	63%		27-112%
321-60-8	2-Fluorobiphenyl	67%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB2 (4-8')		
Lab Sample ID:	MC42297-2	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	79.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	79%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB2 (4-8')		
Lab Sample ID:	MC42297-2	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	79.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK52586.D	1	10/26/15	NK	10/21/15	OP45099	GBK1645
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	40	ug/kg	
11104-28-2	Aroclor 1221	ND	40	ug/kg	
11141-16-5	Aroclor 1232	ND	40	ug/kg	
53469-21-9	Aroclor 1242	ND	40	ug/kg	
12672-29-6	Aroclor 1248	ND	40	ug/kg	
11097-69-1	Aroclor 1254	ND	40	ug/kg	
11096-82-5	Aroclor 1260	ND	40	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		35-136%
877-09-8	Tetrachloro-m-xylene	88%		35-136%
2051-24-3	Decachlorobiphenyl	107%		24-171%
2051-24-3	Decachlorobiphenyl	106%		24-171%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB2 (4-8')
Lab Sample ID: MC42297-2
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/15/15
Date Received: 10/20/15
Percent Solids: 79.5

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5350	18	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Arsenic	1.9	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Barium	19.7	4.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Beryllium	< 0.36	0.36	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.36	0.36	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Calcium	34800	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Chromium	4.8	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cobalt	< 4.5	4.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Copper	2.7	2.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Iron	6510	8.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Lead	11.7	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Magnesium	4360	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Manganese	116	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.035	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [4]
Nickel	4.0	3.6	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Potassium	545	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.45	0.45	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 450	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Vanadium	10.4	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Zinc	16.0	1.8	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Prep QC Batch: MP25349
(4) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID: TP4 (4-8')
Lab Sample ID: MC42297-3
Matrix: SO - Soil
Method: SW846 8260C
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/13/15
Date Received: 10/20/15
Percent Solids: 92.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43253.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2 [a]	V43266.D	1	10/22/15	JT	n/a	n/a	MSV1570

	Initial Weight	Final Volume
Run #1	5.32 g	5.0 ml
Run #2	5.16 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/kg	
71-43-2	Benzene	ND	0.51	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
74-83-9	Bromomethane	ND	2.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	10	ug/kg	
75-15-0	Carbon disulfide	ND	5.1	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	5.1	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
74-87-3	Chloromethane	ND	5.1	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
591-78-6	2-Hexanone	ND	10	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.1	ug/kg	
75-09-2	Methylene chloride	4.4	2.0	ug/kg	
100-42-5	Styrene	ND	5.1	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	ug/kg	
108-88-3	Toluene	ND	5.1	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
79-01-6	Trichloroethene	3.8	2.0	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP4 (4-8')		
Lab Sample ID:	MC42297-3	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	92.2
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.0	ug/kg	
1330-20-7	Xylene (total)	2.0	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%	110%	65-141%
2037-26-5	Toluene-D8	96%	96%	65-129%
460-00-4	4-Bromofluorobenzene	134%	100%	63-137%

(a) Confirmation run for internal standard areas.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP4 (4-8')
Lab Sample ID: MC42297-3
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/13/15
Date Received: 10/20/15
Percent Solids: 92.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24507.D	5	10/26/15	NE	10/21/15	OP45098	MSW1026
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	1300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2700	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2700	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2700	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	5400	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	2700	ug/kg	
95-48-7	2-Methylphenol	ND	2700	ug/kg	
	3&4-Methylphenol	ND	2700	ug/kg	
88-75-5	2-Nitrophenol	ND	2700	ug/kg	
100-02-7	4-Nitrophenol	ND	5400	ug/kg	
87-86-5	Pentachlorophenol	ND	2700	ug/kg	
108-95-2	Phenol	ND	1300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2700	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2700	ug/kg	
83-32-9	Acenaphthene	2960	540	ug/kg	
208-96-8	Acenaphthylene	884	540	ug/kg	
120-12-7	Anthracene	7700	540	ug/kg	
56-55-3	Benzo(a)anthracene	16200	540	ug/kg	
50-32-8	Benzo(a)pyrene	14900	540	ug/kg	
205-99-2	Benzo(b)fluoranthene	13000	540	ug/kg	
191-24-2	Benzo(g,h,i)perylene	8700	540	ug/kg	
207-08-9	Benzo(k)fluoranthene	12400	540	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	1300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1300	ug/kg	
106-47-8	4-Chloroaniline	ND	2700	ug/kg	
86-74-8	Carbazole	4010	540	ug/kg	
218-01-9	Chrysene	16300	540	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	1300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1300	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1300	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP4 (4-8')
Lab Sample ID: MC42297-3
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/13/15
Date Received: 10/20/15
Percent Solids: 92.2

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1300	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2700	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2700	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1300	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	803	540	ug/kg	
132-64-9	Dibenzofuran	2700	540	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1300	ug/kg	
84-66-2	Diethyl phthalate	ND	1300	ug/kg	
131-11-3	Dimethyl phthalate	ND	1300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1300	ug/kg	
206-44-0	Fluoranthene	37500	540	ug/kg	
86-73-7	Fluorene	3890	540	ug/kg	
118-74-1	Hexachlorobenzene	ND	1300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1300	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	2700	ug/kg	
67-72-1	Hexachloroethane	ND	1300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	8230	540	ug/kg	
78-59-1	Isophorone	ND	1300	ug/kg	
91-57-6	2-Methylnaphthalene	1730	540	ug/kg	
88-74-4	2-Nitroaniline	ND	2700	ug/kg	
99-09-2	3-Nitroaniline	ND	2700	ug/kg	
100-01-6	4-Nitroaniline	ND	2700	ug/kg	
91-20-3	Naphthalene	3540	540	ug/kg	
98-95-3	Nitrobenzene	ND	1300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1300	ug/kg	
85-01-8	Phenanthrene	32400	540	ug/kg	
129-00-0	Pyrene	32400	540	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%		24-110%
4165-62-2	Phenol-d5	86%		30-114%
118-79-6	2,4,6-Tribromophenol	91%		20-139%
4165-60-0	Nitrobenzene-d5	87%		27-112%
321-60-8	2-Fluorobiphenyl	91%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP4 (4-8')		
Lab Sample ID:	MC42297-3	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	92.2
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	109%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP4 (4-8')
Lab Sample ID: MC42297-3
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/13/15
Date Received: 10/20/15
Percent Solids: 92.2

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5610	17	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 0.85	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Arsenic	12.4	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Barium	85.0	4.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Beryllium	< 0.34	0.34	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cadmium	0.46	0.34	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Calcium	34600	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Chromium	11.3	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cobalt	4.4	4.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Copper	23.1	2.1	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Iron	30500	8.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Lead	95.0	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Magnesium	3890	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Manganese	486	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Mercury	0.056	0.032	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [4]
Nickel	9.0	3.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Potassium	805	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 0.85	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.42	0.42	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 420	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 0.85	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Vanadium	17.4	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Zinc	150	1.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Prep QC Batch: MP25349
(4) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB1 (0-4')		
Lab Sample ID:	MC42297-4	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	84.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43254.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2 [a]	V43267.D	1	10/22/15	JT	n/a	n/a	MSV1570

	Initial Weight	Final Volume
Run #1	4.38 g	5.0 ml
Run #2	4.90 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	14	ug/kg	
71-43-2	Benzene	ND	0.68	ug/kg	
75-27-4	Bromodichloromethane	ND	2.7	ug/kg	
75-25-2	Bromoform	ND	2.7	ug/kg	
74-83-9	Bromomethane	ND	2.7	ug/kg	
78-93-3	2-Butanone (MEK)	ND	14	ug/kg	
75-15-0	Carbon disulfide	ND	6.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.7	ug/kg	
108-90-7	Chlorobenzene	ND	2.7	ug/kg	
75-00-3	Chloroethane	ND	6.8	ug/kg	
67-66-3	Chloroform	ND	2.7	ug/kg	
74-87-3	Chloromethane	ND	6.8	ug/kg	
124-48-1	Dibromochloromethane	ND	2.7	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.7	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.7	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.7	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.7	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.7	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.7	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.7	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.7	ug/kg	
100-41-4	Ethylbenzene	ND	2.7	ug/kg	
591-78-6	2-Hexanone	ND	14	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	6.8	ug/kg	
75-09-2	Methylene chloride	17.2	2.7	ug/kg	
100-42-5	Styrene	ND	6.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.7	ug/kg	
127-18-4	Tetrachloroethene	ND	2.7	ug/kg	
108-88-3	Toluene	ND	6.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.7	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.7	ug/kg	
79-01-6	Trichloroethene	ND	2.7	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB1 (0-4')		
Lab Sample ID:	MC42297-4	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	84.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.7	ug/kg	
1330-20-7	Xylene (total)	ND	2.7	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	130%	131%	65-141%
2037-26-5	Toluene-D8	92%	94%	65-129%
460-00-4	4-Bromofluorobenzene	139% [b]	143% [b]	63-137%

(a) Confirmation run.
(b) Outside control limits due to possible matrix interference.Confirmed by re-analysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB1 (0-4')		
Lab Sample ID:	MC42297-4	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24508.D	1	10/26/15	NE	10/21/15	OP45098	MSW1026
Run #2							

	Initial Weight	Final Volume
Run #1	20.4 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	290	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	580	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	580	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	580	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	580	ug/kg	
95-48-7	2-Methylphenol	ND	580	ug/kg	
	3&4-Methylphenol	ND	580	ug/kg	
88-75-5	2-Nitrophenol	ND	580	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	580	ug/kg	
108-95-2	Phenol	ND	290	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	580	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	580	ug/kg	
83-32-9	Acenaphthene	ND	120	ug/kg	
208-96-8	Acenaphthylene	ND	120	ug/kg	
120-12-7	Anthracene	ND	120	ug/kg	
56-55-3	Benzo(a)anthracene	196	120	ug/kg	
50-32-8	Benzo(a)pyrene	175	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	222	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	155	120	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	290	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	290	ug/kg	
91-58-7	2-Chloronaphthalene	ND	290	ug/kg	
106-47-8	4-Chloroaniline	ND	580	ug/kg	
86-74-8	Carbazole	ND	120	ug/kg	
218-01-9	Chrysene	239	120	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	290	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	290	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	290	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	290	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB1 (0-4')		
Lab Sample ID:	MC42297-4	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	290	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	290	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	290	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	580	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	580	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	290	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	ug/kg	
132-64-9	Dibenzofuran	165	120	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	290	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	290	ug/kg	
84-66-2	Diethyl phthalate	ND	290	ug/kg	
131-11-3	Dimethyl phthalate	ND	290	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	290	ug/kg	
206-44-0	Fluoranthene	352	120	ug/kg	
86-73-7	Fluorene	ND	120	ug/kg	
118-74-1	Hexachlorobenzene	ND	290	ug/kg	
87-68-3	Hexachlorobutadiene	ND	290	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	580	ug/kg	
67-72-1	Hexachloroethane	ND	290	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	120	ug/kg	
78-59-1	Isophorone	ND	290	ug/kg	
91-57-6	2-Methylnaphthalene	565	120	ug/kg	
88-74-4	2-Nitroaniline	ND	580	ug/kg	
99-09-2	3-Nitroaniline	ND	580	ug/kg	
100-01-6	4-Nitroaniline	ND	580	ug/kg	
91-20-3	Naphthalene	362	120	ug/kg	
98-95-3	Nitrobenzene	ND	290	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	290	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	290	ug/kg	
85-01-8	Phenanthrene	427	120	ug/kg	
129-00-0	Pyrene	346	120	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	290	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%		24-110%
4165-62-2	Phenol-d5	86%		30-114%
118-79-6	2,4,6-Tribromophenol	68%		20-139%
4165-60-0	Nitrobenzene-d5	79%		27-112%
321-60-8	2-Fluorobiphenyl	83%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB1 (0-4')		
Lab Sample ID:	MC42297-4	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	84.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	104%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB1 (0-4')		
Lab Sample ID:	MC42297-4	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	84.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ95259.D	1	10/27/15	NK	10/21/15	OP45101	GYZ7845
Run #2							

	Initial Weight	Final Volume
Run #1	30.7 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	23	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	23	ug/kg	
93-76-5	2,4,5-T	ND	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	64%		12-200%
19719-28-9	2,4-DCAA	70%		12-200%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB1 (0-4')		
Lab Sample ID:	MC42297-4	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
		Percent Solids:	84.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	9780	19	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.95	0.95	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	8.7	0.95	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	68.9	4.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	1.1	0.38	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	< 0.38	0.38	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	56300	2400	mg/kg	5	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	10.7	0.95	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	< 4.7	4.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	16.1	2.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	28500	9.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Lead	32.8	0.95	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	6950	470	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	1130	1.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	< 0.038	0.038	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	8.8	3.8	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	921	470	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	1.3	0.95	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.47	0.47	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 470	470	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.95	0.95	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	18.7	0.95	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	55.4	1.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TP11 (0-4')		
Lab Sample ID:	MC42297-5	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8151 SW846 3550B	**Percent Solids:**	93.0
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ95260.D	1	10/27/15	NK	10/21/15	OP45101	GYZ7845
Run #2							

	Initial Weight	Final Volume
Run #1	30.4 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	21	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	21	ug/kg	
93-76-5	2,4,5-T	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	68%		12-200%
19719-28-9	2,4-DCAA	83%		12-200%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP5 (0-4')		
Lab Sample ID:	MC42297-6	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	86.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43255.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2 [a]	V43268.D	1	10/22/15	JT	n/a	n/a	MSV1570

	Initial Weight	Final Volume
Run #1	5.33 g	5.0 ml
Run #2	4.15 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	
71-43-2	Benzene	ND	0.54	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	ug/kg	
75-25-2	Bromoform	ND	2.2	ug/kg	
74-83-9	Bromomethane	ND	2.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.4	ug/kg	
67-66-3	Chloroform	ND	2.2	ug/kg	
74-87-3	Chloromethane	ND	5.4	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.2	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.2	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.4	ug/kg	
75-09-2	Methylene chloride	8.0	2.2	ug/kg	
100-42-5	Styrene	ND	5.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	ug/kg	
108-88-3	Toluene	ND	5.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ug/kg	
79-01-6	Trichloroethene	2.2	2.2	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP5 (0-4')		
Lab Sample ID:	MC42297-6	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	86.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.2	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	114%	120%	65-141%
2037-26-5	Toluene-D8	95%	98%	65-129%
460-00-4	4-Bromofluorobenzene	135%	134%	63-137%

(a) Confirmation run.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP5 (0-4')
Lab Sample ID: MC42297-6 **Date Sampled:** 10/13/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8270D SW846 3546 **Percent Solids:** 86.7
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24509.D	1	10/26/15	NE	10/21/15	OP45098	MSW1026
Run #2							

	Initial Weight	Final Volume
Run #1	20.8 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	550	ug/kg	
95-48-7	2-Methylphenol	ND	550	ug/kg	
	3&4-Methylphenol	ND	550	ug/kg	
88-75-5	2-Nitrophenol	ND	550	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	550	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	ug/kg	
83-32-9	Acenaphthene	143	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
120-12-7	Anthracene	381	110	ug/kg	
56-55-3	Benzo(a)anthracene	891	110	ug/kg	
50-32-8	Benzo(a)pyrene	842	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	730	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	514	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	704	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	550	ug/kg	
86-74-8	Carbazole	200	110	ug/kg	
218-01-9	Chrysene	881	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP5 (0-4')		
Lab Sample ID:	MC42297-6	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	1880	110	ug/kg	
86-73-7	Fluorene	156	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	550	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	471	110	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	550	ug/kg	
99-09-2	3-Nitroaniline	ND	550	ug/kg	
100-01-6	4-Nitroaniline	ND	550	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	1440	110	ug/kg	
129-00-0	Pyrene	1600	110	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	72%		24-110%
4165-62-2	Phenol-d5	83%		30-114%
118-79-6	2,4,6-Tribromophenol	92%		20-139%
4165-60-0	Nitrobenzene-d5	76%		27-112%
321-60-8	2-Fluorobiphenyl	80%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP5 (0-4')		
Lab Sample ID:	MC42297-6	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	86.7
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	96%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP5 (0-4')
Lab Sample ID:	MC42297-6
Matrix:	SO - Soil
Method:	SW846 8151 SW846 3550B
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY
Date Sampled:	10/13/15
Date Received:	10/20/15
Percent Solids:	86.7

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	YZ95261.D	1	10/27/15	NK	10/21/15	OP45101	GYZ7845
Run #2							

	Initial Weight	Final Volume
Run #1	30.1 g	5.0 ml
Run #2		

Herbicide List

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	23	ug/kg	
93-72-1	2,4,5-TP (Silvex)	ND	23	ug/kg	
93-76-5	2,4,5-T	ND	23	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	99%		12-200%
19719-28-9	2,4-DCAA	107%		12-200%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP5 (0-4')
Lab Sample ID: MC42297-6
Matrix: SO - Soil
Date Sampled: 10/13/15
Date Received: 10/20/15
Percent Solids: 86.7
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	12500	18	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Antimony	1.7	0.92	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Arsenic	22.2	0.92	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Barium	131	4.6	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Beryllium	1.1	0.37	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cadmium	0.93	0.37	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Calcium	24700	460	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Chromium	20.0	0.92	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cobalt	9.9	4.6	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Copper	66.6	2.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Iron	33000	9.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Lead	156	0.92	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Magnesium	5470	460	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Manganese	561	1.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Mercury	0.18	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [4]
Nickel	31.3	3.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Potassium	1770	460	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Selenium	2.3	0.92	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.46	0.46	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 460	460	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 0.92	0.92	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Vanadium	28.4	0.92	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Zinc	277	1.8	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Prep QC Batch: MP25349
(4) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB15 (0-4')		
Lab Sample ID:	MC42297-7	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	88.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43256.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2 [a]	V43269.D	1	10/22/15	JT	n/a	n/a	MSV1570

	Initial Weight	Final Volume
Run #1	4.88 g	5.0 ml
Run #2	5.54 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	12	ug/kg	
71-43-2	Benzene	ND	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	ug/kg	
75-25-2	Bromoform	ND	2.3	ug/kg	
74-83-9	Bromomethane	ND	2.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	ug/kg	
75-15-0	Carbon disulfide	ND	5.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.3	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	2.3	ug/kg	
74-87-3	Chloromethane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.3	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.3	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.3	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.3	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	ug/kg	
100-41-4	Ethylbenzene	ND	2.3	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.8	ug/kg	
75-09-2	Methylene chloride	3.7	2.3	ug/kg	B
100-42-5	Styrene	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	ug/kg	
127-18-4	Tetrachloroethene	4.7	2.3	ug/kg	
108-88-3	Toluene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	ug/kg	
79-01-6	Trichloroethene	4.3	2.3	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15 (0-4')		
Lab Sample ID:	MC42297-7	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	88.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.3	ug/kg	
1330-20-7	Xylene (total)	ND	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	111%	115%	65-141%
2037-26-5	Toluene-D8	93%	98%	65-129%
460-00-4	4-Bromofluorobenzene	135%	115%	63-137%

(a) Confirmation run.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15 (0-4')		
Lab Sample ID:	MC42297-7	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24510.D	5	10/26/15	NE	10/21/15	OP45098	MSW1026
Run #2							

	Initial Weight	Final Volume
Run #1	20.0 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	1400	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2800	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2800	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2800	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	5600	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	2800	ug/kg	
95-48-7	2-Methylphenol	ND	2800	ug/kg	
	3&4-Methylphenol	ND	2800	ug/kg	
88-75-5	2-Nitrophenol	ND	2800	ug/kg	
100-02-7	4-Nitrophenol	ND	5600	ug/kg	
87-86-5	Pentachlorophenol	ND	2800	ug/kg	
108-95-2	Phenol	ND	1400	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2800	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2800	ug/kg	
83-32-9	Acenaphthene	964	560	ug/kg	
208-96-8	Acenaphthylene	574	560	ug/kg	
120-12-7	Anthracene	3330	560	ug/kg	
56-55-3	Benzo(a)anthracene	7410	560	ug/kg	
50-32-8	Benzo(a)pyrene	6550	560	ug/kg	
205-99-2	Benzo(b)fluoranthene	6070	560	ug/kg	
191-24-2	Benzo(g,h,i)perylene	3690	560	ug/kg	
207-08-9	Benzo(k)fluoranthene	5390	560	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	1400	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1400	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1400	ug/kg	
106-47-8	4-Chloroaniline	ND	2800	ug/kg	
86-74-8	Carbazole	1490	560	ug/kg	
218-01-9	Chrysene	7220	560	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	1400	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1400	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1400	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1400	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15 (0-4')		
Lab Sample ID:	MC42297-7	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1400	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1400	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1400	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2800	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2800	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1400	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	560	ug/kg	
132-64-9	Dibenzofuran	1140	560	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1400	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1400	ug/kg	
84-66-2	Diethyl phthalate	ND	1400	ug/kg	
131-11-3	Dimethyl phthalate	ND	1400	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1400	ug/kg	
206-44-0	Fluoranthene	15000	560	ug/kg	
86-73-7	Fluorene	1430	560	ug/kg	
118-74-1	Hexachlorobenzene	ND	1400	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1400	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	2800	ug/kg	
67-72-1	Hexachloroethane	ND	1400	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3580	560	ug/kg	
78-59-1	Isophorone	ND	1400	ug/kg	
91-57-6	2-Methylnaphthalene	1010	560	ug/kg	
88-74-4	2-Nitroaniline	ND	2800	ug/kg	
99-09-2	3-Nitroaniline	ND	2800	ug/kg	
100-01-6	4-Nitroaniline	ND	2800	ug/kg	
91-20-3	Naphthalene	991	560	ug/kg	
98-95-3	Nitrobenzene	ND	1400	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1400	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1400	ug/kg	
85-01-8	Phenanthrene	12300	560	ug/kg	
129-00-0	Pyrene	13300	560	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1400	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	74%		24-110%
4165-62-2	Phenol-d5	80%		30-114%
118-79-6	2,4,6-Tribromophenol	85%		20-139%
4165-60-0	Nitrobenzene-d5	77%		27-112%
321-60-8	2-Fluorobiphenyl	83%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15 (0-4')		
Lab Sample ID:	MC42297-7	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	98%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15 (0-4')		
Lab Sample ID:	MC42297-7	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8082A SW846 3546	**Percent Solids:**	88.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK52588.D	1	10/26/15	NK	10/21/15	OP45099	GBK1645
Run #2							

	Initial Weight	Final Volume
Run #1	15.6 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	36	ug/kg	
11104-28-2	Aroclor 1221	ND	36	ug/kg	
11141-16-5	Aroclor 1232	ND	36	ug/kg	
53469-21-9	Aroclor 1242	ND	36	ug/kg	
12672-29-6	Aroclor 1248	ND	36	ug/kg	
11097-69-1	Aroclor 1254	56.5	36	ug/kg	
11096-82-5	Aroclor 1260	ND	36	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	82%		35-136%
877-09-8	Tetrachloro-m-xylene	72%		35-136%
2051-24-3	Decachlorobiphenyl	94%		24-171%
2051-24-3	Decachlorobiphenyl	83%		24-171%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15 (0-4')		
Lab Sample ID:	MC42297-7	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
		Percent Solids:	88.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	9520	18	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Antimony	1.3	0.90	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Arsenic	28.4	0.90	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Barium	144	4.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.67	0.36	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cadmium	1.7	0.36	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Calcium	29000	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Chromium	41.0	0.90	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cobalt	6.1	4.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Copper	73.0	2.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Iron	30100	9.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Lead	190	0.90	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Magnesium	6230	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Manganese	921	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.035	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [4]
Nickel	17.4	3.6	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Potassium	1350	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 0.90	0.90	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.45	0.45	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 450	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 0.90	0.90	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Vanadium	26.2	0.90	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Zinc	270	1.8	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Prep QC Batch: MP25349
(4) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TP10 (4-8')		
Lab Sample ID:	MC42297-8	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	81.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43280.D	1	10/23/15	JT	n/a	n/a	MSV1571
Run #2							

	Initial Weight	Final Volume
Run #1	4.90 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	95.5	12	ug/kg	
71-43-2	Benzene	ND	0.62	ug/kg	
75-27-4	Bromodichloromethane	ND	2.5	ug/kg	
75-25-2	Bromoform	ND	2.5	ug/kg	
74-83-9	Bromomethane	ND	2.5	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	ug/kg	
75-15-0	Carbon disulfide	ND	6.2	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.5	ug/kg	
108-90-7	Chlorobenzene	ND	2.5	ug/kg	
75-00-3	Chloroethane	ND	6.2	ug/kg	
67-66-3	Chloroform	ND	2.5	ug/kg	
74-87-3	Chloromethane	ND	6.2	ug/kg	
124-48-1	Dibromochloromethane	ND	2.5	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.5	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.5	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.5	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.5	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.5	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.5	ug/kg	
100-41-4	Ethylbenzene	ND	2.5	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	6.2	ug/kg	
75-09-2	Methylene chloride	11.2	2.5	ug/kg	
100-42-5	Styrene	ND	6.2	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.5	ug/kg	
127-18-4	Tetrachloroethene	ND	2.5	ug/kg	
108-88-3	Toluene	ND	6.2	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.5	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.5	ug/kg	
79-01-6	Trichloroethene	ND	2.5	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP10 (4-8')		
Lab Sample ID:	MC42297-8	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	81.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.5	ug/kg	
1330-20-7	Xylene (total)	ND	2.5	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	119%		65-141%
2037-26-5	Toluene-D8	91%		65-129%
460-00-4	4-Bromofluorobenzene	147% [a]		63-137%

(a) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP10 (4-8')
Lab Sample ID: MC42297-8
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 81.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07558.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2							

	Initial Weight	Final Volume
Run #1	20.3 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	600	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	600	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	600	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1200	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	600	ug/kg	
95-48-7	2-Methylphenol	ND	600	ug/kg	
	3&4-Methylphenol	ND	600	ug/kg	
88-75-5	2-Nitrophenol	ND	600	ug/kg	
100-02-7	4-Nitrophenol	ND	1200	ug/kg	
87-86-5	Pentachlorophenol	ND	600	ug/kg	
108-95-2	Phenol	ND	300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	600	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	600	ug/kg	
83-32-9	Acenaphthene	132	120	ug/kg	
208-96-8	Acenaphthylene	ND	120	ug/kg	
120-12-7	Anthracene	337	120	ug/kg	
56-55-3	Benzo(a)anthracene	637	120	ug/kg	
50-32-8	Benzo(a)pyrene	681	120	ug/kg	
205-99-2	Benzo(b)fluoranthene	600	120	ug/kg	
191-24-2	Benzo(g,h,i)perylene	499	120	ug/kg	
207-08-9	Benzo(k)fluoranthene	433	120	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	300	ug/kg	
106-47-8	4-Chloroaniline	ND	600	ug/kg	
86-74-8	Carbazole	168	120	ug/kg	
218-01-9	Chrysene	724	120	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	300	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	300	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP10 (4-8')		
Lab Sample ID:	MC42297-8	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	300	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	600	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	600	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	300	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	120	ug/kg	
132-64-9	Dibenzofuran	165	120	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	300	ug/kg	
84-66-2	Diethyl phthalate	ND	300	ug/kg	
131-11-3	Dimethyl phthalate	ND	300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	300	ug/kg	
206-44-0	Fluoranthene	1580	120	ug/kg	
86-73-7	Fluorene	159	120	ug/kg	
118-74-1	Hexachlorobenzene	ND	300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	300	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	600	ug/kg	
67-72-1	Hexachloroethane	ND	300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	298	120	ug/kg	
78-59-1	Isophorone	ND	300	ug/kg	
91-57-6	2-Methylnaphthalene	184	120	ug/kg	
88-74-4	2-Nitroaniline	ND	600	ug/kg	
99-09-2	3-Nitroaniline	ND	600	ug/kg	
100-01-6	4-Nitroaniline	ND	600	ug/kg	
91-20-3	Naphthalene	203	120	ug/kg	
98-95-3	Nitrobenzene	ND	300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	300	ug/kg	
85-01-8	Phenanthrene	1490	120	ug/kg	
129-00-0	Pyrene	1650	120	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	47%		24-110%
4165-62-2	Phenol-d5	57%		30-114%
118-79-6	2,4,6-Tribromophenol	98%		20-139%
4165-60-0	Nitrobenzene-d5	51%		27-112%
321-60-8	2-Fluorobiphenyl	74%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP10 (4-8')		
Lab Sample ID:	MC42297-8	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	81.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	106%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP10 (4-8')
Lab Sample ID: MC42297-8
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 81.8

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	10000	19	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 0.97	0.97	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Arsenic	8.6	0.97	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Barium	55.1	4.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Beryllium	0.42	0.39	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.39	0.39	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Calcium	22200	490	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Chromium	11.0	0.97	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cobalt	< 4.9	4.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Copper	24.2	2.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Iron	18800	9.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Lead	87.7	0.97	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Magnesium	2630	490	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Manganese	1140	1.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.038	0.038	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [4]
Nickel	7.3	3.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Potassium	1550	490	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 0.97	0.97	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.49	0.49	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 490	490	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 0.97	0.97	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Vanadium	21.8	0.97	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Zinc	141	1.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Prep QC Batch: MP25349
(4) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID: TP7 (0-4')
Lab Sample ID: MC42297-9 **Date Sampled:** 10/13/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8260C **Percent Solids:** 90.3
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43258.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2							

	Initial Weight	Final Volume
Run #1	5.60 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	9.9	ug/kg	
71-43-2	Benzene	ND	0.49	ug/kg	
75-27-4	Bromodichloromethane	ND	2.0	ug/kg	
75-25-2	Bromoform	ND	2.0	ug/kg	
74-83-9	Bromomethane	ND	2.0	ug/kg	
78-93-3	2-Butanone (MEK)	ND	9.9	ug/kg	
75-15-0	Carbon disulfide	ND	4.9	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.0	ug/kg	
108-90-7	Chlorobenzene	ND	2.0	ug/kg	
75-00-3	Chloroethane	ND	4.9	ug/kg	
67-66-3	Chloroform	ND	2.0	ug/kg	
74-87-3	Chloromethane	ND	4.9	ug/kg	
124-48-1	Dibromochloromethane	ND	2.0	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.0	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.0	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.0	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.0	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.0	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.0	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	2.0	ug/kg	
591-78-6	2-Hexanone	ND	9.9	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	4.9	ug/kg	
75-09-2	Methylene chloride	ND	2.0	ug/kg	
100-42-5	Styrene	ND	4.9	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.0	ug/kg	
127-18-4	Tetrachloroethene	ND	2.0	ug/kg	
108-88-3	Toluene	ND	4.9	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.0	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.0	ug/kg	
79-01-6	Trichloroethene	ND	2.0	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP7 (0-4')		
Lab Sample ID:	MC42297-9	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	90.3
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.0	ug/kg	
1330-20-7	Xylene (total)	ND	2.0	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		65-141%
2037-26-5	Toluene-D8	97%		65-129%
460-00-4	4-Bromofluorobenzene	119%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP7 (0-4')
Lab Sample ID: MC42297-9 **Date Sampled:** 10/13/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8270D SW846 3546 **Percent Solids:** 90.3
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07559.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2							

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
	3&4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	265	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
120-12-7	Anthracene	515	110	ug/kg	
56-55-3	Benzo(a)anthracene	1240	110	ug/kg	
50-32-8	Benzo(a)pyrene	1190	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	1090	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	629	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	916	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	518	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
86-74-8	Carbazole	275	110	ug/kg	
218-01-9	Chrysene	1270	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP7 (0-4')
Lab Sample ID: MC42297-9 **Date Sampled:** 10/13/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8270D SW846 3546 **Percent Solids:** 90.3
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	158	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	2860	110	ug/kg	
86-73-7	Fluorene	245	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	549	110	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	540	ug/kg	
99-09-2	3-Nitroaniline	ND	540	ug/kg	
100-01-6	4-Nitroaniline	ND	540	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
85-01-8	Phenanthrene	2390	110	ug/kg	
129-00-0	Pyrene	2540	110	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	76%		24-110%
4165-62-2	Phenol-d5	81%		30-114%
118-79-6	2,4,6-Tribromophenol	110%		20-139%
4165-60-0	Nitrobenzene-d5	85%		27-112%
321-60-8	2-Fluorobiphenyl	95%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP7 (0-4')		
Lab Sample ID:	MC42297-9	**Date Sampled:**	10/13/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	90.3
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	115%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP7 (0-4')
Lab Sample ID: MC42297-9
Matrix: SO - Soil
Date Sampled: 10/13/15
Date Received: 10/20/15
Percent Solids: 90.3
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5740	17	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.87	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	7.1	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	139	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	0.42	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	1.2	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	72700	2200	mg/kg	5	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	27.4	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	< 4.3	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	348	2.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	11200	8.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Lead	159	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	17000	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	313	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.081	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	11.5	3.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	908	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 0.87	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.43	0.43	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 430	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.87	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	13.4	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	198	1.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TP14 (0-3')		
Lab Sample ID:	MC42297-10	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.3
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K92071.D	1	10/26/15	KD	n/a	n/a	MSK2848
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.7 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	560	ug/kg	
71-43-2	Benzene	ND	28	ug/kg	
75-27-4	Bromodichloromethane	ND	110	ug/kg	
75-25-2	Bromoform	ND	110	ug/kg	
74-83-9	Bromomethane	ND	110	ug/kg	
78-93-3	2-Butanone (MEK)	ND	560	ug/kg	
75-15-0	Carbon disulfide	ND	280	ug/kg	
56-23-5	Carbon tetrachloride	ND	110	ug/kg	
108-90-7	Chlorobenzene	ND	110	ug/kg	
75-00-3	Chloroethane	ND	280	ug/kg	
67-66-3	Chloroform	ND	110	ug/kg	
74-87-3	Chloromethane	ND	280	ug/kg	
124-48-1	Dibromochloromethane	ND	110	ug/kg	
75-34-3	1,1-Dichloroethane	ND	110	ug/kg	
107-06-2	1,2-Dichloroethane	ND	110	ug/kg	
75-35-4	1,1-Dichloroethene	ND	110	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	110	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	110	ug/kg	
78-87-5	1,2-Dichloropropane	ND	110	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	110	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	110	ug/kg	
100-41-4	Ethylbenzene	ND	110	ug/kg	
591-78-6	2-Hexanone	ND	560	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	280	ug/kg	
75-09-2	Methylene chloride	ND	110	ug/kg	
100-42-5	Styrene	ND	280	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	110	ug/kg	
127-18-4	Tetrachloroethene	ND	110	ug/kg	
108-88-3	Toluene	ND	280	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	110	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	110	ug/kg	
79-01-6	Trichloroethene	ND	110	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP14 (0-3')		
Lab Sample ID:	MC42297-10	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.3
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	110	ug/kg	
1330-20-7	Xylene (total)	519	110	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		65-141%
2037-26-5	Toluene-D8	98%		65-129%
460-00-4	4-Bromofluorobenzene	98%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP14 (0-3')
Lab Sample ID: MC42297-10
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 91.3

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07560.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2	W24528.D	20	10/27/15	NE	10/21/15	OP45098	MSW1027

	Initial Weight	Final Volume
Run #1	21.0 g	1.0 ml
Run #2	21.0 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	520	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	520	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	520	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	520	ug/kg	
95-48-7	2-Methylphenol	ND	520	ug/kg	
	3&4-Methylphenol	ND	520	ug/kg	
88-75-5	2-Nitrophenol	ND	520	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	ug/kg	
87-86-5	Pentachlorophenol	ND	520	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	520	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	520	ug/kg	
83-32-9	Acenaphthene	1450	100	ug/kg	
208-96-8	Acenaphthylene	248	100	ug/kg	
120-12-7	Anthracene	3210	100	ug/kg	
56-55-3	Benzo(a)anthracene	6770	100	ug/kg	
50-32-8	Benzo(a)pyrene	5400	100	ug/kg	
205-99-2	Benzo(b)fluoranthene	7340	100	ug/kg	
191-24-2	Benzo(g,h,i)perylene	3390	100	ug/kg	
207-08-9	Benzo(k)fluoranthene	4320	100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	520	ug/kg	
86-74-8	Carbazole	1830	100	ug/kg	
218-01-9	Chrysene	7120	100	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP14 (0-3')		
Lab Sample ID:	MC42297-10	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.3
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	520	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	520	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	440	100	ug/kg	
132-64-9	Dibenzofuran	1540	100	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	260	ug/kg	
206-44-0	Fluoranthene	16400 [a]	2100	ug/kg	
86-73-7	Fluorene	1460	100	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	520	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	3690	100	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	2490	100	ug/kg	
88-74-4	2-Nitroaniline	ND	520	ug/kg	
99-09-2	3-Nitroaniline	ND	520	ug/kg	
100-01-6	4-Nitroaniline	ND	520	ug/kg	
91-20-3	Naphthalene	2680	100	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	15100 [a]	2100	ug/kg	
129-00-0	Pyrene	14000 [a]	2100	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	66%	71%	24-110%
4165-62-2	Phenol-d5	69%	79%	30-114%
118-79-6	2,4,6-Tribromophenol	92%	76%	20-139%
4165-60-0	Nitrobenzene-d5	75%	72%	27-112%
321-60-8	2-Fluorobiphenyl	77%	89%	35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP14 (0-3')		
Lab Sample ID:	MC42297-10	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.3
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	87%	109%	48-136%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP14 (0-3')
Lab Sample ID: MC42297-10
Matrix: SO - Soil
Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 91.3
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	9010	17	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.85	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	11.1	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	63.2	4.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	0.45	0.34	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	0.64	0.34	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	7050	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Chromium	12.6	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	6.4	4.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	22.0	2.1	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	58000	85	mg/kg	10	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Lead	164	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	1210	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	891	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.28	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	12.8	3.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	1350	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 0.85	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.42	0.42	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 420	420	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.85	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	23.8	0.85	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	242	1.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID: TP16 (4-8')
Lab Sample ID: MC42297-11
Matrix: SO - Soil
Method: SW846 8260C
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 88.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43259.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2 [a]	V43281.D	1	10/23/15	JT	n/a	n/a	MSV1571

	Initial Weight	Final Volume
Run #1	5.06 g	5.0 ml
Run #2	5.51 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	
71-43-2	Benzene	ND	0.56	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	ug/kg	
75-25-2	Bromoform	ND	2.2	ug/kg	
74-83-9	Bromomethane	ND	2.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	
75-15-0	Carbon disulfide	ND	5.6	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.6	ug/kg	
67-66-3	Chloroform	ND	2.2	ug/kg	
74-87-3	Chloromethane	ND	5.6	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.2	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.2	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.6	ug/kg	
75-09-2	Methylene chloride	ND	2.2	ug/kg	
100-42-5	Styrene	ND	5.6	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	ug/kg	
108-88-3	Toluene	ND	5.6	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ug/kg	
79-01-6	Trichloroethene	ND	2.2	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP16 (4-8')		
Lab Sample ID:	MC42297-11	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	88.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.2	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	105%	110%	65-141%
2037-26-5	Toluene-D8	98%	97%	65-129%
460-00-4	4-Bromofluorobenzene	116%	119%	63-137%

(a) Confirmation run for internal standard areas.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP16 (4-8')
Lab Sample ID: MC42297-11
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 88.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07550.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2	W24529.D	20	10/27/15	NE	10/21/15	OP45098	MSW1027

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2	20.1 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	570	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	570	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	570	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	570	ug/kg	
95-48-7	2-Methylphenol	ND	570	ug/kg	
	3&4-Methylphenol	ND	570	ug/kg	
88-75-5	2-Nitrophenol	ND	570	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	570	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	570	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	570	ug/kg	
83-32-9	Acenaphthene	1720	110	ug/kg	
208-96-8	Acenaphthylene	593	110	ug/kg	
120-12-7	Anthracene	6570	110	ug/kg	
56-55-3	Benzo(a)anthracene	14000 [a]	2300	ug/kg	
50-32-8	Benzo(a)pyrene	12500 [a]	2300	ug/kg	
205-99-2	Benzo(b)fluoranthene	10600 [a]	2300	ug/kg	
191-24-2	Benzo(g,h,i)perylene	9040	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	6180	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	570	ug/kg	
86-74-8	Carbazole	2440	110	ug/kg	
218-01-9	Chrysene	13400 [a]	2300	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP16 (4-8')		
Lab Sample ID:	MC42297-11	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	570	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	570	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	778	110	ug/kg	
132-64-9	Dibenzofuran	1410	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	28100 [a]	2300	ug/kg	
86-73-7	Fluorene	2040	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	570	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	8900	110	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	704	110	ug/kg	
88-74-4	2-Nitroaniline	ND	570	ug/kg	
99-09-2	3-Nitroaniline	ND	570	ug/kg	
100-01-6	4-Nitroaniline	ND	570	ug/kg	
91-20-3	Naphthalene	1310	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	22000 [a]	2300	ug/kg	
129-00-0	Pyrene	23400 [a]	2300	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%	54%	24-110%
4165-62-2	Phenol-d5	58%	74%	30-114%
118-79-6	2,4,6-Tribromophenol	94%	69%	20-139%
4165-60-0	Nitrobenzene-d5	62%	53%	27-112%
321-60-8	2-Fluorobiphenyl	74%	82%	35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP16 (4-8')		
Lab Sample ID:	MC42297-11	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	88.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	80%	90%	48-136%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP16 (4-8')
Lab Sample ID: MC42297-11
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 88.1

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	7450	18	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	1.1	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	14.9	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	243	4.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	0.42	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	0.90	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	48700	2200	mg/kg	5	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	20.9	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	6.5	4.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	42.9	2.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	56400	44	mg/kg	5	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Lead	330	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	6440	440	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	605	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.26	0.036	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	21.4	3.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	1390	440	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.44	0.44	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 440	440	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	32.1	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	267	1.8	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID: TP18 (0-4')
Lab Sample ID: MC42297-12
Matrix: SO - Soil
Method: SW846 8260C
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 90.2

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43260.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2							

	Initial Weight	Final Volume
Run #1	4.59 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	12	ug/kg	
71-43-2	Benzene	ND	0.60	ug/kg	
75-27-4	Bromodichloromethane	ND	2.4	ug/kg	
75-25-2	Bromoform	ND	2.4	ug/kg	
74-83-9	Bromomethane	ND	2.4	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	ug/kg	
75-15-0	Carbon disulfide	ND	6.0	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.4	ug/kg	
108-90-7	Chlorobenzene	ND	2.4	ug/kg	
75-00-3	Chloroethane	ND	6.0	ug/kg	
67-66-3	Chloroform	ND	2.4	ug/kg	
74-87-3	Chloromethane	ND	6.0	ug/kg	
124-48-1	Dibromochloromethane	ND	2.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.4	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.4	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.4	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.4	ug/kg	
100-41-4	Ethylbenzene	ND	2.4	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	6.0	ug/kg	
75-09-2	Methylene chloride	ND	2.4	ug/kg	
100-42-5	Styrene	ND	6.0	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.4	ug/kg	
127-18-4	Tetrachloroethene	ND	2.4	ug/kg	
108-88-3	Toluene	ND	6.0	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.4	ug/kg	
79-01-6	Trichloroethene	ND	2.4	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP18 (0-4')		
Lab Sample ID:	MC42297-12	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	90.2
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.4	ug/kg	
1330-20-7	Xylene (total)	ND	2.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		65-141%
2037-26-5	Toluene-D8	98%		65-129%
460-00-4	4-Bromofluorobenzene	112%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP18 (0-4')
Lab Sample ID: MC42297-12 **Date Sampled:** 10/14/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8270D SW846 3546 **Percent Solids:** 90.2
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07551.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	280	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	550	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	550	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	550	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	550	ug/kg	
95-48-7	2-Methylphenol	ND	550	ug/kg	
	3&4-Methylphenol	ND	550	ug/kg	
88-75-5	2-Nitrophenol	ND	550	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	550	ug/kg	
108-95-2	Phenol	ND	280	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	550	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	550	ug/kg	
83-32-9	Acenaphthene	246	110	ug/kg	
208-96-8	Acenaphthylene	255	110	ug/kg	
120-12-7	Anthracene	1020	110	ug/kg	
56-55-3	Benzo(a)anthracene	3000	110	ug/kg	
50-32-8	Benzo(a)pyrene	2980	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	2550	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	1400	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	2330	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	280	ug/kg	
85-68-7	Butyl benzyl phthalate	1200	280	ug/kg	
91-58-7	2-Chloronaphthalene	ND	280	ug/kg	
106-47-8	4-Chloroaniline	ND	550	ug/kg	
86-74-8	Carbazole	432	110	ug/kg	
218-01-9	Chrysene	2880	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	280	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	280	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	280	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	280	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP18 (0-4')		
Lab Sample ID:	MC42297-12	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	90.2
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	280	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	280	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	280	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	550	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	550	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	280	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	523	110	ug/kg	
132-64-9	Dibenzofuran	183	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	280	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	280	ug/kg	
84-66-2	Diethyl phthalate	ND	280	ug/kg	
131-11-3	Dimethyl phthalate	ND	280	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	280	ug/kg	
206-44-0	Fluoranthene	7140	110	ug/kg	
86-73-7	Fluorene	282	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	280	ug/kg	
87-68-3	Hexachlorobutadiene	ND	280	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	550	ug/kg	
67-72-1	Hexachloroethane	ND	280	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	1230	110	ug/kg	
78-59-1	Isophorone	ND	280	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	550	ug/kg	
99-09-2	3-Nitroaniline	ND	550	ug/kg	
100-01-6	4-Nitroaniline	ND	550	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	280	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	280	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	280	ug/kg	
85-01-8	Phenanthrene	3820	110	ug/kg	
129-00-0	Pyrene	6020	110	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	280	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	53%		24-110%
4165-62-2	Phenol-d5	61%		30-114%
118-79-6	2,4,6-Tribromophenol	103%		20-139%
4165-60-0	Nitrobenzene-d5	61%		27-112%
321-60-8	2-Fluorobiphenyl	73%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP18 (0-4')		
Lab Sample ID:	MC42297-12	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	90.2
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	96%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP18 (0-4')
Lab Sample ID: MC42297-12
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 90.2

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5630	18	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	6.1	0.89	mg/kg	1	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Barium	47.9	4.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	< 0.35	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	0.40	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	47000	2200	mg/kg	5	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	8.7	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	5.4	4.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	30.8	2.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	15200	8.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Lead	66.2	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	7740	440	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	331	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.043	0.034	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	18.9	3.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	950	440	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.44	0.44	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 440	440	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.89	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	13.3	0.89	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	124	1.8	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB4 (0-4')		
Lab Sample ID:	MC42297-13	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K92072.D	1	10/26/15	KD	n/a	n/a	MSK2848
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	10.0 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	590	ug/kg	
71-43-2	Benzene	ND	29	ug/kg	
75-27-4	Bromodichloromethane	ND	120	ug/kg	
75-25-2	Bromoform	ND	120	ug/kg	
74-83-9	Bromomethane	ND	120	ug/kg	
78-93-3	2-Butanone (MEK)	ND	590	ug/kg	
75-15-0	Carbon disulfide	ND	290	ug/kg	
56-23-5	Carbon tetrachloride	ND	120	ug/kg	
108-90-7	Chlorobenzene	ND	120	ug/kg	
75-00-3	Chloroethane	ND	290	ug/kg	
67-66-3	Chloroform	ND	120	ug/kg	
74-87-3	Chloromethane	ND	290	ug/kg	
124-48-1	Dibromochloromethane	ND	120	ug/kg	
75-34-3	1,1-Dichloroethane	ND	120	ug/kg	
107-06-2	1,2-Dichloroethane	ND	120	ug/kg	
75-35-4	1,1-Dichloroethene	ND	120	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	120	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	120	ug/kg	
78-87-5	1,2-Dichloropropane	ND	120	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	120	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	120	ug/kg	
100-41-4	Ethylbenzene	ND	120	ug/kg	
591-78-6	2-Hexanone	ND	590	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	290	ug/kg	
75-09-2	Methylene chloride	ND	120	ug/kg	
100-42-5	Styrene	ND	290	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	120	ug/kg	
127-18-4	Tetrachloroethene	ND	120	ug/kg	
108-88-3	Toluene	ND	290	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	120	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	120	ug/kg	
79-01-6	Trichloroethene	ND	120	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB4 (0-4')		
Lab Sample ID:	MC42297-13	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	120	ug/kg	
1330-20-7	Xylene (total)	ND	120	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		65-141%
2037-26-5	Toluene-D8	97%		65-129%
460-00-4	4-Bromofluorobenzene	97%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB4 (0-4')
Lab Sample ID: MC42297-13
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/15/15
Date Received: 10/20/15
Percent Solids: 91.8

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07552.D	20	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2	W24532.D	100	10/27/15	NE	10/21/15	OP45098	MSW1027

	Initial Weight	Final Volume
Run #1	21.0 g	1.0 ml
Run #2	21.0 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5200	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	10000	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	10000	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	10000	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	21000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	10000	ug/kg	
95-48-7	2-Methylphenol	ND	10000	ug/kg	
	3&4-Methylphenol	ND	10000	ug/kg	
88-75-5	2-Nitrophenol	ND	10000	ug/kg	
100-02-7	4-Nitrophenol	ND	21000	ug/kg	
87-86-5	Pentachlorophenol	ND	10000	ug/kg	
108-95-2	Phenol	ND	5200	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	10000	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	10000	ug/kg	
83-32-9	Acenaphthene	14200	2100	ug/kg	
208-96-8	Acenaphthylene	12900	2100	ug/kg	
120-12-7	Anthracene	66400	2100	ug/kg	
56-55-3	Benzo(a)anthracene	98200	2100	ug/kg	
50-32-8	Benzo(a)pyrene	85600	2100	ug/kg	
205-99-2	Benzo(b)fluoranthene	69000	2100	ug/kg	
191-24-2	Benzo(g,h,i)perylene	32100	2100	ug/kg	
207-08-9	Benzo(k)fluoranthene	57900	2100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	5200	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	5200	ug/kg	
91-58-7	2-Chloronaphthalene	ND	5200	ug/kg	
106-47-8	4-Chloroaniline	ND	10000	ug/kg	
86-74-8	Carbazole	21300	2100	ug/kg	
218-01-9	Chrysene	94000	2100	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	5200	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	5200	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5200	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5200	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB4 (0-4')		
Lab Sample ID:	MC42297-13	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5200	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5200	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5200	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	10000	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	10000	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	5200	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	3890	2100	ug/kg	
132-64-9	Dibenzofuran	19300	2100	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	5200	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	5200	ug/kg	
84-66-2	Diethyl phthalate	ND	5200	ug/kg	
131-11-3	Dimethyl phthalate	ND	5200	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5200	ug/kg	
206-44-0	Fluoranthene	180000 [a]	10000	ug/kg	
86-73-7	Fluorene	32800	2100	ug/kg	
118-74-1	Hexachlorobenzene	ND	5200	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5200	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	10000	ug/kg	
67-72-1	Hexachloroethane	ND	5200	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	29200	2100	ug/kg	
78-59-1	Isophorone	ND	5200	ug/kg	
91-57-6	2-Methylnaphthalene	27600	2100	ug/kg	
88-74-4	2-Nitroaniline	ND	10000	ug/kg	
99-09-2	3-Nitroaniline	ND	10000	ug/kg	
100-01-6	4-Nitroaniline	ND	10000	ug/kg	
91-20-3	Naphthalene	33500	2100	ug/kg	
98-95-3	Nitrobenzene	ND	5200	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	5200	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	5200	ug/kg	
85-01-8	Phenanthrene	201000 [a]	10000	ug/kg	
129-00-0	Pyrene	162000 [a]	10000	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5200	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	78%	62%	24-110%
4165-62-2	Phenol-d5	82%	62%	30-114%
118-79-6	2,4,6-Tribromophenol	531% [b]	59%	20-139%
4165-60-0	Nitrobenzene-d5	88%	63%	27-112%
321-60-8	2-Fluorobiphenyl	94%	86%	35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB4 (0-4')		
Lab Sample ID:	MC42297-13	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	111%	94%	48-136%

(a) Result is from Run# 2
(b) Outside control limits due to possible matrix interference. Sample results confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB4 (0-4')
Lab Sample ID: MC42297-13
Matrix: SO - Soil
Date Sampled: 10/15/15
Date Received: 10/20/15
Percent Solids: 91.8
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3080	16	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Antimony	< 0.80	0.80	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Arsenic	4.5	0.80	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Barium	32.5	4.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Beryllium	< 0.32	0.32	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cadmium	< 0.32	0.32	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Calcium	17700	400	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Chromium	16.0	0.80	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Cobalt	< 4.0	4.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Copper	15.3	2.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Iron	10200	8.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Lead	31.4	0.80	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Magnesium	3470	400	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Manganese	155	1.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Mercury	< 0.033	0.033	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [4]
Nickel	4.5	3.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Potassium	< 400	400	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Selenium	< 0.80	0.80	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Silver	< 0.40	0.40	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Sodium	< 400	400	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Thallium	< 0.80	0.80	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Vanadium	13.2	0.80	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]
Zinc	44.6	1.6	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [3]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Prep QC Batch: MP25349
(4) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	TP17 (0-4')		
Lab Sample ID:	MC42297-14	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	87.4
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K92073.D	1	10/26/15	KD	n/a	n/a	MSK2848
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	9.19 g	10.0 ml	100 ul
Run #2			

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	690	ug/kg	
71-43-2	Benzene	ND	35	ug/kg	
75-27-4	Bromodichloromethane	ND	140	ug/kg	
75-25-2	Bromoform	ND	140	ug/kg	
74-83-9	Bromomethane	ND	140	ug/kg	
78-93-3	2-Butanone (MEK)	ND	690	ug/kg	
75-15-0	Carbon disulfide	ND	350	ug/kg	
56-23-5	Carbon tetrachloride	ND	140	ug/kg	
108-90-7	Chlorobenzene	ND	140	ug/kg	
75-00-3	Chloroethane	ND	350	ug/kg	
67-66-3	Chloroform	ND	140	ug/kg	
74-87-3	Chloromethane	ND	350	ug/kg	
124-48-1	Dibromochloromethane	ND	140	ug/kg	
75-34-3	1,1-Dichloroethane	ND	140	ug/kg	
107-06-2	1,2-Dichloroethane	ND	140	ug/kg	
75-35-4	1,1-Dichloroethene	ND	140	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	140	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	140	ug/kg	
78-87-5	1,2-Dichloropropane	ND	140	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	140	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	140	ug/kg	
100-41-4	Ethylbenzene	ND	140	ug/kg	
591-78-6	2-Hexanone	ND	690	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	350	ug/kg	
75-09-2	Methylene chloride	ND	140	ug/kg	
100-42-5	Styrene	ND	350	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	140	ug/kg	
127-18-4	Tetrachloroethene	ND	140	ug/kg	
108-88-3	Toluene	ND	350	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	140	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	140	ug/kg	
79-01-6	Trichloroethene	ND	140	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP17 (0-4')		
Lab Sample ID:	MC42297-14	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	87.4
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	140	ug/kg	
1330-20-7	Xylene (total)	ND	140	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	98%		65-141%
2037-26-5	Toluene-D8	98%		65-129%
460-00-4	4-Bromofluorobenzene	99%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP17 (0-4')
Lab Sample ID: MC42297-14 **Date Sampled:** 10/14/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8270D SW846 3546 **Percent Solids:** 87.4
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07553.D	20	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2							

	Initial Weight	Final Volume
Run #1	20.1 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5700	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	11000	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	11000	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	11000	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	23000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	11000	ug/kg	
95-48-7	2-Methylphenol	ND	11000	ug/kg	
	3&4-Methylphenol	ND	11000	ug/kg	
88-75-5	2-Nitrophenol	ND	11000	ug/kg	
100-02-7	4-Nitrophenol	ND	23000	ug/kg	
87-86-5	Pentachlorophenol	ND	11000	ug/kg	
108-95-2	Phenol	ND	5700	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	11000	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	11000	ug/kg	
83-32-9	Acenaphthene	2980	2300	ug/kg	
208-96-8	Acenaphthylene	2540	2300	ug/kg	
120-12-7	Anthracene	11200	2300	ug/kg	
56-55-3	Benzo(a)anthracene	34900	2300	ug/kg	
50-32-8	Benzo(a)pyrene	33100	2300	ug/kg	
205-99-2	Benzo(b)fluoranthene	26900	2300	ug/kg	
191-24-2	Benzo(g,h,i)perylene	14200	2300	ug/kg	
207-08-9	Benzo(k)fluoranthene	26800	2300	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	5700	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	5700	ug/kg	
91-58-7	2-Chloronaphthalene	ND	5700	ug/kg	
106-47-8	4-Chloroaniline	ND	11000	ug/kg	
86-74-8	Carbazole	3960	2300	ug/kg	
218-01-9	Chrysene	33500	2300	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	5700	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	5700	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5700	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5700	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP17 (0-4')		
Lab Sample ID:	MC42297-14	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.4
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5700	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	5700	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	5700	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	11000	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	11000	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	5700	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	2300	ug/kg	
132-64-9	Dibenzofuran	ND	2300	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	5700	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	5700	ug/kg	
84-66-2	Diethyl phthalate	ND	5700	ug/kg	
131-11-3	Dimethyl phthalate	ND	5700	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	5700	ug/kg	
206-44-0	Fluoranthene	69800	2300	ug/kg	
86-73-7	Fluorene	3210	2300	ug/kg	
118-74-1	Hexachlorobenzene	ND	5700	ug/kg	
87-68-3	Hexachlorobutadiene	ND	5700	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	11000	ug/kg	
67-72-1	Hexachloroethane	ND	5700	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	14700	2300	ug/kg	
78-59-1	Isophorone	ND	5700	ug/kg	
91-57-6	2-Methylnaphthalene	ND	2300	ug/kg	
88-74-4	2-Nitroaniline	ND	11000	ug/kg	
99-09-2	3-Nitroaniline	ND	11000	ug/kg	
100-01-6	4-Nitroaniline	ND	11000	ug/kg	
91-20-3	Naphthalene	ND	2300	ug/kg	
98-95-3	Nitrobenzene	ND	5700	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	5700	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	5700	ug/kg	
85-01-8	Phenanthrene	38000	2300	ug/kg	
129-00-0	Pyrene	63500	2300	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	5700	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	87%		24-110%
4165-62-2	Phenol-d5	89%		30-114%
118-79-6	2,4,6-Tribromophenol	530% [a]		20-139%
4165-60-0	Nitrobenzene-d5	93%		27-112%
321-60-8	2-Fluorobiphenyl	103%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	TP17 (0-4')		
Lab Sample ID:	MC42297-14	**Date Sampled:**	10/14/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	87.4
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	118%		48-136%

(a) Outside control limits due to dilution.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP17 (0-4')
Lab Sample ID: MC42297-14 **Date Sampled:** 10/14/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8082A SW846 3546 **Percent Solids:** 87.4
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK52589.D	1	10/27/15	NK	10/21/15	OP45099	GBK1645
Run #2							

	Initial Weight	Final Volume
Run #1	15.2 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	38	ug/kg	
11104-28-2	Aroclor 1221	ND	38	ug/kg	
11141-16-5	Aroclor 1232	ND	38	ug/kg	
53469-21-9	Aroclor 1242	ND	38	ug/kg	
12672-29-6	Aroclor 1248	ND	38	ug/kg	
11097-69-1	Aroclor 1254	ND	38	ug/kg	
11096-82-5	Aroclor 1260	ND	38	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	88%		35-136%
877-09-8	Tetrachloro-m-xylene	78%		35-136%
2051-24-3	Decachlorobiphenyl	101%		24-171%
2051-24-3	Decachlorobiphenyl	95%		24-171%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: TP17 (0-4')
Lab Sample ID: MC42297-14
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/14/15
Date Received: 10/20/15
Percent Solids: 87.4

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	9860	18	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.91	0.91	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	8.6	0.91	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	145	4.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	0.66	0.36	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	0.54	0.36	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	85700	2300	mg/kg	5	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	16.2	0.91	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	7.4	4.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	47.4	2.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	27800	9.1	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Lead	107	0.91	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	22800	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	441	1.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.21	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	19.2	3.6	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	2160	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 0.91	0.91	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.45	0.45	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 450	450	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.91	0.91	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	23.1	0.91	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	196	1.8	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB10 (0-4')		
Lab Sample ID:	MC42297-15	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	92.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43261.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2 [a]	V43282.D	1	10/23/15	JT	n/a	n/a	MSV1571

	Initial Weight	Final Volume
Run #1	4.66 g	5.0 ml
Run #2	4.81 g	5.0 ml

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	12	ug/kg	
71-43-2	Benzene	ND	0.58	ug/kg	
75-27-4	Bromodichloromethane	ND	2.3	ug/kg	
75-25-2	Bromoform	ND	2.3	ug/kg	
74-83-9	Bromomethane	ND	2.3	ug/kg	
78-93-3	2-Butanone (MEK)	ND	12	ug/kg	
75-15-0	Carbon disulfide	ND	5.8	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.3	ug/kg	
108-90-7	Chlorobenzene	ND	2.3	ug/kg	
75-00-3	Chloroethane	ND	5.8	ug/kg	
67-66-3	Chloroform	ND	2.3	ug/kg	
74-87-3	Chloromethane	ND	5.8	ug/kg	
124-48-1	Dibromochloromethane	ND	2.3	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.3	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.3	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.3	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.3	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.3	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.3	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.3	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.3	ug/kg	
100-41-4	Ethylbenzene	6.2	2.3	ug/kg	
591-78-6	2-Hexanone	ND	12	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.8	ug/kg	
75-09-2	Methylene chloride	6.6	2.3	ug/kg	
100-42-5	Styrene	ND	5.8	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.3	ug/kg	
127-18-4	Tetrachloroethene	ND	2.3	ug/kg	
108-88-3	Toluene	ND	5.8	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.3	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.3	ug/kg	
79-01-6	Trichloroethene	ND	2.3	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB10 (0-4')		
Lab Sample ID:	MC42297-15	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	92.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.3	ug/kg	
1330-20-7	Xylene (total)	47.1	2.3	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%	108%	65-141%
2037-26-5	Toluene-D8	96%	98%	65-129%
460-00-4	4-Bromofluorobenzene	142% [b]	141% [b]	63-137%

(a) Confirmation run.
(b) Outside control limits due to possible matrix interference. Confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB10 (0-4')
Lab Sample ID: MC42297-15
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: 92.5

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07554.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2	W24533.D	20	10/27/15	NE	10/21/15	OP45098	MSW1027

	Initial Weight	Final Volume
Run #1	20.7 g	1.0 ml
Run #2	20.7 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	520	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	520	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	520	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	520	ug/kg	
95-48-7	2-Methylphenol	ND	520	ug/kg	
	3&4-Methylphenol	ND	520	ug/kg	
88-75-5	2-Nitrophenol	ND	520	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	ug/kg	
87-86-5	Pentachlorophenol	ND	520	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	520	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	520	ug/kg	
83-32-9	Acenaphthene	859	100	ug/kg	
208-96-8	Acenaphthylene	402	100	ug/kg	
120-12-7	Anthracene	3210	100	ug/kg	
56-55-3	Benzo(a)anthracene	6660	100	ug/kg	
50-32-8	Benzo(a)pyrene	6380	100	ug/kg	
205-99-2	Benzo(b)fluoranthene	8070	100	ug/kg	
191-24-2	Benzo(g,h,i)perylene	4950	100	ug/kg	
207-08-9	Benzo(k)fluoranthene	5150	100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	520	ug/kg	
86-74-8	Carbazole	1520	100	ug/kg	
218-01-9	Chrysene	6650	100	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB10 (0-4')		
Lab Sample ID:	MC42297-15	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	92.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	520	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	520	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	442	100	ug/kg	
132-64-9	Dibenzofuran	870	100	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	260	ug/kg	
206-44-0	Fluoranthene	15000 [a]	2100	ug/kg	
86-73-7	Fluorene	1130	100	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	520	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	4370	100	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	375	100	ug/kg	
88-74-4	2-Nitroaniline	ND	520	ug/kg	
99-09-2	3-Nitroaniline	ND	520	ug/kg	
100-01-6	4-Nitroaniline	ND	520	ug/kg	
91-20-3	Naphthalene	597	100	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	13100 [a]	2100	ug/kg	
129-00-0	Pyrene	13100 [a]	2100	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	57%	57%	24-110%
4165-62-2	Phenol-d5	71%	73%	30-114%
118-79-6	2,4,6-Tribromophenol	54%	29%	20-139%
4165-60-0	Nitrobenzene-d5	76%	71%	27-112%
321-60-8	2-Fluorobiphenyl	83%	87%	35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB10 (0-4')		
Lab Sample ID:	MC42297-15	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	92.5
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	95%	103%	48-136%

(a) Result is from Run# 2

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB10 (0-4')
Lab Sample ID: MC42297-15
Matrix: SO - Soil
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: 92.5

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	5780	17	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.86	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	17.1	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	93.4	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	0.35	0.34	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	0.65	0.34	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	86400	4300	mg/kg	10	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	18.5	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	5.9	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	43.1	2.1	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	56100	86	mg/kg	10	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Lead	63.2	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	20400	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	520	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	0.045	0.032	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	11.5	3.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	994	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 1.7	1.7	mg/kg	2	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Silver	< 0.43	0.43	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 430	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.86	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	40.7	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	146	1.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB14 (0-4')		
Lab Sample ID:	MC42297-16	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43283.D	1	10/23/15	JT	n/a	n/a	MSV1571
Run #2							

	Initial Weight	Final Volume
Run #1	8.03 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	6.8	ug/kg	
71-43-2	Benzene	ND	0.34	ug/kg	
75-27-4	Bromodichloromethane	ND	1.4	ug/kg	
75-25-2	Bromoform	ND	1.4	ug/kg	
74-83-9	Bromomethane	ND	1.4	ug/kg	
78-93-3	2-Butanone (MEK)	ND	6.8	ug/kg	
75-15-0	Carbon disulfide	ND	3.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	1.4	ug/kg	
108-90-7	Chlorobenzene	ND	1.4	ug/kg	
75-00-3	Chloroethane	ND	3.4	ug/kg	
67-66-3	Chloroform	ND	1.4	ug/kg	
74-87-3	Chloromethane	ND	3.4	ug/kg	
124-48-1	Dibromochloromethane	ND	1.4	ug/kg	
75-34-3	1,1-Dichloroethane	ND	1.4	ug/kg	
107-06-2	1,2-Dichloroethane	ND	1.4	ug/kg	
75-35-4	1,1-Dichloroethene	ND	1.4	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	1.4	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	1.4	ug/kg	
78-87-5	1,2-Dichloropropane	ND	1.4	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	1.4	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	1.4	ug/kg	
100-41-4	Ethylbenzene	ND	1.4	ug/kg	
591-78-6	2-Hexanone	ND	6.8	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	3.4	ug/kg	
75-09-2	Methylene chloride	1.8	1.4	ug/kg	
100-42-5	Styrene	ND	3.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	1.4	ug/kg	
127-18-4	Tetrachloroethene	ND	1.4	ug/kg	
108-88-3	Toluene	ND	3.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	1.4	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	1.4	ug/kg	
79-01-6	Trichloroethene	ND	1.4	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB14 (0-4')		
Lab Sample ID:	MC42297-16	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.4	ug/kg	
1330-20-7	Xylene (total)	ND	1.4	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		65-141%
2037-26-5	Toluene-D8	100%		65-129%
460-00-4	4-Bromofluorobenzene	107%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB14 (0-4')
Lab Sample ID: MC42297-16
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: 91.6

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07555.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2							

	Initial Weight	Final Volume
Run #1	20.9 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	260	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	520	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	520	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	520	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1000	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	520	ug/kg	
95-48-7	2-Methylphenol	ND	520	ug/kg	
	3&4-Methylphenol	ND	520	ug/kg	
88-75-5	2-Nitrophenol	ND	520	ug/kg	
100-02-7	4-Nitrophenol	ND	1000	ug/kg	
87-86-5	Pentachlorophenol	ND	520	ug/kg	
108-95-2	Phenol	ND	260	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	520	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	520	ug/kg	
83-32-9	Acenaphthene	ND	100	ug/kg	
208-96-8	Acenaphthylene	ND	100	ug/kg	
120-12-7	Anthracene	ND	100	ug/kg	
56-55-3	Benzo(a)anthracene	ND	100	ug/kg	
50-32-8	Benzo(a)pyrene	ND	100	ug/kg	
205-99-2	Benzo(b)fluoranthene	ND	100	ug/kg	
191-24-2	Benzo(g,h,i)perylene	ND	100	ug/kg	
207-08-9	Benzo(k)fluoranthene	ND	100	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	260	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	260	ug/kg	
91-58-7	2-Chloronaphthalene	ND	260	ug/kg	
106-47-8	4-Chloroaniline	ND	520	ug/kg	
86-74-8	Carbazole	ND	100	ug/kg	
218-01-9	Chrysene	ND	100	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	260	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	260	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	260	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	260	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB14 (0-4')		
Lab Sample ID:	MC42297-16	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	260	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	260	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	260	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	520	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	520	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	260	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	100	ug/kg	
132-64-9	Dibenzofuran	ND	100	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	260	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	260	ug/kg	
84-66-2	Diethyl phthalate	ND	260	ug/kg	
131-11-3	Dimethyl phthalate	ND	260	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	260	ug/kg	
206-44-0	Fluoranthene	170	100	ug/kg	
86-73-7	Fluorene	ND	100	ug/kg	
118-74-1	Hexachlorobenzene	ND	260	ug/kg	
87-68-3	Hexachlorobutadiene	ND	260	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	520	ug/kg	
67-72-1	Hexachloroethane	ND	260	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	100	ug/kg	
78-59-1	Isophorone	ND	260	ug/kg	
91-57-6	2-Methylnaphthalene	ND	100	ug/kg	
88-74-4	2-Nitroaniline	ND	520	ug/kg	
99-09-2	3-Nitroaniline	ND	520	ug/kg	
100-01-6	4-Nitroaniline	ND	520	ug/kg	
91-20-3	Naphthalene	ND	100	ug/kg	
98-95-3	Nitrobenzene	ND	260	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	260	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	260	ug/kg	
85-01-8	Phenanthrene	124	100	ug/kg	
129-00-0	Pyrene	162	100	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	260	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	64%		24-110%
4165-62-2	Phenol-d5	68%		30-114%
118-79-6	2,4,6-Tribromophenol	97%		20-139%
4165-60-0	Nitrobenzene-d5	70%		27-112%
321-60-8	2-Fluorobiphenyl	78%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB14 (0-4')		
Lab Sample ID:	MC42297-16	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.6
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	94%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB14 (0-4')
Lab Sample ID: MC42297-16
Matrix: SO - Soil
Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: 91.6
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3420	17	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.87	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	5.9	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	17.4	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	< 0.35	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	< 0.35	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	70900	4300	mg/kg	10	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	25.3	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	< 4.3	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	4.4	2.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	21100	8.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Lead	101	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	3810	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	278	1.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	< 0.035	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	4.6	3.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	< 430	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 0.87	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.43	0.43	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 430	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.87	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	16.1	0.87	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	10.5	1.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB8 (0-4')		
Lab Sample ID:	MC42297-17	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43263.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2							

	Initial Weight	Final Volume
Run #1	4.24 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	13	ug/kg	
71-43-2	Benzene	ND	0.64	ug/kg	
75-27-4	Bromodichloromethane	ND	2.6	ug/kg	
75-25-2	Bromoform	ND	2.6	ug/kg	
74-83-9	Bromomethane	ND	2.6	ug/kg	
78-93-3	2-Butanone (MEK)	ND	13	ug/kg	
75-15-0	Carbon disulfide	ND	6.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.6	ug/kg	
108-90-7	Chlorobenzene	ND	2.6	ug/kg	
75-00-3	Chloroethane	ND	6.4	ug/kg	
67-66-3	Chloroform	ND	2.6	ug/kg	
74-87-3	Chloromethane	ND	6.4	ug/kg	
124-48-1	Dibromochloromethane	ND	2.6	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.6	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.6	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.6	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.6	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.6	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.6	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.6	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.6	ug/kg	
100-41-4	Ethylbenzene	ND	2.6	ug/kg	
591-78-6	2-Hexanone	ND	13	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	6.4	ug/kg	
75-09-2	Methylene chloride	4.7	2.6	ug/kg	B
100-42-5	Styrene	ND	6.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.6	ug/kg	
127-18-4	Tetrachloroethene	ND	2.6	ug/kg	
108-88-3	Toluene	ND	6.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.6	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.6	ug/kg	
79-01-6	Trichloroethene	ND	2.6	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB8 (0-4')		
Lab Sample ID:	MC42297-17	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.6	ug/kg	
1330-20-7	Xylene (total)	ND	2.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	107%		65-141%
2037-26-5	Toluene-D8	99%		65-129%
460-00-4	4-Bromofluorobenzene	120%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB8 (0-4')		
Lab Sample ID:	MC42297-17	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07556.D	5	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2	W24553.D	50	10/28/15	NE	10/21/15	OP45098	MSW1028

	Initial Weight	Final Volume
Run #1	20.5 g	1.0 ml
Run #2	20.5 g	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	1300	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	2700	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	2700	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	2700	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	5300	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	2700	ug/kg	
95-48-7	2-Methylphenol	ND	2700	ug/kg	
	3&4-Methylphenol	ND	2700	ug/kg	
88-75-5	2-Nitrophenol	ND	2700	ug/kg	
100-02-7	4-Nitrophenol	ND	5300	ug/kg	
87-86-5	Pentachlorophenol	ND	2700	ug/kg	
108-95-2	Phenol	ND	1300	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	2700	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	2700	ug/kg	
83-32-9	Acenaphthene	2970	530	ug/kg	
208-96-8	Acenaphthylene	2800	530	ug/kg	
120-12-7	Anthracene	11100	530	ug/kg	
56-55-3	Benzo(a)anthracene	18500	530	ug/kg	
50-32-8	Benzo(a)pyrene	16600	530	ug/kg	
205-99-2	Benzo(b)fluoranthene	13100	530	ug/kg	
191-24-2	Benzo(g,h,i)perylene	7090	530	ug/kg	
207-08-9	Benzo(k)fluoranthene	12300	530	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	1300	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	1300	ug/kg	
91-58-7	2-Chloronaphthalene	ND	1300	ug/kg	
106-47-8	4-Chloroaniline	ND	2700	ug/kg	
86-74-8	Carbazole	3840	530	ug/kg	
218-01-9	Chrysene	17000	530	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	1300	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	1300	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	1300	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	1300	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB8 (0-4')		
Lab Sample ID:	MC42297-17	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	1300	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	1300	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	1300	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	2700	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	2700	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	1300	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	679	530	ug/kg	
132-64-9	Dibenzofuran	3440	530	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	1300	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	1300	ug/kg	
84-66-2	Diethyl phthalate	ND	1300	ug/kg	
131-11-3	Dimethyl phthalate	ND	1300	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	1300	ug/kg	
206-44-0	Fluoranthene	46000 [a]	5300	ug/kg	
86-73-7	Fluorene	4240	530	ug/kg	
118-74-1	Hexachlorobenzene	ND	1300	ug/kg	
87-68-3	Hexachlorobutadiene	ND	1300	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	2700	ug/kg	
67-72-1	Hexachloroethane	ND	1300	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	6320	530	ug/kg	
78-59-1	Isophorone	ND	1300	ug/kg	
91-57-6	2-Methylnaphthalene	1690	530	ug/kg	
88-74-4	2-Nitroaniline	ND	2700	ug/kg	
99-09-2	3-Nitroaniline	ND	2700	ug/kg	
100-01-6	4-Nitroaniline	ND	2700	ug/kg	
91-20-3	Naphthalene	3230	530	ug/kg	
98-95-3	Nitrobenzene	ND	1300	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	1300	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	1300	ug/kg	
85-01-8	Phenanthrene	43400 [a]	5300	ug/kg	
129-00-0	Pyrene	41800	530	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	1300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	75%	79%	24-110%
4165-62-2	Phenol-d5	80%	92%	30-114%
118-79-6	2,4,6-Tribromophenol	183% [b]	80%	20-139%
4165-60-0	Nitrobenzene-d5	85%	84%	27-112%
321-60-8	2-Fluorobiphenyl	90%	95%	35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB8 (0-4')		
Lab Sample ID:	MC42297-17	**Date Sampled:**	10/15/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	91.8
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	106%	110%	48-136%

(a) Result is from Run# 2
(b) Outside control limits due to possible matrix interference.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB8 (0-4')
Lab Sample ID: MC42297-17 **Date Sampled:** 10/15/15
Matrix: SO - Soil **Date Received:** 10/20/15
Method: SW846 8082A SW846 3546 **Percent Solids:** 91.8
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	BK52590.D	1	10/27/15	NK	10/21/15	OP45099	GBK1645
Run #2							

	Initial Weight	Final Volume
Run #1	15.8 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	35	ug/kg	
11104-28-2	Aroclor 1221	ND	35	ug/kg	
11141-16-5	Aroclor 1232	ND	35	ug/kg	
53469-21-9	Aroclor 1242	ND	35	ug/kg	
12672-29-6	Aroclor 1248	ND	35	ug/kg	
11097-69-1	Aroclor 1254	ND	35	ug/kg	
11096-82-5	Aroclor 1260	ND	35	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	98%		35-136%
877-09-8	Tetrachloro-m-xylene	85%		35-136%
2051-24-3	Decachlorobiphenyl	102%		24-171%
2051-24-3	Decachlorobiphenyl	100%		24-171%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB8 (0-4')
Lab Sample ID: MC42297-17
Matrix: SO - Soil
Date Sampled: 10/15/15
Date Received: 10/20/15
Percent Solids: 91.8
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	19200	17	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.86	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	5.4	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	207	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	2.7	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	< 0.35	0.35	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	104000	4300	mg/kg	10	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	9.9	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	< 4.3	4.3	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	8.1	2.2	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	12200	8.6	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Lead	52.1	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	10900	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	1820	13	mg/kg	10	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Mercury	0.045	0.035	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	4.9	3.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	1230	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	1.9	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.43	0.43	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	525	430	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.86	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	12.7	0.86	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	48.4	1.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB12 (0-4')		
Lab Sample ID:	MC42297-18	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	92.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	V43264.D	1	10/22/15	JT	n/a	n/a	MSV1570
Run #2							

	Initial Weight	Final Volume
Run #1	5.03 g	5.0 ml
Run #2		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	11	ug/kg	
71-43-2	Benzene	ND	0.54	ug/kg	
75-27-4	Bromodichloromethane	ND	2.2	ug/kg	
75-25-2	Bromoform	ND	2.2	ug/kg	
74-83-9	Bromomethane	ND	2.2	ug/kg	
78-93-3	2-Butanone (MEK)	ND	11	ug/kg	
75-15-0	Carbon disulfide	ND	5.4	ug/kg	
56-23-5	Carbon tetrachloride	ND	2.2	ug/kg	
108-90-7	Chlorobenzene	ND	2.2	ug/kg	
75-00-3	Chloroethane	ND	5.4	ug/kg	
67-66-3	Chloroform	ND	2.2	ug/kg	
74-87-3	Chloromethane	ND	5.4	ug/kg	
124-48-1	Dibromochloromethane	ND	2.2	ug/kg	
75-34-3	1,1-Dichloroethane	ND	2.2	ug/kg	
107-06-2	1,2-Dichloroethane	ND	2.2	ug/kg	
75-35-4	1,1-Dichloroethene	ND	2.2	ug/kg	
156-59-2	cis-1,2-Dichloroethene	ND	2.2	ug/kg	
156-60-5	trans-1,2-Dichloroethene	ND	2.2	ug/kg	
78-87-5	1,2-Dichloropropane	ND	2.2	ug/kg	
10061-01-5	cis-1,3-Dichloropropene	ND	2.2	ug/kg	
10061-02-6	trans-1,3-Dichloropropene	ND	2.2	ug/kg	
100-41-4	Ethylbenzene	ND	2.2	ug/kg	
591-78-6	2-Hexanone	ND	11	ug/kg	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.4	ug/kg	
75-09-2	Methylene chloride	3.8	2.2	ug/kg	B
100-42-5	Styrene	ND	5.4	ug/kg	
79-34-5	1,1,2,2-Tetrachloroethane	ND	2.2	ug/kg	
127-18-4	Tetrachloroethene	ND	2.2	ug/kg	
108-88-3	Toluene	ND	5.4	ug/kg	
71-55-6	1,1,1-Trichloroethane	ND	2.2	ug/kg	
79-00-5	1,1,2-Trichloroethane	ND	2.2	ug/kg	
79-01-6	Trichloroethene	ND	2.2	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB12 (0-4')		
Lab Sample ID:	MC42297-18	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	92.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	2.2	ug/kg	
1330-20-7	Xylene (total)	ND	2.2	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		65-141%
2037-26-5	Toluene-D8	100%		65-129%
460-00-4	4-Bromofluorobenzene	105%		63-137%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB12 (0-4')
Lab Sample ID: MC42297-18
Matrix: SO - Soil
Method: SW846 8270D SW846 3546
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: 92.1

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	X07557.D	1	10/26/15	MR	10/21/15	OP45098	MSX234
Run #2							

	Initial Weight	Final Volume
Run #1	20.2 g	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	270	ug/kg	
59-50-7	4-Chloro-3-methyl phenol	ND	540	ug/kg	
120-83-2	2,4-Dichlorophenol	ND	540	ug/kg	
105-67-9	2,4-Dimethylphenol	ND	540	ug/kg	
51-28-5	2,4-Dinitrophenol	ND	1100	ug/kg	
534-52-1	4,6-Dinitro-o-cresol	ND	540	ug/kg	
95-48-7	2-Methylphenol	ND	540	ug/kg	
	3&4-Methylphenol	ND	540	ug/kg	
88-75-5	2-Nitrophenol	ND	540	ug/kg	
100-02-7	4-Nitrophenol	ND	1100	ug/kg	
87-86-5	Pentachlorophenol	ND	540	ug/kg	
108-95-2	Phenol	ND	270	ug/kg	
95-95-4	2,4,5-Trichlorophenol	ND	540	ug/kg	
88-06-2	2,4,6-Trichlorophenol	ND	540	ug/kg	
83-32-9	Acenaphthene	ND	110	ug/kg	
208-96-8	Acenaphthylene	ND	110	ug/kg	
120-12-7	Anthracene	121	110	ug/kg	
56-55-3	Benzo(a)anthracene	403	110	ug/kg	
50-32-8	Benzo(a)pyrene	389	110	ug/kg	
205-99-2	Benzo(b)fluoranthene	324	110	ug/kg	
191-24-2	Benzo(g,h,i)perylene	207	110	ug/kg	
207-08-9	Benzo(k)fluoranthene	303	110	ug/kg	
101-55-3	4-Bromophenyl phenyl ether	ND	270	ug/kg	
85-68-7	Butyl benzyl phthalate	ND	270	ug/kg	
91-58-7	2-Chloronaphthalene	ND	270	ug/kg	
106-47-8	4-Chloroaniline	ND	540	ug/kg	
86-74-8	Carbazole	ND	110	ug/kg	
218-01-9	Chrysene	393	110	ug/kg	
111-91-1	bis(2-Chloroethoxy)methane	ND	270	ug/kg	
111-44-4	bis(2-Chloroethyl)ether	ND	270	ug/kg	
108-60-1	bis(2-Chloroisopropyl)ether	ND	270	ug/kg	
7005-72-3	4-Chlorophenyl phenyl ether	ND	270	ug/kg	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB12 (0-4')		
Lab Sample ID:	MC42297-18	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	92.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	270	ug/kg	
541-73-1	1,3-Dichlorobenzene	ND	270	ug/kg	
106-46-7	1,4-Dichlorobenzene	ND	270	ug/kg	
121-14-2	2,4-Dinitrotoluene	ND	540	ug/kg	
606-20-2	2,6-Dinitrotoluene	ND	540	ug/kg	
91-94-1	3,3'-Dichlorobenzidine	ND	270	ug/kg	
53-70-3	Dibenzo(a,h)anthracene	ND	110	ug/kg	
132-64-9	Dibenzofuran	ND	110	ug/kg	
84-74-2	Di-n-butyl phthalate	ND	270	ug/kg	
117-84-0	Di-n-octyl phthalate	ND	270	ug/kg	
84-66-2	Diethyl phthalate	ND	270	ug/kg	
131-11-3	Dimethyl phthalate	ND	270	ug/kg	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	270	ug/kg	
206-44-0	Fluoranthene	723	110	ug/kg	
86-73-7	Fluorene	ND	110	ug/kg	
118-74-1	Hexachlorobenzene	ND	270	ug/kg	
87-68-3	Hexachlorobutadiene	ND	270	ug/kg	
77-47-4	Hexachlorocyclopentadiene	ND	540	ug/kg	
67-72-1	Hexachloroethane	ND	270	ug/kg	
193-39-5	Indeno(1,2,3-cd)pyrene	211	110	ug/kg	
78-59-1	Isophorone	ND	270	ug/kg	
91-57-6	2-Methylnaphthalene	ND	110	ug/kg	
88-74-4	2-Nitroaniline	ND	540	ug/kg	
99-09-2	3-Nitroaniline	ND	540	ug/kg	
100-01-6	4-Nitroaniline	ND	540	ug/kg	
91-20-3	Naphthalene	ND	110	ug/kg	
98-95-3	Nitrobenzene	ND	270	ug/kg	
621-64-7	N-Nitroso-di-n-propylamine	ND	270	ug/kg	
86-30-6	N-Nitrosodiphenylamine	ND	270	ug/kg	
85-01-8	Phenanthrene	452	110	ug/kg	
129-00-0	Pyrene	706	110	ug/kg	
120-82-1	1,2,4-Trichlorobenzene	ND	270	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		24-110%
4165-62-2	Phenol-d5	59%		30-114%
118-79-6	2,4,6-Tribromophenol	89%		20-139%
4165-60-0	Nitrobenzene-d5	65%		27-112%
321-60-8	2-Fluorobiphenyl	71%		35-115%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB12 (0-4')		
Lab Sample ID:	MC42297-18	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3546	**Percent Solids:**	92.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	99%		48-136%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB12 (0-4')		
Lab Sample ID:	MC42297-18	**Date Sampled:**	10/16/15
Matrix:	SO - Soil	**Date Received:**	10/20/15
		Percent Solids:	92.1
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	3770	15	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Antimony	< 0.74	0.74	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Arsenic	2.5	0.74	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Barium	19.0	3.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Beryllium	< 0.30	0.30	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cadmium	< 0.30	0.30	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Calcium	39200	3700	mg/kg	10	10/23/15	10/27/15	EAL	SW846 6010C [3]	SW846 3050B [4]
Chromium	6.9	0.74	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Cobalt	< 3.7	3.7	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Copper	4.9	1.9	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Iron	12800	7.4	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Lead	99.4	0.74	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Magnesium	4030	370	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Manganese	478	1.1	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Mercury	< 0.033	0.033	mg/kg	1	10/26/15	10/26/15	EC	SW846 7471B [2]	SW846 7471B [5]
Nickel	3.5	3.0	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Potassium	533	370	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Selenium	< 0.74	0.74	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Silver	< 0.37	0.37	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Sodium	< 370	370	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Thallium	< 0.74	0.74	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Vanadium	16.0	0.74	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]
Zinc	18.3	1.5	mg/kg	1	10/23/15	10/24/15	EC	SW846 6010C [1]	SW846 3050B [4]

(1) Instrument QC Batch: MA18598
(2) Instrument QC Batch: MA18601
(3) Instrument QC Batch: MA18603
(4) Prep QC Batch: MP25349
(5) Prep QC Batch: MP25360

RL = Reporting Limit

Report of Analysis

Client Sample ID:	MW1		
Lab Sample ID:	MC42297-19	**Date Sampled:**	10/16/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U33329.D	1	10/28/15	AD	n/a	n/a	MSU1362
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1		
Lab Sample ID:	MC42297-19	**Date Sampled:**	10/16/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	1.5	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	97%		79-127%
2037-26-5	Toluene-D8	104%		80-116%
460-00-4	4-Bromofluorobenzene	102%		77-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW1
Lab Sample ID: MC42297-19
Matrix: AQ - Ground Water
Method: SW846 8270D SW846 3510C
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24461.D	1	10/23/15	NE	10/21/15	OP45111	MSW1025
Run #2							

	Initial Volume	Final Volume
Run #1	930 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.4	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	22	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	ND	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	22	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	ND	5.4	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
83-32-9	Acenaphthene	ND	2.2	ug/l	
208-96-8	Acenaphthylene	ND	2.2	ug/l	
120-12-7	Anthracene	ND	2.2	ug/l	
56-55-3	Benzo(a)anthracene	ND	2.2	ug/l	
50-32-8	Benzo(a)pyrene	ND	2.2	ug/l	
205-99-2	Benzo(b)fluoranthene	ND	2.2	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.2	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.2	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.4	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.4	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.4	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
86-74-8	Carbazole	ND	2.2	ug/l	
218-01-9	Chrysene	ND	2.2	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.4	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.4	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.4	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.4	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1		
Lab Sample ID:	MC42297-19	**Date Sampled:**	10/16/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.4	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.4	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.4	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.4	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.2	ug/l	
132-64-9	Dibenzofuran	ND	2.2	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.4	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.4	ug/l	
84-66-2	Diethyl phthalate	ND	5.4	ug/l	
131-11-3	Dimethyl phthalate	ND	5.4	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.2	ug/l	
206-44-0	Fluoranthene	ND	2.2	ug/l	
86-73-7	Fluorene	ND	2.2	ug/l	
118-74-1	Hexachlorobenzene	ND	5.4	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.4	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.4	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.2	ug/l	
78-59-1	Isophorone	ND	5.4	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.2	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
91-20-3	Naphthalene	ND	2.2	ug/l	
98-95-3	Nitrobenzene	ND	5.4	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.4	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.4	ug/l	
85-01-8	Phenanthrene	ND	2.2	ug/l	
129-00-0	Pyrene	ND	2.2	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.4	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-80%
4165-62-2	Phenol-d5	36%		10-72%
118-79-6	2,4,6-Tribromophenol	121%		42-134%
4165-60-0	Nitrobenzene-d5	93%		25-117%
321-60-8	2-Fluorobiphenyl	85%		24-112%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	MW1		
Lab Sample ID:	MC42297-19	**Date Sampled:**	10/16/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	124%		48-133%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: MW1
Lab Sample ID: MC42297-19
Matrix: AQ - Ground Water
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	777	200	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Antimony	< 6.0	6.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Arsenic	18.5	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Barium	107	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Beryllium	< 4.0	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Calcium	185000	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Chromium	< 10	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cobalt	< 50	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Copper	< 25	25	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Iron	66200	100	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Lead	5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Magnesium	47300	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Manganese	609	15	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Mercury	< 0.20	0.20	ug/l	1	10/27/15	10/27/15	EC	SW846 7470A [2]	SW846 7470A [4]
Nickel	< 40	40	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Potassium	6450	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Sodium	14500	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Thallium	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Vanadium	< 10	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Zinc	< 20	20	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18599
(2) Instrument QC Batch: MA18602
(3) Prep QC Batch: MP25350
(4) Prep QC Batch: MP25365

RL = Reporting Limit

Report of Analysis

Client Sample ID:	SB5		
Lab Sample ID:	MC42297-20	**Date Sampled:**	10/15/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U33330.D	1	10/28/15	AD	n/a	n/a	MSU1362
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB5		
Lab Sample ID:	MC42297-20	**Date Sampled:**	10/15/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	103%		79-127%
2037-26-5	Toluene-D8	105%		80-116%
460-00-4	4-Bromofluorobenzene	99%		77-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB5
Lab Sample ID: MC42297-20
Matrix: AQ - Ground Water
Method: SW846 8270D SW846 3510C
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/15/15
Date Received: 10/20/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24462.D	1	10/23/15	NE	10/21/15	OP45111	MSW1025
Run #2	W24530.D	1	10/27/15	NE	10/21/15	OP45111	MSW1027

	Initial Volume	Final Volume
Run #1	990 ml	1.0 ml
Run #2	990 ml	1.0 ml

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
83-32-9	Acenaphthene	ND	2.0	ug/l	
208-96-8	Acenaphthylene	ND	2.0	ug/l	
120-12-7	Anthracene	ND	2.0	ug/l	
56-55-3	Benzo(a)anthracene	2.3	2.0	ug/l	
50-32-8	Benzo(a)pyrene	2.3	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	2.1	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	ND	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	ND	2.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
86-74-8	Carbazole	ND	2.0	ug/l	
218-01-9	Chrysene	2.3	2.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB5		
Lab Sample ID:	MC42297-20	**Date Sampled:**	10/15/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	ND	2.0	ug/l	
132-64-9	Dibenzofuran	ND	2.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
206-44-0	Fluoranthene	4.3	2.0	ug/l	
86-73-7	Fluorene	ND	2.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
91-20-3	Naphthalene	ND	2.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	ug/l	
85-01-8	Phenanthrene	2.1	2.0	ug/l	
129-00-0	Pyrene	4.0	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	55%	52%	10-80%
4165-62-2	Phenol-d5	38%	37%	10-72%
118-79-6	2,4,6-Tribromophenol	137% [a]	127%	42-134%
4165-60-0	Nitrobenzene-d5	106%	96%	25-117%
321-60-8	2-Fluorobiphenyl	97%	97%	24-112%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB5		
Lab Sample ID:	MC42297-20	**Date Sampled:**	10/15/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	131%	136% [a]	48-133%

(a) Outside control limits due to possible matrix interference. Sample results confirmed by reanalysis.

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB5
Lab Sample ID: MC42297-20
Matrix: AQ - Ground Water
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/15/15
Date Received: 10/20/15
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	53300	200	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Antimony	< 6.0	6.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Arsenic	12.2	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Barium	403	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Beryllium	< 4.0	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cadmium	< 4.0	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Calcium	244000	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Chromium	65.6	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cobalt	< 50	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Copper	59.9	25	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Iron	61300	100	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Lead	80.3	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Magnesium	112000	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Manganese	5460	15	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Mercury	0.23	0.20	ug/l	1	10/27/15	10/27/15	EC	SW846 7470A [2]	SW846 7470A [4]
Nickel	69.7	40	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Potassium	8470	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Sodium	33500	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Thallium	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Vanadium	88.0	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Zinc	273	20	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18599
(2) Instrument QC Batch: MA18602
(3) Prep QC Batch: MP25350
(4) Prep QC Batch: MP25365

RL = Reporting Limit

Report of Analysis

Client Sample ID: SB9
Lab Sample ID: MC42297-21 **Date Sampled:** 10/15/15
Matrix: AQ - Ground Water **Date Received:** 10/20/15
Method: SW846 8260C **Percent Solids:** n/a
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U33331.D	1	10/28/15	AD	n/a	n/a	MSU1362
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB9		
Lab Sample ID:	MC42297-21	**Date Sampled:**	10/15/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	1.3	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	109%		79-127%
2037-26-5	Toluene-D8	93%		80-116%
460-00-4	4-Bromofluorobenzene	91%		77-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB9
Lab Sample ID: MC42297-21 **Date Sampled:** 10/15/15
Matrix: AQ - Ground Water **Date Received:** 10/20/15
Method: SW846 8270D SW846 3510C **Percent Solids:** n/a
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24463.D	1	10/23/15	NE	10/21/15	OP45111	MSW1025
Run #2							

	Initial Volume	Final Volume
Run #1	950 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.3	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	11	ug/l	
120-83-2	2,4-Dichlorophenol	ND	11	ug/l	
105-67-9	2,4-Dimethylphenol	ND	11	ug/l	
51-28-5	2,4-Dinitrophenol	ND	21	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	11	ug/l	
95-48-7	2-Methylphenol	ND	11	ug/l	
	3&4-Methylphenol	12.0	11	ug/l	
88-75-5	2-Nitrophenol	ND	11	ug/l	
100-02-7	4-Nitrophenol	ND	21	ug/l	
87-86-5	Pentachlorophenol	ND	11	ug/l	
108-95-2	Phenol	37.7	5.3	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	11	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	11	ug/l	
83-32-9	Acenaphthene	3.9	2.1	ug/l	
208-96-8	Acenaphthylene	6.2	2.1	ug/l	
120-12-7	Anthracene	11.9	2.1	ug/l	
56-55-3	Benzo(a)anthracene	40.1	2.1	ug/l	
50-32-8	Benzo(a)pyrene	46.1	2.1	ug/l	
205-99-2	Benzo(b)fluoranthene	37.2	2.1	ug/l	
191-24-2	Benzo(g,h,i)perylene	27.3	2.1	ug/l	
207-08-9	Benzo(k)fluoranthene	33.5	2.1	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.3	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.3	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.3	ug/l	
106-47-8	4-Chloroaniline	ND	11	ug/l	
86-74-8	Carbazole	2.7	2.1	ug/l	
218-01-9	Chrysene	40.1	2.1	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.3	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.3	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.3	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.3	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB9		
Lab Sample ID:	MC42297-21	**Date Sampled:**	10/15/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.3	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.3	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.3	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	11	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	11	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.3	ug/l	
53-70-3	Dibenzo(a,h)anthracene	8.8	2.1	ug/l	
132-64-9	Dibenzofuran	2.6	2.1	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.3	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.3	ug/l	
84-66-2	Diethyl phthalate	ND	5.3	ug/l	
131-11-3	Dimethyl phthalate	ND	5.3	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.1	ug/l	
206-44-0	Fluoranthene	77.0	2.1	ug/l	
86-73-7	Fluorene	4.2	2.1	ug/l	
118-74-1	Hexachlorobenzene	ND	5.3	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.3	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	11	ug/l	
67-72-1	Hexachloroethane	ND	5.3	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	24.6	2.1	ug/l	
78-59-1	Isophorone	ND	5.3	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.1	ug/l	
88-74-4	2-Nitroaniline	ND	11	ug/l	
99-09-2	3-Nitroaniline	ND	11	ug/l	
100-01-6	4-Nitroaniline	ND	11	ug/l	
91-20-3	Naphthalene	2.2	2.1	ug/l	
98-95-3	Nitrobenzene	ND	5.3	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.3	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.3	ug/l	
85-01-8	Phenanthrene	33.8	2.1	ug/l	
129-00-0	Pyrene	82.9	2.1	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.3	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	40%		10-80%
4165-62-2	Phenol-d5	25%		10-72%
118-79-6	2,4,6-Tribromophenol	115%		42-134%
4165-60-0	Nitrobenzene-d5	107%		25-117%
321-60-8	2-Fluorobiphenyl	90%		24-112%

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RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB9		
Lab Sample ID:	MC42297-21	**Date Sampled:**	10/15/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	121%		48-133%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Accutest Laboratories

Report of Analysis

Client Sample ID: SB9
Lab Sample ID: MC42297-21
Matrix: AQ - Ground Water
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/15/15
Date Received: 10/20/15
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	80300	200	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Antimony	< 6.0	6.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Arsenic	84.2	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Barium	819	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Beryllium	< 4.0	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cadmium	7.4	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Calcium	1050000	25000	ug/l	5	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Chromium	190	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cobalt	58.5	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Copper	198	25	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Iron	201000	100	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Lead	688	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Magnesium	76900	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Manganese	9920	15	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Mercury	1.4	0.20	ug/l	1	10/27/15	10/27/15	EC	SW846 7470A [2]	SW846 7470A [4]
Nickel	114	40	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Potassium	11800	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Sodium	18600	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Thallium	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Vanadium	169	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Zinc	2680	20	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18599
(2) Instrument QC Batch: MA18602
(3) Prep QC Batch: MP25350
(4) Prep QC Batch: MP25365

RL = Reporting Limit

Report of Analysis

Client Sample ID: SB15
Lab Sample ID: MC42297-22
Matrix: AQ - Ground Water
Method: SW846 8260C
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: n/a

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	U33332.D	1	10/28/15	AD	n/a	n/a	MSU1362
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
67-64-1	Acetone	ND	10	ug/l	
71-43-2	Benzene	ND	0.50	ug/l	
75-27-4	Bromodichloromethane	ND	1.0	ug/l	
75-25-2	Bromoform	ND	1.0	ug/l	
74-83-9	Bromomethane	ND	2.0	ug/l	
78-93-3	2-Butanone (MEK)	ND	10	ug/l	
75-15-0	Carbon disulfide	ND	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	1.0	ug/l	
108-90-7	Chlorobenzene	ND	1.0	ug/l	
75-00-3	Chloroethane	ND	2.0	ug/l	
67-66-3	Chloroform	ND	1.0	ug/l	
74-87-3	Chloromethane	ND	2.0	ug/l	
124-48-1	Dibromochloromethane	ND	1.0	ug/l	
75-34-3	1,1-Dichloroethane	ND	1.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	1.0	ug/l	
75-35-4	1,1-Dichloroethene	ND	1.0	ug/l	
156-59-2	cis-1,2-Dichloroethene	ND	1.0	ug/l	
156-60-5	trans-1,2-Dichloroethene	ND	1.0	ug/l	
78-87-5	1,2-Dichloropropane	ND	2.0	ug/l	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	ug/l	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	ug/l	
100-41-4	Ethylbenzene	ND	1.0	ug/l	
591-78-6	2-Hexanone	ND	10	ug/l	
108-10-1	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/l	
75-09-2	Methylene chloride	ND	2.0	ug/l	
100-42-5	Styrene	ND	5.0	ug/l	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	ug/l	
127-18-4	Tetrachloroethene	ND	1.0	ug/l	
108-88-3	Toluene	ND	1.0	ug/l	
71-55-6	1,1,1-Trichloroethane	ND	1.0	ug/l	
79-00-5	1,1,2-Trichloroethane	ND	1.0	ug/l	
79-01-6	Trichloroethene	ND	1.0	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15		
Lab Sample ID:	MC42297-22	**Date Sampled:**	10/16/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8260C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

VOA TCL List

CAS No.	Compound	Result	RL	Units	Q
75-01-4	Vinyl chloride	ND	1.0	ug/l	
1330-20-7	Xylene (total)	ND	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	104%		79-127%
2037-26-5	Toluene-D8	102%		80-116%
460-00-4	4-Bromofluorobenzene	95%		77-124%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB15
Lab Sample ID: MC42297-22 **Date Sampled:** 10/16/15
Matrix: AQ - Ground Water **Date Received:** 10/20/15
Method: SW846 8270D SW846 3510C **Percent Solids:** n/a
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W24464.D	1	10/23/15	NE	10/21/15	OP45111	MSW1025
Run #2							

	Initial Volume	Final Volume
Run #1	980 ml	1.0 ml
Run #2		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-57-8	2-Chlorophenol	ND	5.1	ug/l	
59-50-7	4-Chloro-3-methyl phenol	ND	10	ug/l	
120-83-2	2,4-Dichlorophenol	ND	10	ug/l	
105-67-9	2,4-Dimethylphenol	ND	10	ug/l	
51-28-5	2,4-Dinitrophenol	ND	20	ug/l	
534-52-1	4,6-Dinitro-o-cresol	ND	10	ug/l	
95-48-7	2-Methylphenol	ND	10	ug/l	
	3&4-Methylphenol	ND	10	ug/l	
88-75-5	2-Nitrophenol	ND	10	ug/l	
100-02-7	4-Nitrophenol	ND	20	ug/l	
87-86-5	Pentachlorophenol	ND	10	ug/l	
108-95-2	Phenol	ND	5.1	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	10	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	10	ug/l	
83-32-9	Acenaphthene	2.8	2.0	ug/l	
208-96-8	Acenaphthylene	ND	2.0	ug/l	
120-12-7	Anthracene	9.7	2.0	ug/l	
56-55-3	Benzo(a)anthracene	21.4	2.0	ug/l	
50-32-8	Benzo(a)pyrene	18.6	2.0	ug/l	
205-99-2	Benzo(b)fluoranthene	17.0	2.0	ug/l	
191-24-2	Benzo(g,h,i)perylene	10.5	2.0	ug/l	
207-08-9	Benzo(k)fluoranthene	14.4	2.0	ug/l	
101-55-3	4-Bromophenyl phenyl ether	ND	5.1	ug/l	
85-68-7	Butyl benzyl phthalate	ND	5.1	ug/l	
91-58-7	2-Chloronaphthalene	ND	5.1	ug/l	
106-47-8	4-Chloroaniline	ND	10	ug/l	
86-74-8	Carbazole	3.7	2.0	ug/l	
218-01-9	Chrysene	21.0	2.0	ug/l	
111-91-1	bis(2-Chloroethoxy)methane	ND	5.1	ug/l	
111-44-4	bis(2-Chloroethyl)ether	ND	5.1	ug/l	
108-60-1	bis(2-Chloroisopropyl)ether	ND	5.1	ug/l	
7005-72-3	4-Chlorophenyl phenyl ether	ND	5.1	ug/l	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15		
Lab Sample ID:	MC42297-22	**Date Sampled:**	10/16/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Compound	Result	RL	Units	Q
95-50-1	1,2-Dichlorobenzene	ND	5.1	ug/l	
541-73-1	1,3-Dichlorobenzene	ND	5.1	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	5.1	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	10	ug/l	
606-20-2	2,6-Dinitrotoluene	ND	10	ug/l	
91-94-1	3,3'-Dichlorobenzidine	ND	5.1	ug/l	
53-70-3	Dibenzo(a,h)anthracene	4.0	2.0	ug/l	
132-64-9	Dibenzofuran	2.2	2.0	ug/l	
84-74-2	Di-n-butyl phthalate	ND	5.1	ug/l	
117-84-0	Di-n-octyl phthalate	ND	5.1	ug/l	
84-66-2	Diethyl phthalate	ND	5.1	ug/l	
131-11-3	Dimethyl phthalate	ND	5.1	ug/l	
117-81-7	bis(2-Ethylhexyl)phthalate	ND	2.0	ug/l	
206-44-0	Fluoranthene	41.5	2.0	ug/l	
86-73-7	Fluorene	4.0	2.0	ug/l	
118-74-1	Hexachlorobenzene	ND	5.1	ug/l	
87-68-3	Hexachlorobutadiene	ND	5.1	ug/l	
77-47-4	Hexachlorocyclopentadiene	ND	10	ug/l	
67-72-1	Hexachloroethane	ND	5.1	ug/l	
193-39-5	Indeno(1,2,3-cd)pyrene	9.7	2.0	ug/l	
78-59-1	Isophorone	ND	5.1	ug/l	
91-57-6	2-Methylnaphthalene	ND	2.0	ug/l	
88-74-4	2-Nitroaniline	ND	10	ug/l	
99-09-2	3-Nitroaniline	ND	10	ug/l	
100-01-6	4-Nitroaniline	ND	10	ug/l	
91-20-3	Naphthalene	2.4	2.0	ug/l	
98-95-3	Nitrobenzene	ND	5.1	ug/l	
621-64-7	N-Nitroso-di-n-propylamine	ND	5.1	ug/l	
86-30-6	N-Nitrosodiphenylamine	ND	5.1	ug/l	
85-01-8	Phenanthrene	35.5	2.0	ug/l	
129-00-0	Pyrene	37.8	2.0	ug/l	
120-82-1	1,2,4-Trichlorobenzene	ND	5.1	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	52%		10-80%
4165-62-2	Phenol-d5	36%		10-72%
118-79-6	2,4,6-Tribromophenol	128%		42-134%
4165-60-0	Nitrobenzene-d5	98%		25-117%
321-60-8	2-Fluorobiphenyl	84%		24-112%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	SB15		
Lab Sample ID:	MC42297-22	**Date Sampled:**	10/16/15
Matrix:	AQ - Ground Water	**Date Received:**	10/20/15
Method:	SW846 8270D SW846 3510C	**Percent Solids:**	n/a
Project:	Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY		

ABN TCL List

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1718-51-0	Terphenyl-d14	128%		48-133%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: SB15
Lab Sample ID: MC42297-22
Matrix: AQ - Ground Water
Project: Donation Parcel Investigation, 1801 Elmwood Avenue, Buffalo, NY

Date Sampled: 10/16/15
Date Received: 10/20/15
Percent Solids: n/a

Total Metals Analysis

Analyte	Result	RL	Units	DF	Prep	Analyzed	By	Method	Prep Method
Aluminum	129000	200	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Antimony	< 6.0	6.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Arsenic	130	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Barium	1220	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Beryllium	4.9	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cadmium	5.8	4.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Calcium	899000	10000	ug/l	2	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Chromium	187	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Cobalt	63.5	50	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Copper	283	25	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Iron	216000	100	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Lead	956	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Magnesium	145000	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Manganese	8490	15	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Mercury	1.4	0.20	ug/l	1	10/27/15	10/27/15	EC	SW846 7470A [2]	SW846 7470A [4]
Nickel	122	40	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Potassium	21200	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Selenium	< 10	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Silver	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Sodium	11500	5000	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Thallium	< 5.0	5.0	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Vanadium	256	10	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]
Zinc	1050	20	ug/l	1	10/23/15	10/26/15	EC	SW846 6010C [1]	SW846 3010A [3]

(1) Instrument QC Batch: MA18599
(2) Instrument QC Batch: MA18602
(3) Prep QC Batch: MP25350
(4) Prep QC Batch: MP25365

RL = Reporting Limit

Misc. Forms

Custody Documents and Other Forms

Includes the following where applicable:

- Chain of Custody

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 1 OF 2

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # MC42297

Client / Reporting Information

Company Name: Hazard Evaluations Inc
Street Address: 3752 N. Buffalo Road
City: Orchard Park State: NY Zip: 14127
Project Contact: Michele Wittman E-mail: mwittman@hazardevaluations.com
Phone #: 716-667-3130 Fax #:
Sampler(s) Name(s): Eric Bertzold Phone #: 716-667-3130

Project Information

Project Name: Donation Parcel Phase II
Street: Elmwood Ave.
City: Buffalo, NY
Project#: e1459
Client PO#:
Project Manager: Michele Wittman

Billing Information (If different from Report to)

Company Name:
Street Address:
City State Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	Number of preserved Bottles: HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOC via Method 8260 TCL	SVOC via Method 8270 TCL	PCBs via Method 8082	Metals - TAL	Herbicides via Method 8151	LAB USE ONLY
-1	TP4 (9-12')		10/13/15	11:45am	EB	SO	2					2					X	X	X	X		
-2	SB2 (4-8')		10/15/15	9:45am	EB		2					2					X	X	X	X		
-3	TP4 (4-8')		10/13/15	11:45am	EB		2					2					X	X		X		
-4	SB1 (0-4')		10/15/15	8:50am	EB		2					2					X	X		X	X	
-5	TP11 (0-4')		10/14/15	9:10am	EB		1					1									X	120
-6	TP5 (0-4')		10/13/15	1:20pm	EB		3					3					X	X		X	X	
-7	SB15 (0-4')		10/16/15	12:00pm	EB		2					2					X	X	X	X		
-8	TP10 (4-8')		10/14/15	8:45am	EB		2					2					X	X		X		
-9	TP7 (0-4')		10/13/15	2:40pm	EB		2					2					X	X		X		
-10	TP14 (0-3')		10/14/15	1:10pm	EB		2					2					X	X		X		
-11	TP16 (4-8')		10/14/15	2:30pm	EB		2					2					X	X		X		
-12	TP18 (0-4')		10/14/15	3:30pm	EB	V	2					2					X	X		X		

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
SW - Surface Water
SO - Soil
SL- Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [x] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [x] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

ACCUTEST SYRACUSE-SC

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Eric Bertzold	10/19/15 1330				2
3	FX	10-20-15 9:15	Brenda			4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not Intact	Preserved where applicable	On Ice	Cooler Temp. 1.0C 0.2C

MC42297: Chain of Custody
Page 1 of 3

ACCUTEST LABORATORIES

CHAIN OF CUSTODY

Accutest Laboratories of New England
495 Technology Center West, Building One
TEL. 508-481-6200 FAX: 508-481-7753
www.accutest.com

PAGE 2 OF 2

FED-EX Tracking # | Bottle Order Control #
Accutest Quote # | Accutest Job # MC42297

Client / Reporting Information

Company Name: Hazard Evaluations Inc.
Street Address:
City: See Page State: Zip:
Project Contact: E-mail:
Phone #: 1 Fax #:
Sampler(s) Name(s): Phone #:

Project Information

Project Name:
Street: SAME
City:
Project#:
Client PO#:
Project Manager:

Billing Information (If different from Report to)

Company Name:
Street Address:
City: State: Zip:
Attention: PO#:

Requested Analysis (see TEST CODE sheet)

Accutest Sample #	Field ID / Point of Collection	MEOH/DI Vial #	Collection Date	Collection Time	Sampled by	Matrix	# of bottles	HCl	NaOH	HNO3	H2SO4	NONE	DI Water	MEOH	ENCORE	Bisulfate	VOC via Method 8260 TCL	SVOC via Method 8270 TCL	PCBs via Method 8082	Metals TAL	Herbicides via Method 8151	LAB USE ONLY
-13	SB4 (0-4')		10/15/15	11:15am	EB	SO	2					2					X	X		X		
-14	TP17 (0-4')		10/14/15	3:15pm	EB		2					2					X	X	X	X		
-15	SB10 (0-4')		10/16/15	8:45am	EB		2					2					X	X		X		
-16	SB14 (0-4')		10/16/15	10:30am	EB		2					2					X	X		X		
-17	SB8 (0-4')		10/15/15	2:30pm	EB		2					2					X	X	X	X		
-18	SB12 (0-4')		10/16/15	10:00am	EB		2					2					X	X		X		
-19	MW1		10/16/15	3:15pm	EB	WA	4	2		1		1					X	X		X		
-20	SB5		10/15/15	4:15pm	EB	WA	4	2		1		1					X	X		X		(2)
-21	SB9		10/15/15	3:45pm	EB	WA	5	3		1		1					X	X		X		
-22	SB15		10/16/15	3:00pm	EB	WA	4	2		1		1					X	X		X		

Matrix Codes

DW - Drinking Water
GW - Ground Water
WW - Water
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SO - Soil
SL - Sludge
SED-Sediment
OI - Oil
LIQ - Other Liquid
AIR - Air
SOL - Other Solid
WP - Wipe
FB-Field Blank
EB- Equipment Blank
RB- Rinse Blank
TB-Trip Blank

Turnaround Time (Business days)

Approved By (Accutest PM): / Date:

- [ ] Std. 10 Business Days
- [x] Std. 5 Business Days (By Contract only)
- [ ] 5 Day *RUSH*
- [ ] 3 Day *EMERGENCY*
- [ ] 2 Day *EMERGENCY*
- [ ] 1 Day *EMERGENCY*

Emergency & Rush T/A data available VIA Lablink

Data Deliverable Information

- [x] Commercial "A" (Level 1)
- [ ] Commercial "B" (Level 2)
- [ ] FULLT1 (Level 3+4)
- [ ] CT RCP
- [ ] MA MCP
- [ ] NYASP Category A
- [ ] NYASP Category B
- [ ] State Forms
- [ ] EDD Format
- [ ] Other

Commercial "A" = Results Only
Commercial "B" = Results + QC Summary

Comments / Special Instructions

ACCUTEST SYRACUSE-SC

Sample Custody must be documented below each time samples change possession, including courier delivery.

	Relinquished by Sampler:	Date Time:	Received By:	Relinquished By:	Date Time:	Received By:
1	Erin Bell	10/19/15 1330	1			2
3		10-20-15	3	4		4
5	Relinquished by:	Date Time:	Received By:	Custody Seal #	Intact / Not intact	Preserved where applicable

On Ice: ☐ Cooler Temp: 1.0°C 0.2°C

MC42297: Chain of Custody
Page 2 of 3

Accutest Laboratories Sample Receipt Summary

Accutest Job Number: MC42297 **Client:** HAZARD ENV **Project:**

Date / Time Received: 10/20/2015 9:15:00 AM **Delivery Method:** **Airbill #'s:**

Cooler Temps (Initial/Adjusted): #: (0.2/0.2); #1: (1/1);

Cooler Security

	Y	or	N		Y	or	N
1. Custody Seals Present:	☑		☐	3. COC Present:	☑		☐
2. Custody Seals Intact:	☑		☐	4. Smpl Dates/Time OK	☑		☐

Cooler Temperature

	Y	or	N
1. Temp criteria achieved:	☑		☐
2. Thermometer ID:	G1;		
3. Cooler media:	Ice (Bag)		
4. No. Coolers:	1		

Quality Control Preservation

	Y	or	N	N/A
1. Trip Blank present / cooler:	☐		☑	☐
2. Trip Blank listed on COC:	☐		☑	☐
3. Samples preserved properly:	☑		☐	
4. VOCs headspace free:	☑		☐	☐

Sample Integrity - Documentation

	Y	or	N
1. Sample labels present on bottles:	☑		☐
2. Container labeling complete:	☑		☐
3. Sample container label / COC agree:	☑		☐

Sample Integrity - Condition

	Y	or	N
1. Sample recvd within HT:	☑		☐
2. All containers accounted for:	☑		☐
3. Condition of sample:	Intact		

Sample Integrity - Instructions

	Y	or	N	N/A
1. Analysis requested is clear:	☑		☐	
2. Bottles received for unspecified tests	☐		☑	
3. Sufficient volume recvd for analysis:	☑		☐	
4. Compositing instructions clear:	☐		☐	☑
5. Filtering instructions clear:	☐		☐	☑

Comments

Accutest Laboratories
V:(508) 481-6200

495 Technology Center West, Bldg One
F: (508) 481-7753

Marlborough, MA 01752
www/accutest.com

MC42297: Chain of Custody
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Analytical Testing Results – December 2016 Locations

ANALYTICAL REPORT

Lab Number:	L1642311
Client:	Hazard Evaluations, Inc. 3752 North Buffalo Road Orchard Park, NY 14127
ATTN:	Michele Wittman
Phone:	(716) 667-3130
Project Name:	BCP PH. II ESA
Project Number:	E1609
Report Date:	01/05/17

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1642311-01	SB2	WATER	MPC BUFFALO, NY	12/21/16 12:00	12/28/16
L1642311-02	SB8	WATER	MPC BUFFALO, NY	12/23/16 13:10	12/28/16
L1642311-03	SB10	WATER	MPC BUFFALO, NY	12/23/16 12:45	12/28/16
L1642311-04	SB14	WATER	MPC BUFFALO, NY	12/23/16 14:15	12/28/16
L1642311-05	SS1 (0-1')	SOIL	MPC BUFFALO, NY	12/23/16 12:30	12/28/16
L1642311-06	SS2 (0-1')	SOIL	MPC BUFFALO, NY	12/23/16 13:35	12/28/16
L1642311-07	SB1 (2-6')	SOIL	MPC BUFFALO, NY	12/21/16 10:30	12/28/16
L1642311-08	SB6 (0-4')	SOIL	MPC BUFFALO, NY	12/21/16 15:00	12/28/16
L1642311-09	SB7 (2-6')	SOIL	MPC BUFFALO, NY	12/21/16 15:30	12/28/16
L1642311-10	SB8 (2-6')	SOIL	MPC BUFFALO, NY	12/22/16 09:05	12/28/16
L1642311-11	SB9 (0-2')	SOIL	MPC BUFFALO, NY	12/23/16 14:15	12/28/16
L1642311-12	SB9 (0-4')	SOIL	MPC BUFFALO, NY	12/22/16 09:30	12/28/16
L1642311-13	SB10 (1-3')	SOIL	MPC BUFFALO, NY	12/22/16 10:30	12/28/16
L1642311-14	SB11 (1-3')	SOIL	MPC BUFFALO, NY	12/22/16 11:00	12/28/16
L1642311-15	SB13 (1-5')	SOIL	MPC BUFFALO, NY	12/22/16 12:30	12/28/16
L1642311-16	SB14 (0-4')	SOIL	MPC BUFFALO, NY	12/22/16 15:50	12/28/16
L1642311-17	SB16 (.5-4.5)	SOIL	MPC BUFFALO, NY	12/22/16 14:15	12/28/16
L1642311-18	SB21 (1-4')	SOIL	MPC BUFFALO, NY	12/23/16 08:30	12/28/16
L1642311-19	SB25 (2-6')	SOIL	MPC BUFFALO, NY	12/23/16 10:15	12/28/16

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Case Narrative

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

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

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

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

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

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

Project Name:	BCP PH. II ESA	**Lab Number:**	L1642311
Project Number:	E1609	**Report Date:**	01/05/17

Case Narrative (continued)

Report Submission

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

Sample Receipt

At the client's request, L1642311-01 was placed on hold.

Volatile Organics

L1642311-08, -09, -10, -12, -15, -17, -18 and -19: Any reported concentrations that are below 200 ug/kg may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications.

L1642311-10: A methanol dilution was utilized for the analysis.

Semivolatile Organics

L1642311-02: The sample has elevated detection limits due to the dilution required by the sample matrix.

Semivolatile Organics by SIM

L1642311-02: The sample has elevated detection limits due to the dilution required by the sample matrix.

Metals

L1642311-06 through -10, -12, -15, -17, -18 and -19: 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 WG966156-3 MS recoveries for aluminum (448%), calcium (0%), iron (15700%) and manganese (0%), performed on L1642311-06, do not apply because the sample concentrations are greater than four times the spike amounts added.

The WG966156-3 MS recoveries, performed on L1642311-06, are outside the acceptance criteria for arsenic (0%), copper (197%) and lead (66%). A post digestion spike was performed and was within acceptance criteria.

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Case Narrative (continued)

The WG966156-4 Laboratory Duplicate RPDs, performed on L1642311-06, are outside the acceptance criteria for calcium (44%), chromium (27%), magnesium (29%) and vanadium (37%). 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: Michelle M. Morris

Title: Technical Director/Representative Date: 01/05/17

ORGANICS

VOLATILES

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-02
Client ID: SB8
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/03/17 03:05
Analyst: KD

Date Collected: 12/23/16 13:10
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	0.24	J	ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	0.74	J	ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	16		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-02
Client ID: SB8
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 13:10
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	3.5	J	ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	0.43	J	ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	103		70-130
Toluene-d8	94		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	107		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-03
Client ID: SB10
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/03/17 00:24
Analyst: KD

Date Collected: 12/23/16 12:45
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	42		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	0.22	J	ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-03
Client ID: SB10
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 12:45
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	32		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	89		70-130
Dibromofluoromethane	111		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-04
Client ID: SB14
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/03/17 00:47
Analyst: KD

Date Collected: 12/23/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-04
Client ID: SB14
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	ND		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	109		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	78		70-130
Dibromofluoromethane	111		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08
Client ID: SB6 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/04/17 15:16
Analyst: MV
Percent Solids: 86%

Date Collected: 12/21/16 15:00
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.26	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	0.49	J	ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	0.19	J	ug/kg	1.2	0.14	1
Toluene	0.35	J	ug/kg	1.7	0.23	1
Ethylbenzene	6.0		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.25	1
Trichloroethene	8.5		ug/kg	1.2	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08 Date Collected: 12/21/16 15:00

Client ID: SB6 (0-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	2.9		ug/kg	2.3	0.41	1
o-Xylene	ND		ug/kg	2.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.3	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	4.0	J	ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.78	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	0.62	J	ug/kg	1.2	0.13	1
sec-Butylbenzene	0.14	J	ug/kg	1.2	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Isopropylbenzene	0.46	J	ug/kg	1.2	0.12	1
p-Isopropyltoluene	0.17	J	ug/kg	1.2	0.14	1
Naphthalene	6.2		ug/kg	5.8	0.16	1
n-Propylbenzene	2.7		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3,5-Trimethylbenzene	4.6	J	ug/kg	5.8	0.17	1
1,2,4-Trimethylbenzene	2.3	J	ug/kg	5.8	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.6	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	96		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	99		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-09
Client ID: SB7 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/03/17 16:24
Analyst: MV
Percent Solids: 86%

Date Collected: 12/21/16 15:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.1	0.27	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.35	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.41	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.7	0.28	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	0.16	J	ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.23	1
Ethylbenzene	3.2		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	0.25	J	ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.37	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	2.5		ug/kg	1.2	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-09 Date Collected: 12/21/16 15:30

Client ID: SB7 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	12		ug/kg	2.3	0.41	1
o-Xylene	ND		ug/kg	2.3	0.39	1
cis-1,2-Dichloroethene	2.1		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.3	0.47	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	14		ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.32	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.78	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.7	0.20	1
n-Butylbenzene	0.17	J	ug/kg	1.2	0.13	1
sec-Butylbenzene	ND		ug/kg	1.2	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Isopropylbenzene	0.30	J	ug/kg	1.2	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.14	1
Naphthalene	0.49	J	ug/kg	5.8	0.16	1
n-Propylbenzene	0.93	J	ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3,5-Trimethylbenzene	2.4	J	ug/kg	5.8	0.17	1
1,2,4-Trimethylbenzene	6.3		ug/kg	5.8	0.16	1
Methyl Acetate	ND		ug/kg	23	0.32	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.7	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	88		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	80		70-130
Dibromofluoromethane	100		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10 D
Client ID: SB8 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/03/17 16:51
Analyst: MV
Percent Solids: 80%

Date Collected: 12/22/16 09:05
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	620	69.	1
1,1-Dichloroethane	ND		ug/kg	94	5.3	1
Chloroform	ND		ug/kg	94	23.	1
Carbon tetrachloride	ND		ug/kg	62	13.	1
1,2-Dichloropropane	ND		ug/kg	220	14.	1
Dibromochloromethane	ND		ug/kg	62	9.6	1
1,1,2-Trichloroethane	ND		ug/kg	94	19.	1
Tetrachloroethene	ND		ug/kg	62	8.8	1
Chlorobenzene	ND		ug/kg	62	22.	1
Trichlorofluoromethane	ND		ug/kg	310	24.	1
1,2-Dichloroethane	ND		ug/kg	62	7.1	1
1,1,1-Trichloroethane	ND		ug/kg	62	6.9	1
Bromodichloromethane	ND		ug/kg	62	11.	1
trans-1,3-Dichloropropene	ND		ug/kg	62	7.5	1
cis-1,3-Dichloropropene	ND		ug/kg	62	7.3	1
Bromoform	ND		ug/kg	250	15.	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	62	6.3	1
Benzene	ND		ug/kg	62	7.4	1
Toluene	ND		ug/kg	94	12.	1
Ethylbenzene	78		ug/kg	62	8.0	1
Chloromethane	ND		ug/kg	310	18.	1
Bromomethane	ND		ug/kg	120	21.	1
Vinyl chloride	ND		ug/kg	120	7.3	1
Chloroethane	ND		ug/kg	120	20.	1
1,1-Dichloroethene	ND		ug/kg	62	16.	1
trans-1,2-Dichloroethene	ND		ug/kg	94	13.	1
Trichloroethene	3300		ug/kg	62	7.8	1
1,2-Dichlorobenzene	ND		ug/kg	310	9.6	1
1,3-Dichlorobenzene	ND		ug/kg	310	8.4	1
1,4-Dichlorobenzene	ND		ug/kg	310	8.6	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10 D Date Collected: 12/22/16 09:05

Client ID: SB8 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	120	5.3	1
p/m-Xylene	340		ug/kg	120	22.	1
o-Xylene	ND		ug/kg	120	21.	1
cis-1,2-Dichloroethene	ND		ug/kg	62	8.9	1
Styrene	ND		ug/kg	120	25.	1
Dichlorodifluoromethane	ND		ug/kg	620	12.	1
Acetone	ND		ug/kg	620	65.	1
Carbon disulfide	ND		ug/kg	620	69.	1
2-Butanone	ND		ug/kg	620	17.	1
4-Methyl-2-pentanone	ND		ug/kg	620	15.	1
2-Hexanone	ND		ug/kg	620	42.	1
Bromochloromethane	ND		ug/kg	310	17.	1
1,2-Dibromoethane	ND		ug/kg	250	11.	1
n-Butylbenzene	31	J	ug/kg	62	7.2	1
sec-Butylbenzene	31	J	ug/kg	62	7.6	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	310	25.	1
Isopropylbenzene	9.9	J	ug/kg	62	6.5	1
p-Isopropyltoluene	ND		ug/kg	62	7.8	1
Naphthalene	170	J	ug/kg	310	8.6	1
n-Propylbenzene	46	J	ug/kg	62	6.8	1
1,2,3-Trichlorobenzene	ND		ug/kg	310	9.2	1
1,2,4-Trichlorobenzene	ND		ug/kg	310	11.	1
1,3,5-Trimethylbenzene	79	J	ug/kg	310	9.0	1
1,2,4-Trimethylbenzene	290	J	ug/kg	310	8.8	1
Methyl Acetate	ND		ug/kg	1200	17.	1
Cyclohexane	ND		ug/kg	1200	9.1	1
1,4-Dioxane	ND		ug/kg	6200	900	1
Freon-113	ND		ug/kg	1200	17.	1
Methyl cyclohexane	ND		ug/kg	250	9.6	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	87		70-130
Toluene-d8	91		70-130
4-Bromofluorobenzene	82		70-130
Dibromofluoromethane	98		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-12
Client ID: SB9 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/04/17 15:42
Analyst: MV
Percent Solids: 86%

Date Collected: 12/22/16 09:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.43	1
Carbon tetrachloride	ND		ug/kg	1.2	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.2	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	11		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.45	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	0.19	J	ug/kg	1.2	0.14	1
Toluene	0.36	J	ug/kg	1.7	0.22	1
Ethylbenzene	11		ug/kg	1.2	0.15	1
Chloromethane	ND		ug/kg	5.8	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.14	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	0.58	J	ug/kg	1.2	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.16	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-12 Date Collected: 12/22/16 09:30

Client ID: SB9 (0-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	1.8	J	ug/kg	2.3	0.41	1
o-Xylene	0.66	J	ug/kg	2.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.16	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	12	0.22	1
Acetone	2.7	J	ug/kg	12	1.2	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.31	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.77	1
Bromochloromethane	ND		ug/kg	5.8	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	1.0	J	ug/kg	1.2	0.13	1
sec-Butylbenzene	0.17	J	ug/kg	1.2	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.46	1
Isopropylbenzene	0.75	J	ug/kg	1.2	0.12	1
p-Isopropyltoluene	0.17	J	ug/kg	1.2	0.14	1
Naphthalene	3.4	J	ug/kg	5.8	0.16	1
n-Propylbenzene	6.0		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3,5-Trimethylbenzene	6.9		ug/kg	5.8	0.16	1
1,2,4-Trimethylbenzene	1.9	J	ug/kg	5.8	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	120	17.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.6	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	115		70-130
Dibromofluoromethane	100		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-15
Client ID: SB13 (1-5')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/04/17 16:08
Analyst: MV
Percent Solids: 89%

Date Collected: 12/22/16 12:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	3.9	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.39	1
Trichlorofluoromethane	ND		ug/kg	5.6	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
Bromoform	ND		ug/kg	4.5	0.26	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	0.18	J	ug/kg	1.1	0.13	1
Toluene	0.59	J	ug/kg	1.7	0.22	1
Ethylbenzene	5.1		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.6	0.33	1
Bromomethane	ND		ug/kg	2.2	0.38	1
Vinyl chloride	ND		ug/kg	2.2	0.13	1
Chloroethane	ND		ug/kg	2.2	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.29	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	0.20	J	ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.6	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	5.6	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.6	0.16	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-15 Date Collected: 12/22/16 12:30

Client ID: SB13 (1-5') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.2	0.10	1
p/m-Xylene	22		ug/kg	2.2	0.39	1
o-Xylene	0.39	J	ug/kg	2.2	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.2	0.45	1
Dichlorodifluoromethane	ND		ug/kg	11	0.21	1
Acetone	6.1	J	ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.30	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.27	1
2-Hexanone	ND		ug/kg	11	0.75	1
Bromochloromethane	ND		ug/kg	5.6	0.31	1
1,2-Dibromoethane	ND		ug/kg	4.5	0.20	1
n-Butylbenzene	0.35	J	ug/kg	1.1	0.13	1
sec-Butylbenzene	ND		ug/kg	1.1	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.6	0.44	1
Isopropylbenzene	0.41	J	ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	0.74	J	ug/kg	5.6	0.16	1
n-Propylbenzene	2.0		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.6	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.6	0.20	1
1,3,5-Trimethylbenzene	3.5	J	ug/kg	5.6	0.16	1
1,2,4-Trimethylbenzene	13		ug/kg	5.6	0.16	1
Methyl Acetate	ND		ug/kg	22	0.30	1
Cyclohexane	ND		ug/kg	22	0.16	1
1,4-Dioxane	ND		ug/kg	110	16.	1
Freon-113	ND		ug/kg	22	0.31	1
Methyl cyclohexane	ND		ug/kg	4.5	0.17	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	99		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	101		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-17
Client ID: SB16 (.5-4.5)
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/04/17 16:34
Analyst: MV
Percent Solids: 88%

Date Collected: 12/22/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	0.50	J	ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.13	1
Bromodichloromethane	ND		ug/kg	1.1	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.12	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	0.45	J	ug/kg	1.7	0.22	1
Ethylbenzene	7.0		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.7	0.34	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.13	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	0.49	J	ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.7	0.18	1
1,3-Dichlorobenzene	ND		ug/kg	5.7	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.7	0.16	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-17 Date Collected: 12/22/16 14:15

Client ID: SB16 (.5-4.5) Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	32		ug/kg	2.3	0.40	1
o-Xylene	0.40	J	ug/kg	2.3	0.39	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	11	0.22	1
Acetone	3.6	J	ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.31	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.28	1
2-Hexanone	ND		ug/kg	11	0.76	1
Bromochloromethane	ND		ug/kg	5.7	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	0.33	J	ug/kg	1.1	0.13	1
sec-Butylbenzene	ND		ug/kg	1.1	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.7	0.45	1
Isopropylbenzene	0.52	J	ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	0.65	J	ug/kg	5.7	0.16	1
n-Propylbenzene	2.5		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.7	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.7	0.21	1
1,3,5-Trimethylbenzene	4.2	J	ug/kg	5.7	0.16	1
1,2,4-Trimethylbenzene	15		ug/kg	5.7	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	110	16.	1
Freon-113	ND		ug/kg	23	0.31	1
Methyl cyclohexane	ND		ug/kg	4.6	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	108		70-130
Dibromofluoromethane	101		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18
Client ID: SB21 (1-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/04/17 17:00
Analyst: MV
Percent Solids: 78%

Date Collected: 12/23/16 08:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	13	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.9	0.11	1
Chloroform	ND		ug/kg	1.9	0.47	1
Carbon tetrachloride	ND		ug/kg	1.3	0.27	1
1,2-Dichloropropane	ND		ug/kg	4.5	0.29	1
Dibromochloromethane	ND		ug/kg	1.3	0.20	1
1,1,2-Trichloroethane	ND		ug/kg	1.9	0.39	1
Tetrachloroethene	ND		ug/kg	1.3	0.18	1
Chlorobenzene	ND		ug/kg	1.3	0.44	1
Trichlorofluoromethane	ND		ug/kg	6.4	0.50	1
1,2-Dichloroethane	ND		ug/kg	1.3	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.3	0.14	1
Bromodichloromethane	ND		ug/kg	1.3	0.22	1
trans-1,3-Dichloropropene	ND		ug/kg	1.3	0.15	1
cis-1,3-Dichloropropene	ND		ug/kg	1.3	0.15	1
Bromoform	ND		ug/kg	5.1	0.30	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.3	0.13	1
Benzene	0.20	J	ug/kg	1.3	0.15	1
Toluene	ND		ug/kg	1.9	0.25	1
Ethylbenzene	4.5		ug/kg	1.3	0.16	1
Chloromethane	ND		ug/kg	6.4	0.38	1
Bromomethane	ND		ug/kg	2.6	0.43	1
Vinyl chloride	ND		ug/kg	2.6	0.15	1
Chloroethane	ND		ug/kg	2.6	0.40	1
1,1-Dichloroethene	ND		ug/kg	1.3	0.34	1
trans-1,2-Dichloroethene	ND		ug/kg	1.9	0.27	1
Trichloroethene	ND		ug/kg	1.3	0.16	1
1,2-Dichlorobenzene	ND		ug/kg	6.4	0.20	1
1,3-Dichlorobenzene	ND		ug/kg	6.4	0.17	1
1,4-Dichlorobenzene	ND		ug/kg	6.4	0.18	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18 Date Collected: 12/23/16 08:30

Client ID: SB21 (1-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.6	0.11	1
p/m-Xylene	18		ug/kg	2.6	0.45	1
o-Xylene	ND		ug/kg	2.6	0.43	1
cis-1,2-Dichloroethene	ND		ug/kg	1.3	0.18	1
Styrene	ND		ug/kg	2.6	0.51	1
Dichlorodifluoromethane	ND		ug/kg	13	0.24	1
Acetone	13		ug/kg	13	1.3	1
Carbon disulfide	ND		ug/kg	13	1.4	1
2-Butanone	ND		ug/kg	13	0.35	1
4-Methyl-2-pentanone	ND		ug/kg	13	0.31	1
2-Hexanone	ND		ug/kg	13	0.85	1
Bromochloromethane	ND		ug/kg	6.4	0.35	1
1,2-Dibromoethane	ND		ug/kg	5.1	0.22	1
n-Butylbenzene	0.16	J	ug/kg	1.3	0.15	1
sec-Butylbenzene	ND		ug/kg	1.3	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.4	0.51	1
Isopropylbenzene	0.38	J	ug/kg	1.3	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.3	0.16	1
Naphthalene	0.77	J	ug/kg	6.4	0.18	1
n-Propylbenzene	1.3		ug/kg	1.3	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.4	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.4	0.23	1
1,3,5-Trimethylbenzene	2.6	J	ug/kg	6.4	0.18	1
1,2,4-Trimethylbenzene	8.0		ug/kg	6.4	0.18	1
Methyl Acetate	ND		ug/kg	26	0.34	1
Cyclohexane	ND		ug/kg	26	0.19	1
1,4-Dioxane	ND		ug/kg	130	18.	1
Freon-113	ND		ug/kg	26	0.35	1
Methyl cyclohexane	ND		ug/kg	5.1	0.20	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	98		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	100		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-19
Client ID: SB25 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/04/17 17:26
Analyst: MV
Percent Solids: 88%

Date Collected: 12/23/16 10:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.17	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.34	1
Tetrachloroethene	ND		ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.13	1
Bromodichloromethane	ND		ug/kg	1.1	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	0.28	J	ug/kg	1.1	0.13	1
Toluene	0.45	J	ug/kg	1.7	0.22	1
Ethylbenzene	8.4		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.7	0.33	1
Bromomethane	ND		ug/kg	2.3	0.38	1
Vinyl chloride	ND		ug/kg	2.3	0.13	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	0.37	J	ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	5.7	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.7	0.16	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-19 Date Collected: 12/23/16 10:15

Client ID: SB25 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	36		ug/kg	2.3	0.40	1
o-Xylene	ND		ug/kg	2.3	0.38	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	11	0.22	1
Acetone	4.7	J	ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	ND		ug/kg	11	0.31	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.28	1
2-Hexanone	ND		ug/kg	11	0.76	1
Bromochloromethane	ND		ug/kg	5.7	0.31	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	0.50	J	ug/kg	1.1	0.13	1
sec-Butylbenzene	0.18	J	ug/kg	1.1	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.7	0.45	1
Isopropylbenzene	0.88	J	ug/kg	1.1	0.12	1
p-Isopropyltoluene	0.15	J	ug/kg	1.1	0.14	1
Naphthalene	0.43	J	ug/kg	5.7	0.16	1
n-Propylbenzene	3.5		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.7	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.7	0.21	1
1,3,5-Trimethylbenzene	6.4		ug/kg	5.7	0.16	1
1,2,4-Trimethylbenzene	18		ug/kg	5.7	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	110	16.	1
Freon-113	ND		ug/kg	23	0.31	1
Methyl cyclohexane	ND		ug/kg	4.6	0.18	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	105		70-130
4-Bromofluorobenzene	114		70-130
Dibromofluoromethane	103		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/17 19:27
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG966511-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/17 19:27
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG966511-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/17 19:27
Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG966511-5					
Methyl cyclohexane	ND		ug/l	10	0.40

Tentatively Identified Compounds			
Total TIC Compounds	1.10	J	ug/l
Unknown	1.10	J	ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	93		70-130
4-Bromofluorobenzene	91		70-130
Dibromofluoromethane	107		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/17 09:25
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09-10 Batch: WG966762-5					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/17 09:25
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09-10 Batch: WG966762-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	0.16	J	ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	0.15	J	ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/03/17 09:25
Analyst: BN

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09-10 Batch: WG966762-5					
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	89		70-130
Toluene-d8	92		70-130
4-Bromofluorobenzene	79		70-130
Dibromofluoromethane	99		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/17 09:34
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08,12,15,17-19 Batch: WG967095-5					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/17 09:34
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08,12,15,17-19 Batch: WG967095-5					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.35
o-Xylene	ND		ug/kg	2.0	0.34
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	ND		ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	ND		ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.
Freon-113	ND		ug/kg	20	0.27

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/04/17 09:34
Analyst: MV

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08,12,15,17-19 Batch: WG967095-5					
Methyl cyclohexane	ND		ug/kg	4.0	0.15

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	114		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	103		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG966511-3 WG966511-4								
Methylene chloride	93		91		70-130	2		20
1,1-Dichloroethane	92		90		70-130	2		20
Chloroform	99		96		70-130	3		20
2-Chloroethylvinyl ether	**23**	Q	**22**	Q	70-130	4		20
Carbon tetrachloride	110		110		63-132	0		20
1,2-Dichloropropane	85		84		70-130	1		20
Dibromochloromethane	94		95		63-130	1		20
1,1,2-Trichloroethane	83		82		70-130	1		20
Tetrachloroethene	110		110		70-130	0		20
Chlorobenzene	93		93		75-130	0		20
Trichlorofluoromethane	100		98		62-150	2		20
1,2-Dichloroethane	100		98		70-130	2		20
1,1,1-Trichloroethane	110		100		67-130	10		20
Bromodichloromethane	98		96		67-130	2		20
trans-1,3-Dichloropropene	79		78		70-130	1		20
cis-1,3-Dichloropropene	92		89		70-130	3		20
1,1-Dichloropropene	100		98		70-130	2		20
Bromoform	90		89		54-136	1		20
1,1,2,2-Tetrachloroethane	78		77		67-130	1		20
Benzene	94		92		70-130	2		20
Toluene	89		89		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG966511-3 WG966511-4								
Ethylbenzene	93		94		70-130	1		20
Chloromethane	**62**	Q	64		64-130	3		20
Bromomethane	75		75		39-139	0		20
Vinyl chloride	79		76		55-140	4		20
Chloroethane	98		97		55-138	1		20
1,1-Dichloroethene	100		100		61-145	0		20
trans-1,2-Dichloroethene	100		98		70-130	2		20
Trichloroethene	100		99		70-130	1		20
1,2-Dichlorobenzene	91		91		70-130	0		20
1,3-Dichlorobenzene	93		94		70-130	1		20
1,4-Dichlorobenzene	92		92		70-130	0		20
Methyl tert butyl ether	100		98		63-130	2		20
p/m-Xylene	100		100		70-130	0		20
o-Xylene	100		100		70-130	0		20
cis-1,2-Dichloroethene	98		96		70-130	2		20
Dibromomethane	99		93		70-130	6		20
1,2,3-Trichloropropane	84		80		64-130	5		20
Acrylonitrile	90		85		70-130	6		20
Isopropyl Ether	89		87		70-130	2		20
tert-Butyl Alcohol	108		88		70-130	20		20
Styrene	95		95		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG966511-3 WG966511-4								
Dichlorodifluoromethane	110		100		36-147	10		20
Acetone	96		80		58-148	18		20
Carbon disulfide	94		92		51-130	2		20
2-Butanone	88		79		63-138	11		20
Vinyl acetate	90		86		70-130	5		20
4-Methyl-2-pentanone	67		65		59-130	3		20
2-Hexanone	61		**56**	Q	57-130	9		20
Acrolein	66		66		40-160	0		20
Bromochloromethane	110		110		70-130	0		20
2,2-Dichloropropane	110		110		63-133	0		20
1,2-Dibromoethane	92		91		70-130	1		20
1,3-Dichloropropane	84		84		70-130	0		20
1,1,1,2-Tetrachloroethane	98		97		64-130	1		20
Bromobenzene	94		94		70-130	0		20
n-Butylbenzene	90		91		53-136	1		20
sec-Butylbenzene	96		97		70-130	1		20
tert-Butylbenzene	95		96		70-130	1		20
o-Chlorotoluene	90		91		70-130	1		20
p-Chlorotoluene	89		88		70-130	1		20
1,2-Dibromo-3-chloropropane	72		68		41-144	6		20
Hexachlorobutadiene	97		98		63-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG966511-3 WG966511-4								
Isopropylbenzene	96		97		70-130	1		20
p-Isopropyltoluene	86		87		70-130	1		20
Naphthalene	**57**	Q	**54**	Q	70-130	5		20
n-Propylbenzene	94		95		69-130	1		20
1,2,3-Trichlorobenzene	73		**69**	Q	70-130	6		20
1,2,4-Trichlorobenzene	80		77		70-130	4		20
1,3,5-Trimethylbenzene	93		95		64-130	2		20
1,2,4-Trimethylbenzene	94		94		70-130	0		20
Methyl Acetate	87		78		70-130	11		20
Ethyl Acetate	90		84		70-130	7		20
Cyclohexane	100		100		70-130	0		20
Ethyl-Tert-Butyl-Ether	100		96		70-130	4		20
Tertiary-Amyl Methyl Ether	92		88		66-130	4		20
1,4-Dioxane	102		76		56-162	**29**	Q	20
1,1,2-Trichloro-1,2,2-Trifluoroethane	120		110		70-130	9		20
1,4-Diethylbenzene	92		93		70-130	1		20
4-Ethyltoluene	100		100		70-130	0		20
1,2,4,5-Tetramethylbenzene	82		87		70-130	6		20
Tetrahydrofuran	85		76		58-130	11		20
Ethyl ether	83		80		59-134	4		20
trans-1,4-Dichloro-2-butene	**67**	Q	**64**	Q	70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG966511-3 WG966511-4								
Iodomethane	**42**	Q	**47**	Q	70-130	11		20
Methyl cyclohexane	100		100		70-130	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		103		70-130
Toluene-d8	94		94		70-130
4-Bromofluorobenzene	90		90		70-130
Dibromofluoromethane	109		106		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG966762-3 WG966762-4								
Methylene chloride	99		100		70-130	1		30
1,1-Dichloroethane	92		92		70-130	0		30
Chloroform	101		101		70-130	0		30
Carbon tetrachloride	113		111		70-130	2		30
1,2-Dichloropropane	90		92		70-130	2		30
Dibromochloromethane	106		106		70-130	0		30
1,1,2-Trichloroethane	96		96		70-130	0		30
Tetrachloroethene	127		125		70-130	2		30
Chlorobenzene	105		105		70-130	0		30
Trichlorofluoromethane	132		131		70-139	1		30
1,2-Dichloroethane	99		100		70-130	1		30
1,1,1-Trichloroethane	108		108		70-130	0		30
Bromodichloromethane	97		97		70-130	0		30
trans-1,3-Dichloropropene	87		87		70-130	0		30
cis-1,3-Dichloropropene	91		91		70-130	0		30
1,1-Dichloropropene	95		95		70-130	0		30
Bromoform	100		100		70-130	0		30
1,1,2,2-Tetrachloroethane	84		82		70-130	2		30
Benzene	96		96		70-130	0		30
Toluene	96		95		70-130	1		30
Ethylbenzene	96		95		70-130	1		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG966762-3 WG966762-4								
Chloromethane	118		116		52-130	2		30
Bromomethane	138		137		57-147	1		30
Vinyl chloride	101		102		67-130	1		30
Chloroethane	105		106		50-151	1		30
1,1-Dichloroethene	122		117		65-135	4		30
trans-1,2-Dichloroethene	108		107		70-130	1		30
Trichloroethene	107		108		70-130	1		30
1,2-Dichlorobenzene	107		107		70-130	0		30
1,3-Dichlorobenzene	106		107		70-130	1		30
1,4-Dichlorobenzene	106		107		70-130	1		30
Methyl tert butyl ether	**61**	Q	**62**	Q	66-130	2		30
p/m-Xylene	102		102		70-130	0		30
o-Xylene	102		102		70-130	0		30
cis-1,2-Dichloroethene	107		108		70-130	1		30
Dibromomethane	107		108		70-130	1		30
Styrene	100		100		70-130	0		30
Dichlorodifluoromethane	110		108		30-146	2		30
Acetone	125		115		54-140	8		30
Carbon disulfide	92		80		59-130	14		30
2-Butanone	98		98		70-130	0		30
Vinyl acetate	94		96		70-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG966762-3 WG966762-4								
4-Methyl-2-pentanone	84		81		70-130	4		30
1,2,3-Trichloropropane	81		78		68-130	4		30
2-Hexanone	82		76		70-130	8		30
Bromochloromethane	127		128		70-130	1		30
2,2-Dichloropropane	92		92		70-130	0		30
1,2-Dibromoethane	107		107		70-130	0		30
1,3-Dichloropropane	90		89		69-130	1		30
1,1,1,2-Tetrachloroethane	108		109		70-130	1		30
Bromobenzene	101		103		70-130	2		30
n-Butylbenzene	86		86		70-130	0		30
sec-Butylbenzene	87		87		70-130	0		30
tert-Butylbenzene	91		91		70-130	0		30
o-Chlorotoluene	81		82		70-130	1		30
p-Chlorotoluene	83		83		70-130	0		30
1,2-Dibromo-3-chloropropane	101		99		68-130	2		30
Hexachlorobutadiene	109		110		67-130	1		30
Isopropylbenzene	84		84		70-130	0		30
p-Isopropyltoluene	93		92		70-130	1		30
Naphthalene	96		96		70-130	0		30
Acrylonitrile	94		89		70-130	5		30
Isopropyl Ether	93		94		66-130	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG966762-3 WG966762-4								
tert-Butyl Alcohol	**69**	Q	**68**	Q	70-130	1		30
n-Propylbenzene	82		82		70-130	0		30
1,2,3-Trichlorobenzene	106		106		70-130	0		30
1,2,4-Trichlorobenzene	107		107		70-130	0		30
1,3,5-Trimethylbenzene	85		84		70-130	1		30
1,2,4-Trimethylbenzene	85		86		70-130	1		30
Methyl Acetate	101		101		51-146	0		30
Ethyl Acetate	105		102		70-130	3		30
Acrolein	98		89		70-130	10		30
Cyclohexane	93		92		59-142	1		30
1,4-Dioxane	89		91		65-136	2		30
Freon-113	125		109		50-139	14		30
1,4-Diethylbenzene	91		91		70-130	0		30
4-Ethyltoluene	85		85		70-130	0		30
1,2,4,5-Tetramethylbenzene	86		87		70-130	1		30
Tetrahydrofuran	102		102		66-130	0		30
Ethyl ether	105		104		67-130	1		30
trans-1,4-Dichloro-2-butene	76		76		70-130	0		30
Methyl cyclohexane	103		101		70-130	2		30
Ethyl-Tert-Butyl-Ether	**66**	Q	**67**	Q	70-130	2		30
Tertiary-Amyl Methyl Ether	**67**	Q	**66**	Q	70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09-10 Batch: WG966762-3 WG966762-4								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	90		90		70-130
Toluene-d8	93		92		70-130
4-Bromofluorobenzene	77		78		70-130
Dibromofluoromethane	105		105		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08,12,15,17-19 Batch: WG967095-3 WG967095-4								
Methylene chloride	102		100		70-130	2		30
1,1-Dichloroethane	114		114		70-130	0		30
Chloroform	115		114		70-130	1		30
Carbon tetrachloride	124		117		70-130	6		30
1,2-Dichloropropane	111		111		70-130	0		30
Dibromochloromethane	112		115		70-130	3		30
2-Chloroethylvinyl ether	91		94		70-130	3		30
1,1,2-Trichloroethane	112		117		70-130	4		30
Tetrachloroethene	115		112		70-130	3		30
Chlorobenzene	111		113		70-130	2		30
Trichlorofluoromethane	118		112		70-139	5		30
1,2-Dichloroethane	123		125		70-130	2		30
1,1,1-Trichloroethane	119		114		70-130	4		30
Bromodichloromethane	115		116		70-130	1		30
trans-1,3-Dichloropropene	114		119		70-130	4		30
cis-1,3-Dichloropropene	115		114		70-130	1		30
1,1-Dichloropropene	119		114		70-130	4		30
Bromoform	114		119		70-130	4		30
1,1,2,2-Tetrachloroethane	108		114		70-130	5		30
Benzene	110		109		70-130	1		30
Toluene	112		110		70-130	2		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08,12,15,17-19 Batch: WG967095-3 WG967095-4								
Ethylbenzene	113		114		70-130	1		30
Chloromethane	109		105		52-130	4		30
Bromomethane	69		70		57-147	1		30
Vinyl chloride	102		100		67-130	2		30
Chloroethane	106		101		50-151	5		30
1,1-Dichloroethene	89		103		65-135	15		30
trans-1,2-Dichloroethene	111		108		70-130	3		30
Trichloroethene	113		111		70-130	2		30
1,2-Dichlorobenzene	113		112		70-130	1		30
1,3-Dichlorobenzene	115		114		70-130	1		30
1,4-Dichlorobenzene	114		112		70-130	2		30
Methyl tert butyl ether	108		112		66-130	4		30
p/m-Xylene	115		114		70-130	1		30
o-Xylene	109		114		70-130	4		30
cis-1,2-Dichloroethene	109		109		70-130	0		30
Dibromomethane	110		112		70-130	2		30
Styrene	113		114		70-130	1		30
Dichlorodifluoromethane	**161**	Q	**154**	Q	30-146	4		30
Acetone	139		139		54-140	0		30
Carbon disulfide	77		90		59-130	16		30
2-Butanone	117		115		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08,12,15,17-19 Batch: WG967095-3 WG967095-4								
Vinyl acetate	121		122		70-130	1		30
4-Methyl-2-pentanone	102		117		70-130	14		30
1,2,3-Trichloropropane	108		114		68-130	5		30
2-Hexanone	102		110		70-130	8		30
Bromochloromethane	116		113		70-130	3		30
2,2-Dichloropropane	121		118		70-130	3		30
1,2-Dibromoethane	111		112		70-130	1		30
1,3-Dichloropropane	112		117		69-130	4		30
1,1,1,2-Tetrachloroethane	114		114		70-130	0		30
Bromobenzene	113		111		70-130	2		30
n-Butylbenzene	121		115		70-130	5		30
sec-Butylbenzene	118		113		70-130	4		30
tert-Butylbenzene	116		112		70-130	4		30
o-Chlorotoluene	114		113		70-130	1		30
p-Chlorotoluene	116		114		70-130	2		30
1,2-Dibromo-3-chloropropane	103		114		68-130	10		30
Hexachlorobutadiene	119		113		67-130	5		30
Isopropylbenzene	116		113		70-130	3		30
p-Isopropyltoluene	116		114		70-130	2		30
Naphthalene	107		109		70-130	2		30
Acrylonitrile	116		122		70-130	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08,12,15,17-19 Batch: WG967095-3 WG967095-4								
Isopropyl Ether	115		115		66-130	0		30
tert-Butyl Alcohol	98		102		70-130	4		30
n-Propylbenzene	117		113		70-130	3		30
1,2,3-Trichlorobenzene	111		114		70-130	3		30
1,2,4-Trichlorobenzene	116		114		70-130	2		30
1,3,5-Trimethylbenzene	118		115		70-130	3		30
1,2,4-Trimethylbenzene	118		116		70-130	2		30
Methyl Acetate	106		111		51-146	5		30
Ethyl Acetate	115		118		70-130	3		30
Acrolein	104		88		70-130	17		30
Cyclohexane	112		108		59-142	4		30
1,4-Dioxane	93		95		65-136	2		30
Freon-113	90		102		50-139	13		30
1,4-Diethylbenzene	115		110		70-130	4		30
4-Ethyltoluene	114		110		70-130	4		30
1,2,4,5-Tetramethylbenzene	113		112		70-130	1		30
Tetrahydrofuran	112		116		66-130	4		30
Ethyl ether	85		98		67-130	14		30
trans-1,4-Dichloro-2-butene	122		124		70-130	2		30
Methyl cyclohexane	107		103		70-130	4		30
Ethyl-Tert-Butyl-Ether	110		112		70-130	2		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08,12,15,17-19 Batch: WG967095-3 WG967095-4								
Tertiary-Amyl Methyl Ether	107		109		70-130	2		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		107		70-130
Toluene-d8	101		103		70-130
4-Bromofluorobenzene	103		102		70-130
Dibromofluoromethane	103		101		70-130

SEMIVOLATILES

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-02 D
Client ID: SB8
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 01/02/17 23:16
Analyst: KV

Date Collected: 12/23/16 13:10
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	10	3.5	5
3,3'-Dichlorobenzidine	ND		ug/l	26	7.2	5
2,4-Dinitrotoluene	ND		ug/l	26	4.4	5
2,6-Dinitrotoluene	ND		ug/l	26	5.8	5
4-Chlorophenyl phenyl ether	ND		ug/l	10	3.2	5
4-Bromophenyl phenyl ether	ND		ug/l	10	3.8	5
Bis(2-chloroisopropyl)ether	ND		ug/l	10	3.6	5
Bis(2-chloroethoxy)methane	ND		ug/l	26	3.3	5
Hexachlorocyclopentadiene	ND		ug/l	100	41.	5
Isophorone	ND		ug/l	26	3.1	5
Nitrobenzene	ND		ug/l	10	3.9	5
NDPA/DPA	ND		ug/l	10	3.4	5
n-Nitrosodi-n-propylamine	ND		ug/l	26	3.6	5
Bis(2-ethylhexyl)phthalate	ND		ug/l	16	4.7	5
Butyl benzyl phthalate	ND		ug/l	26	6.6	5
Di-n-butylphthalate	ND		ug/l	26	3.6	5
Di-n-octylphthalate	ND		ug/l	26	5.9	5
Diethyl phthalate	ND		ug/l	26	3.3	5
Dimethyl phthalate	ND		ug/l	26	3.4	5
Biphenyl	ND		ug/l	10	3.9	5
4-Chloroaniline	ND		ug/l	26	3.3	5
2-Nitroaniline	ND		ug/l	26	5.9	5
3-Nitroaniline	ND		ug/l	26	6.4	5
4-Nitroaniline	ND		ug/l	26	6.8	5
Dibenzofuran	ND		ug/l	10	3.4	5
1,2,4,5-Tetrachlorobenzene	ND		ug/l	52	3.5	5
Acetophenone	ND		ug/l	26	4.4	5
2,4,6-Trichlorophenol	ND		ug/l	26	3.5	5
p-Chloro-m-cresol	ND		ug/l	10	3.2	5
2-Chlorophenol	ND		ug/l	10	3.3	5

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-02 D Date Collected: 12/23/16 13:10

Client ID: SB8 Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	26	4.0	5
2,4-Dimethylphenol	ND		ug/l	26	8.5	5
2-Nitrophenol	ND		ug/l	52	7.9	5
4-Nitrophenol	ND		ug/l	52	9.2	5
2,4-Dinitrophenol	ND		ug/l	100	28.	5
4,6-Dinitro-o-cresol	ND		ug/l	52	11.	5
Phenol	ND		ug/l	26	9.8	5
3-Methylphenol/4-Methylphenol	ND		ug/l	26	5.8	5
2,4,5-Trichlorophenol	ND		ug/l	26	3.7	5
Carbazole	ND		ug/l	10	3.3	5
Atrazine	ND		ug/l	52	9.5	5
Benzaldehyde	ND		ug/l	26	5.7	5
Caprolactam	ND		ug/l	52	18.	5
2,3,4,6-Tetrachlorophenol	ND		ug/l	26	4.8	5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	59		21-120
Phenol-d6	45		10-120
Nitrobenzene-d5	85		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	83		41-149

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-02 D
Client ID: SB8
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/30/16 15:10
Analyst: KL

Date Collected: 12/23/16 13:10
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	4.0		ug/l	0.49	0.17	5
2-Chloronaphthalene	ND		ug/l	0.99	0.17	5
Fluoranthene	11		ug/l	0.99	0.19	5
Hexachlorobutadiene	ND		ug/l	2.5	0.18	5
Naphthalene	0.70	J	ug/l	0.99	0.21	5
Benzo(a)anthracene	3.9		ug/l	0.99	0.09	5
Benzo(a)pyrene	2.3		ug/l	0.99	0.19	5
Benzo(b)fluoranthene	3.6		ug/l	0.99	0.08	5
Benzo(k)fluoranthene	1.4		ug/l	0.99	0.21	5
Chrysene	6.6		ug/l	0.99	0.19	5
Acenaphthylene	0.95	J	ug/l	0.99	0.17	5
Anthracene	3.0		ug/l	0.99	0.17	5
Benzo(ghi)perylene	1.1		ug/l	0.99	0.21	5
Fluorene	6.9		ug/l	0.99	0.18	5
Phenanthrene	ND		ug/l	0.99	0.07	5
Dibenzo(a,h)anthracene	0.40	J	ug/l	0.99	0.19	5
Indeno(1,2,3-cd)pyrene	1.0		ug/l	0.99	0.20	5
Pyrene	12		ug/l	0.99	0.20	5
2-Methylnaphthalene	0.51	J	ug/l	0.99	0.22	5
Pentachlorophenol	ND		ug/l	4.0	1.1	5
Hexachlorobenzene	ND		ug/l	4.0	0.16	5
Hexachloroethane	ND		ug/l	4.0	0.15	5

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-02 D Date Collected: 12/23/16 13:10

Client ID: SB8 Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	52		21-120
Phenol-d6	37		10-120
Nitrobenzene-d5	68		23-120
2-Fluorobiphenyl	82		15-120
2,4,6-Tribromophenol	88		10-120
4-Terphenyl-d14	93		41-149

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-03
Client ID: SB10
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 01/02/17 18:11
Analyst: KV

Date Collected: 12/23/16 12:45
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-03
Client ID: SB10
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 12:45
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	35		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	51		10-120
4-Terphenyl-d14	71		41-149

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-03
Client ID: SB10
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/30/16 15:42
Analyst: KL

Date Collected: 12/23/16 12:45
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.32		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.14	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	0.13	J	ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.20		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	0.09	J	ug/l	0.20	0.04	1
Chrysene	0.19	J	ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	0.05	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	0.09	J	ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.20		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	0.09	J	ug/l	0.20	0.04	1
Pyrene	0.28		ug/l	0.20	0.04	1
2-Methylnaphthalene	ND		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-03 Date Collected: 12/23/16 12:45

Client ID: SB10 Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	39		21-120
Phenol-d6	31		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	70		15-120
2,4,6-Tribromophenol	60		10-120
4-Terphenyl-d14	77		41-149

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-04
Client ID: SB14
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 01/02/17 18:36
Analyst: KV

Date Collected: 12/23/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-04
Client ID: SB14
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	40		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	65		23-120
2-Fluorobiphenyl	60		15-120
2,4,6-Tribromophenol	54		10-120
4-Terphenyl-d14	60		41-149

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-04
Client ID: SB14
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 12/30/16 16:14
Analyst: KL

Date Collected: 12/23/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.03	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	ND		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
2-Methylnaphthalene	ND		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-04 Date Collected: 12/23/16 14:15

Client ID: SB14 Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	37		21-120
Phenol-d6	30		10-120
Nitrobenzene-d5	70		23-120
2-Fluorobiphenyl	66		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	70		41-149

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-06
Client ID: SS2 (0-1')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 19:27
Analyst: KV
Percent Solids: 86%

Date Collected: 12/23/16 13:35
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	140	J	ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	38.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	1200		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	910		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	66.	1
Butyl benzyl phthalate	ND		ug/kg	190	48.	1
Di-n-butylphthalate	ND		ug/kg	190	36.	1
Di-n-octylphthalate	ND		ug/kg	190	65.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	610		ug/kg	120	22.	1
Benzo(a)pyrene	540		ug/kg	150	47.	1
Benzo(b)fluoranthene	810		ug/kg	120	32.	1
Benzo(k)fluoranthene	260		ug/kg	120	31.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-06 Date Collected: 12/23/16 13:35

Client ID: SS2 (0-1') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	710		ug/kg	120	20.	1
Acenaphthylene	98	J	ug/kg	150	30.	1
Anthracene	280		ug/kg	120	37.	1
Benzo(ghi)perylene	370		ug/kg	150	23.	1
Fluorene	ND		ug/kg	190	19.	1
Phenanthrene	1500		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	110	J	ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	380		ug/kg	150	27.	1
Pyrene	1100		ug/kg	120	19.	1
Biphenyl	110	J	ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	420		ug/kg	190	18.	1
2-Methylnaphthalene	1200		ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	200		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	36.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	63.	1
2-Nitrophenol	ND		ug/kg	420	72.	1
4-Nitrophenol	ND		ug/kg	270	78.	1
2,4-Dinitrophenol	ND		ug/kg	920	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	92.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	160	J	ug/kg	190	19.	1
Atrazine	ND		ug/kg	150	67.	1
Benzaldehyde	ND		ug/kg	250	52.	1
Caprolactam	ND		ug/kg	190	58.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-06
Client ID: SS2 (0-1')
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 13:35
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	63		25-120
Phenol-d6	69		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	71		10-136
4-Terphenyl-d14	75		18-120

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-07
Client ID: SB1 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 20:18
Analyst: KV
Percent Solids: 90%

Date Collected: 12/21/16 10:30
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	19.	1
Hexachlorobenzene	ND		ug/kg	110	20.	1
Bis(2-chloroethyl)ether	ND		ug/kg	160	24.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	48.	1
2,4-Dinitrotoluene	ND		ug/kg	180	36.	1
2,6-Dinitrotoluene	ND		ug/kg	180	31.	1
Fluoranthene	400		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	19.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	31.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	190	18.	1
Hexachlorobutadiene	ND		ug/kg	180	26.	1
Hexachlorocyclopentadiene	ND		ug/kg	520	160	1
Hexachloroethane	ND		ug/kg	140	29.	1
Isophorone	ND		ug/kg	160	23.	1
Naphthalene	80	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	160	27.	1
NDPA/DPA	ND		ug/kg	140	20.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	62.	1
Butyl benzyl phthalate	ND		ug/kg	180	45.	1
Di-n-butylphthalate	ND		ug/kg	180	34.	1
Di-n-octylphthalate	ND		ug/kg	180	61.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	38.	1
Benzo(a)anthracene	140		ug/kg	110	20.	1
Benzo(a)pyrene	150		ug/kg	140	44.	1
Benzo(b)fluoranthene	230		ug/kg	110	30.	1
Benzo(k)fluoranthene	72	J	ug/kg	110	29.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-07 Date Collected: 12/21/16 10:30

Client ID: SB1 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	180		ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	140	28.	1
Anthracene	40	J	ug/kg	110	35.	1
Benzo(ghi)perylene	140		ug/kg	140	21.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	190		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	32	J	ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	130	J	ug/kg	140	25.	1
Pyrene	320		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	410	42.	1
4-Chloroaniline	ND		ug/kg	180	33.	1
2-Nitroaniline	ND		ug/kg	180	35.	1
3-Nitroaniline	ND		ug/kg	180	34.	1
4-Nitroaniline	ND		ug/kg	180	75.	1
Dibenzofuran	21	J	ug/kg	180	17.	1
2-Methylnaphthalene	50	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	22.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	34.	1
p-Chloro-m-cresol	ND		ug/kg	180	27.	1
2-Chlorophenol	ND		ug/kg	180	21.	1
2,4-Dichlorophenol	ND		ug/kg	160	29.	1
2,4-Dimethylphenol	ND		ug/kg	180	60.	1
2-Nitrophenol	ND		ug/kg	390	68.	1
4-Nitrophenol	ND		ug/kg	250	74.	1
2,4-Dinitrophenol	ND		ug/kg	870	84.	1
4,6-Dinitro-o-cresol	ND		ug/kg	470	87.	1
Pentachlorophenol	ND		ug/kg	140	40.	1
Phenol	ND		ug/kg	180	27.	1
2-Methylphenol	ND		ug/kg	180	28.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	260	28.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	34.	1
Carbazole	30	J	ug/kg	180	18.	1
Atrazine	ND		ug/kg	140	63.	1
Benzaldehyde	ND		ug/kg	240	49.	1
Caprolactam	ND		ug/kg	180	55.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	36.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-07 Date Collected: 12/21/16 10:30

Client ID: SB1 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	89		25-120
Phenol-d6	95		10-120
Nitrobenzene-d5	94		23-120
2-Fluorobiphenyl	83		30-120
2,4,6-Tribromophenol	70		10-136
4-Terphenyl-d14	77		18-120

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08 D2
Client ID: SB6 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/04/17 18:27
Analyst: MW
Percent Solids: 86%

Date Collected: 12/21/16 15:00
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	170000		ug/kg	4600	880	40
Benzo(a)anthracene	78000		ug/kg	4600	870	40
Benzo(a)pyrene	60000		ug/kg	6200	1900	40
Benzo(b)fluoranthene	80000		ug/kg	4600	1300	40
Chrysene	67000		ug/kg	4600	800	40
Anthracene	53000		ug/kg	4600	1500	40
Benzo(ghi)perylene	32000		ug/kg	6200	910	40
Phenanthrene	160000		ug/kg	4600	940	40
Indeno(1,2,3-cd)pyrene	37000		ug/kg	6200	1100	40
Pyrene	130000		ug/kg	4600	770	40

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08 D
Client ID: SB6 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 20:44
Analyst: KV
Percent Solids: 86%

Date Collected: 12/21/16 15:00
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	28000		ug/kg	620	80.	4
Hexachlorobenzene	ND		ug/kg	460	86.	4
Bis(2-chloroethyl)ether	ND		ug/kg	690	100	4
2-Chloronaphthalene	ND		ug/kg	770	76.	4
3,3'-Dichlorobenzidine	ND		ug/kg	770	200	4
2,4-Dinitrotoluene	ND		ug/kg	770	150	4
2,6-Dinitrotoluene	ND		ug/kg	770	130	4
Fluoranthene	210000	E	ug/kg	460	88.	4
4-Chlorophenyl phenyl ether	ND		ug/kg	770	82.	4
4-Bromophenyl phenyl ether	ND		ug/kg	770	120	4
Bis(2-chloroisopropyl)ether	ND		ug/kg	920	130	4
Bis(2-chloroethoxy)methane	ND		ug/kg	830	77.	4
Hexachlorobutadiene	ND		ug/kg	770	110	4
Hexachlorocyclopentadiene	ND		ug/kg	2200	700	4
Hexachloroethane	ND		ug/kg	620	120	4
Isophorone	ND		ug/kg	690	100	4
Naphthalene	1500		ug/kg	770	94.	4
Nitrobenzene	ND		ug/kg	690	110	4
NDPA/DPA	ND		ug/kg	620	88.	4
n-Nitrosodi-n-propylamine	ND		ug/kg	770	120	4
Bis(2-ethylhexyl)phthalate	ND		ug/kg	770	270	4
Butyl benzyl phthalate	ND		ug/kg	770	190	4
Di-n-butylphthalate	ND		ug/kg	770	150	4
Di-n-octylphthalate	ND		ug/kg	770	260	4
Diethyl phthalate	ND		ug/kg	770	71.	4
Dimethyl phthalate	ND		ug/kg	770	160	4
Benzo(a)anthracene	92000	E	ug/kg	460	87.	4
Benzo(a)pyrene	71000	E	ug/kg	620	190	4
Benzo(b)fluoranthene	92000	E	ug/kg	460	130	4
Benzo(k)fluoranthene	27000		ug/kg	460	120	4

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08 D Date Collected: 12/21/16 15:00

Client ID: SB6 (0-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	82000	E	ug/kg	460	80.	4
Acenaphthylene	860		ug/kg	620	120	4
Anthracene	63000	E	ug/kg	460	150	4
Benzo(ghi)perylene	36000	E	ug/kg	620	91.	4
Fluorene	26000		ug/kg	770	75.	4
Phenanthrene	210000	E	ug/kg	460	94.	4
Dibenzo(a,h)anthracene	11000		ug/kg	460	89.	4
Indeno(1,2,3-cd)pyrene	44000	E	ug/kg	620	110	4
Pyrene	170000	E	ug/kg	460	77.	4
Biphenyl	920	J	ug/kg	1800	180	4
4-Chloroaniline	ND		ug/kg	770	140	4
2-Nitroaniline	ND		ug/kg	770	150	4
3-Nitroaniline	ND		ug/kg	770	140	4
4-Nitroaniline	ND		ug/kg	770	320	4
Dibenzofuran	13000		ug/kg	770	73.	4
2-Methylnaphthalene	2300		ug/kg	920	93.	4
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	770	80.	4
Acetophenone	ND		ug/kg	770	95.	4
2,4,6-Trichlorophenol	ND		ug/kg	460	150	4
p-Chloro-m-cresol	ND		ug/kg	770	110	4
2-Chlorophenol	ND		ug/kg	770	91.	4
2,4-Dichlorophenol	ND		ug/kg	690	120	4
2,4-Dimethylphenol	ND		ug/kg	770	250	4
2-Nitrophenol	ND		ug/kg	1700	290	4
4-Nitrophenol	ND		ug/kg	1100	310	4
2,4-Dinitrophenol	ND		ug/kg	3700	360	4
4,6-Dinitro-o-cresol	ND		ug/kg	2000	370	4
Pentachlorophenol	ND		ug/kg	620	170	4
Phenol	ND		ug/kg	770	120	4
2-Methylphenol	ND		ug/kg	770	120	4
3-Methylphenol/4-Methylphenol	ND		ug/kg	1100	120	4
2,4,5-Trichlorophenol	ND		ug/kg	770	150	4
Carbazole	14000		ug/kg	770	75.	4
Atrazine	ND		ug/kg	620	270	4
Benzaldehyde	ND		ug/kg	1000	210	4
Caprolactam	ND		ug/kg	770	230	4
2,3,4,6-Tetrachlorophenol	ND		ug/kg	770	160	4

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08 D Date Collected: 12/21/16 15:00

Client ID: SB6 (0-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	85		25-120
Phenol-d6	92		10-120
Nitrobenzene-d5	91		23-120
2-Fluorobiphenyl	79		30-120
2,4,6-Tribromophenol	84		10-136
4-Terphenyl-d14	88		18-120

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-09
Client ID: SB7 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 21:09
Analyst: KV
Percent Solids: 86%

Date Collected: 12/21/16 15:30
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	74	J	ug/kg	150	20.	1
Hexachlorobenzene	ND		ug/kg	120	22.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	26.	1
2-Chloronaphthalene	ND		ug/kg	190	19.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	51.	1
2,4-Dinitrotoluene	ND		ug/kg	190	39.	1
2,6-Dinitrotoluene	ND		ug/kg	190	33.	1
Fluoranthene	2800		ug/kg	120	22.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	21.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	29.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	230	33.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	210	19.	1
Hexachlorobutadiene	ND		ug/kg	190	28.	1
Hexachlorocyclopentadiene	ND		ug/kg	550	170	1
Hexachloroethane	ND		ug/kg	150	31.	1
Isophorone	ND		ug/kg	170	25.	1
Naphthalene	140	J	ug/kg	190	24.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	22.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	30.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	67.	1
Butyl benzyl phthalate	ND		ug/kg	190	49.	1
Di-n-butylphthalate	ND		ug/kg	190	37.	1
Di-n-octylphthalate	ND		ug/kg	190	66.	1
Diethyl phthalate	ND		ug/kg	190	18.	1
Dimethyl phthalate	ND		ug/kg	190	40.	1
Benzo(a)anthracene	1300		ug/kg	120	22.	1
Benzo(a)pyrene	1100		ug/kg	150	47.	1
Benzo(b)fluoranthene	1700		ug/kg	120	32.	1
Benzo(k)fluoranthene	600		ug/kg	120	31.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-09 Date Collected: 12/21/16 15:30

Client ID: SB7 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	1400		ug/kg	120	20.	1
Acenaphthylene	56	J	ug/kg	150	30.	1
Anthracene	210		ug/kg	120	38.	1
Benzo(ghi)perylene	720		ug/kg	150	23.	1
Fluorene	56	J	ug/kg	190	19.	1
Phenanthrene	800		ug/kg	120	23.	1
Dibenzo(a,h)anthracene	180		ug/kg	120	22.	1
Indeno(1,2,3-cd)pyrene	790		ug/kg	150	27.	1
Pyrene	2300		ug/kg	120	19.	1
Biphenyl	ND		ug/kg	440	45.	1
4-Chloroaniline	ND		ug/kg	190	35.	1
2-Nitroaniline	ND		ug/kg	190	37.	1
3-Nitroaniline	ND		ug/kg	190	36.	1
4-Nitroaniline	ND		ug/kg	190	80.	1
Dibenzofuran	55	J	ug/kg	190	18.	1
2-Methylnaphthalene	120	J	ug/kg	230	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	24.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	37.	1
p-Chloro-m-cresol	ND		ug/kg	190	29.	1
2-Chlorophenol	ND		ug/kg	190	23.	1
2,4-Dichlorophenol	ND		ug/kg	170	31.	1
2,4-Dimethylphenol	ND		ug/kg	190	64.	1
2-Nitrophenol	ND		ug/kg	420	73.	1
4-Nitrophenol	ND		ug/kg	270	79.	1
2,4-Dinitrophenol	ND		ug/kg	930	90.	1
4,6-Dinitro-o-cresol	ND		ug/kg	500	93.	1
Pentachlorophenol	ND		ug/kg	150	42.	1
Phenol	ND		ug/kg	190	29.	1
2-Methylphenol	ND		ug/kg	190	30.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	280	30.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	37.	1
Carbazole	110	J	ug/kg	190	19.	1
Atrazine	ND		ug/kg	150	68.	1
Benzaldehyde	ND		ug/kg	250	52.	1
Caprolactam	ND		ug/kg	190	59.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	39.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-09 Date Collected: 12/21/16 15:30

Client ID: SB7 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	78		25-120
Phenol-d6	88		10-120
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	78		30-120
2,4,6-Tribromophenol	63		10-136
4-Terphenyl-d14	70		18-120

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10
Client ID: SB8 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 21:34
Analyst: KV
Percent Solids: 80%

Date Collected: 12/22/16 09:05
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	1400		ug/kg	160	21.	1
Hexachlorobenzene	ND		ug/kg	120	23.	1
Bis(2-chloroethyl)ether	ND		ug/kg	180	28.	1
2-Chloronaphthalene	ND		ug/kg	210	20.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	55.	1
2,4-Dinitrotoluene	ND		ug/kg	210	41.	1
2,6-Dinitrotoluene	ND		ug/kg	210	35.	1
Fluoranthene	6800		ug/kg	120	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	22.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	32.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	250	35.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	220	21.	1
Hexachlorobutadiene	ND		ug/kg	210	30.	1
Hexachlorocyclopentadiene	ND		ug/kg	590	190	1
Hexachloroethane	ND		ug/kg	160	33.	1
Isophorone	ND		ug/kg	180	27.	1
Naphthalene	350		ug/kg	210	25.	1
Nitrobenzene	ND		ug/kg	180	30.	1
NDPA/DPA	ND		ug/kg	160	23.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	32.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	210	71.	1
Butyl benzyl phthalate	ND		ug/kg	210	52.	1
Di-n-butylphthalate	ND		ug/kg	210	39.	1
Di-n-octylphthalate	ND		ug/kg	210	70.	1
Diethyl phthalate	ND		ug/kg	210	19.	1
Dimethyl phthalate	ND		ug/kg	210	43.	1
Benzo(a)anthracene	2500		ug/kg	120	23.	1
Benzo(a)pyrene	1400		ug/kg	160	50.	1
Benzo(b)fluoranthene	2400		ug/kg	120	35.	1
Benzo(k)fluoranthene	720		ug/kg	120	33.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10 Date Collected: 12/22/16 09:05

Client ID: SB8 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	3000		ug/kg	120	21.	1
Acenaphthylene	ND		ug/kg	160	32.	1
Anthracene	2200		ug/kg	120	40.	1
Benzo(ghi)perylene	910		ug/kg	160	24.	1
Fluorene	2700		ug/kg	210	20.	1
Phenanthrene	8900	E	ug/kg	120	25.	1
Dibenzo(a,h)anthracene	300		ug/kg	120	24.	1
Indeno(1,2,3-cd)pyrene	900		ug/kg	160	29.	1
Pyrene	6500		ug/kg	120	20.	1
Biphenyl	ND		ug/kg	470	48.	1
4-Chloroaniline	ND		ug/kg	210	38.	1
2-Nitroaniline	ND		ug/kg	210	40.	1
3-Nitroaniline	ND		ug/kg	210	39.	1
4-Nitroaniline	ND		ug/kg	210	85.	1
Dibenzofuran	950		ug/kg	210	20.	1
2-Methylnaphthalene	440		ug/kg	250	25.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	22.	1
Acetophenone	ND		ug/kg	210	26.	1
2,4,6-Trichlorophenol	ND		ug/kg	120	39.	1
p-Chloro-m-cresol	ND		ug/kg	210	31.	1
2-Chlorophenol	ND		ug/kg	210	24.	1
2,4-Dichlorophenol	ND		ug/kg	180	33.	1
2,4-Dimethylphenol	ND		ug/kg	210	68.	1
2-Nitrophenol	ND		ug/kg	450	78.	1
4-Nitrophenol	ND		ug/kg	290	84.	1
2,4-Dinitrophenol	ND		ug/kg	990	96.	1
4,6-Dinitro-o-cresol	ND		ug/kg	540	99.	1
Pentachlorophenol	ND		ug/kg	160	45.	1
Phenol	ND		ug/kg	210	31.	1
2-Methylphenol	ND		ug/kg	210	32.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	300	32.	1
2,4,5-Trichlorophenol	ND		ug/kg	210	40.	1
Carbazole	ND		ug/kg	210	20.	1
Atrazine	ND		ug/kg	160	72.	1
Benzaldehyde	ND		ug/kg	270	56.	1
Caprolactam	ND		ug/kg	210	63.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	210	42.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10 Date Collected: 12/22/16 09:05

Client ID: SB8 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	49		25-120
Phenol-d6	52		10-120
Nitrobenzene-d5	71		23-120
2-Fluorobiphenyl	52		30-120
2,4,6-Tribromophenol	55		10-136
4-Terphenyl-d14	52		18-120

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10 D
Client ID: SB8 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/04/17 18:02
Analyst: MW
Percent Solids: 80%

Date Collected: 12/22/16 09:05
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Phenanthrene	8900		ug/kg	250	50.	2

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-12 D
Client ID: SB9 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 22:00
Analyst: KV
Percent Solids: 86%

Date Collected: 12/22/16 09:30
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	2800		ug/kg	750	97.	5
Hexachlorobenzene	ND		ug/kg	560	100	5
Bis(2-chloroethyl)ether	ND		ug/kg	840	130	5
2-Chloronaphthalene	ND		ug/kg	940	93.	5
3,3'-Dichlorobenzidine	ND		ug/kg	940	250	5
2,4-Dinitrotoluene	ND		ug/kg	940	190	5
2,6-Dinitrotoluene	ND		ug/kg	940	160	5
Fluoranthene	29000		ug/kg	560	110	5
4-Chlorophenyl phenyl ether	ND		ug/kg	940	100	5
4-Bromophenyl phenyl ether	ND		ug/kg	940	140	5
Bis(2-chloroisopropyl)ether	ND		ug/kg	1100	160	5
Bis(2-chloroethoxy)methane	ND		ug/kg	1000	94.	5
Hexachlorobutadiene	ND		ug/kg	940	140	5
Hexachlorocyclopentadiene	ND		ug/kg	2700	850	5
Hexachloroethane	ND		ug/kg	750	150	5
Isophorone	ND		ug/kg	840	120	5
Naphthalene	2100		ug/kg	940	110	5
Nitrobenzene	ND		ug/kg	840	140	5
NDPA/DPA	ND		ug/kg	750	110	5
n-Nitrosodi-n-propylamine	ND		ug/kg	940	140	5
Bis(2-ethylhexyl)phthalate	ND		ug/kg	940	320	5
Butyl benzyl phthalate	ND		ug/kg	940	240	5
Di-n-butylphthalate	ND		ug/kg	940	180	5
Di-n-octylphthalate	ND		ug/kg	940	320	5
Diethyl phthalate	ND		ug/kg	940	87.	5
Dimethyl phthalate	ND		ug/kg	940	200	5
Benzo(a)anthracene	12000		ug/kg	560	100	5
Benzo(a)pyrene	11000		ug/kg	750	230	5
Benzo(b)fluoranthene	16000		ug/kg	560	160	5
Benzo(k)fluoranthene	5900		ug/kg	560	150	5

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-12 D Date Collected: 12/22/16 09:30

Client ID: SB9 (0-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	13000		ug/kg	560	97.	5
Acenaphthylene	320	J	ug/kg	750	140	5
Anthracene	5100		ug/kg	560	180	5
Benzo(ghi)perylene	6500		ug/kg	750	110	5
Fluorene	2600		ug/kg	940	91.	5
Phenanthrene	24000		ug/kg	560	110	5
Dibenzo(a,h)anthracene	1900		ug/kg	560	110	5
Indeno(1,2,3-cd)pyrene	7900		ug/kg	750	130	5
Pyrene	21000		ug/kg	560	93.	5
Biphenyl	ND		ug/kg	2100	220	5
4-Chloroaniline	ND		ug/kg	940	170	5
2-Nitroaniline	ND		ug/kg	940	180	5
3-Nitroaniline	ND		ug/kg	940	180	5
4-Nitroaniline	ND		ug/kg	940	390	5
Dibenzofuran	1600		ug/kg	940	88.	5
2-Methylnaphthalene	700	J	ug/kg	1100	110	5
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	940	98.	5
Acetophenone	ND		ug/kg	940	120	5
2,4,6-Trichlorophenol	ND		ug/kg	560	180	5
p-Chloro-m-cresol	ND		ug/kg	940	140	5
2-Chlorophenol	ND		ug/kg	940	110	5
2,4-Dichlorophenol	ND		ug/kg	840	150	5
2,4-Dimethylphenol	ND		ug/kg	940	310	5
2-Nitrophenol	ND		ug/kg	2000	350	5
4-Nitrophenol	ND		ug/kg	1300	380	5
2,4-Dinitrophenol	ND		ug/kg	4500	440	5
4,6-Dinitro-o-cresol	ND		ug/kg	2400	450	5
Pentachlorophenol	ND		ug/kg	750	210	5
Phenol	ND		ug/kg	940	140	5
2-Methylphenol	ND		ug/kg	940	140	5
3-Methylphenol/4-Methylphenol	ND		ug/kg	1300	150	5
2,4,5-Trichlorophenol	ND		ug/kg	940	180	5
Carbazole	3900		ug/kg	940	91.	5
Atrazine	ND		ug/kg	750	330	5
Benzaldehyde	ND		ug/kg	1200	250	5
Caprolactam	ND		ug/kg	940	280	5
2,3,4,6-Tetrachlorophenol	ND		ug/kg	940	190	5

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-12 D Date Collected: 12/22/16 09:30

Client ID: SB9 (0-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	65		25-120
Phenol-d6	70		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	69		30-120
2,4,6-Tribromophenol	68		10-136
4-Terphenyl-d14	60		18-120

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-15
Client ID: SB13 (1-5')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 22:25
Analyst: KV
Percent Solids: 89%

Date Collected: 12/22/16 12:30
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	580		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	6000		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	140	J	ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	47.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	3300		ug/kg	110	21.	1
Benzo(a)pyrene	3100		ug/kg	150	45.	1
Benzo(b)fluoranthene	3800		ug/kg	110	31.	1
Benzo(k)fluoranthene	1200		ug/kg	110	30.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-15 Date Collected: 12/22/16 12:30

Client ID: SB13 (1-5') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	3400		ug/kg	110	19.	1
Acenaphthylene	56	J	ug/kg	150	29.	1
Anthracene	1300		ug/kg	110	36.	1
Benzo(ghi)perylene	1800		ug/kg	150	22.	1
Fluorene	540		ug/kg	180	18.	1
Phenanthrene	5100		ug/kg	110	22.	1
Dibenzo(a,h)anthracene	500		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	2000		ug/kg	150	26.	1
Pyrene	5300		ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	77.	1
Dibenzofuran	300		ug/kg	180	18.	1
2-Methylnaphthalene	80	J	ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	36.	1
Carbazole	650		ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-15 Date Collected: 12/22/16 12:30

Client ID: SB13 (1-5') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	90		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	80		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	75		18-120

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-17
Client ID: SB16 (.5-4.5)
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 19:02
Analyst: KV
Percent Solids: 88%

Date Collected: 12/22/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	180	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	180	49.	1
2,4-Dinitrotoluene	ND		ug/kg	180	37.	1
2,6-Dinitrotoluene	ND		ug/kg	180	32.	1
Fluoranthene	55	J	ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	180	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	180	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	18.	1
Hexachlorobutadiene	ND		ug/kg	180	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	530	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	ND		ug/kg	180	22.	1
Nitrobenzene	ND		ug/kg	170	27.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	180	28.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	180	64.	1
Butyl benzyl phthalate	ND		ug/kg	180	46.	1
Di-n-butylphthalate	ND		ug/kg	180	35.	1
Di-n-octylphthalate	ND		ug/kg	180	63.	1
Diethyl phthalate	ND		ug/kg	180	17.	1
Dimethyl phthalate	ND		ug/kg	180	39.	1
Benzo(a)anthracene	29	J	ug/kg	110	21.	1
Benzo(a)pyrene	ND		ug/kg	150	45.	1
Benzo(b)fluoranthene	ND		ug/kg	110	31.	1
Benzo(k)fluoranthene	ND		ug/kg	110	30.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-17 Date Collected: 12/22/16 14:15

Client ID: SB16 (.5-4.5) Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	26	J	ug/kg	110	19.	1
Acenaphthylene	ND		ug/kg	150	28.	1
Anthracene	ND		ug/kg	110	36.	1
Benzo(ghi)perylene	ND		ug/kg	150	22.	1
Fluorene	ND		ug/kg	180	18.	1
Phenanthrene	47	J	ug/kg	110	22.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	21.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	26.	1
Pyrene	46	J	ug/kg	110	18.	1
Biphenyl	ND		ug/kg	420	43.	1
4-Chloroaniline	ND		ug/kg	180	34.	1
2-Nitroaniline	ND		ug/kg	180	36.	1
3-Nitroaniline	ND		ug/kg	180	35.	1
4-Nitroaniline	ND		ug/kg	180	76.	1
Dibenzofuran	ND		ug/kg	180	17.	1
2-Methylnaphthalene	ND		ug/kg	220	22.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	180	19.	1
Acetophenone	ND		ug/kg	180	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	180	28.	1
2-Chlorophenol	ND		ug/kg	180	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	180	61.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	75.	1
2,4-Dinitrophenol	ND		ug/kg	890	86.	1
4,6-Dinitro-o-cresol	ND		ug/kg	480	89.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	180	28.	1
2-Methylphenol	ND		ug/kg	180	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	180	35.	1
Carbazole	ND		ug/kg	180	18.	1
Atrazine	ND		ug/kg	150	65.	1
Benzaldehyde	ND		ug/kg	240	50.	1
Caprolactam	ND		ug/kg	180	56.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	180	37.	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-17
Client ID: SB16 (.5-4.5)
Sample Location: MPC BUFFALO, NY
Date Collected: 12/22/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	90		25-120
Phenol-d6	100		10-120
Nitrobenzene-d5	97		23-120
2-Fluorobiphenyl	88		30-120
2,4,6-Tribromophenol	85		10-136
4-Terphenyl-d14	83		18-120

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18
Client ID: SB21 (1-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 22:51
Analyst: KV
Percent Solids: 78%

Date Collected: 12/23/16 08:30
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	980		ug/kg	170	22.	1
Hexachlorobenzene	ND		ug/kg	130	24.	1
Bis(2-chloroethyl)ether	ND		ug/kg	190	29.	1
2-Chloronaphthalene	ND		ug/kg	210	21.	1
3,3'-Dichlorobenzidine	ND		ug/kg	210	57.	1
2,4-Dinitrotoluene	ND		ug/kg	210	43.	1
2,6-Dinitrotoluene	ND		ug/kg	210	36.	1
Fluoranthene	13000	E	ug/kg	130	24.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	210	23.	1
4-Bromophenyl phenyl ether	ND		ug/kg	210	32.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	260	36.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	230	21.	1
Hexachlorobutadiene	ND		ug/kg	210	31.	1
Hexachlorocyclopentadiene	ND		ug/kg	610	190	1
Hexachloroethane	ND		ug/kg	170	34.	1
Isophorone	ND		ug/kg	190	28.	1
Naphthalene	470		ug/kg	210	26.	1
Nitrobenzene	ND		ug/kg	190	32.	1
NDPA/DPA	ND		ug/kg	170	24.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	210	33.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	210	74.	1
Butyl benzyl phthalate	ND		ug/kg	210	54.	1
Di-n-butylphthalate	ND		ug/kg	210	40.	1
Di-n-octylphthalate	ND		ug/kg	210	72.	1
Diethyl phthalate	ND		ug/kg	210	20.	1
Dimethyl phthalate	ND		ug/kg	210	45.	1
Benzo(a)anthracene	5600		ug/kg	130	24.	1
Benzo(a)pyrene	4800		ug/kg	170	52.	1
Benzo(b)fluoranthene	6200		ug/kg	130	36.	1
Benzo(k)fluoranthene	2300		ug/kg	130	34.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18 Date Collected: 12/23/16 08:30

Client ID: SB21 (1-4') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	5300		ug/kg	130	22.	1
Acenaphthylene	210		ug/kg	170	33.	1
Anthracene	2600		ug/kg	130	42.	1
Benzo(ghi)perylene	2700		ug/kg	170	25.	1
Fluorene	1000		ug/kg	210	21.	1
Phenanthrene	10000	E	ug/kg	130	26.	1
Dibenzo(a,h)anthracene	810		ug/kg	130	25.	1
Indeno(1,2,3-cd)pyrene	3100		ug/kg	170	30.	1
Pyrene	10000	E	ug/kg	130	21.	1
Biphenyl	90	J	ug/kg	480	49.	1
4-Chloroaniline	ND		ug/kg	210	39.	1
2-Nitroaniline	ND		ug/kg	210	41.	1
3-Nitroaniline	ND		ug/kg	210	40.	1
4-Nitroaniline	ND		ug/kg	210	88.	1
Dibenzofuran	610		ug/kg	210	20.	1
2-Methylnaphthalene	450		ug/kg	260	26.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	210	22.	1
Acetophenone	ND		ug/kg	210	26.	1
2,4,6-Trichlorophenol	ND		ug/kg	130	40.	1
p-Chloro-m-cresol	ND		ug/kg	210	32.	1
2-Chlorophenol	ND		ug/kg	210	25.	1
2,4-Dichlorophenol	ND		ug/kg	190	34.	1
2,4-Dimethylphenol	ND		ug/kg	210	70.	1
2-Nitrophenol	ND		ug/kg	460	80.	1
4-Nitrophenol	ND		ug/kg	300	87.	1
2,4-Dinitrophenol	ND		ug/kg	1000	99.	1
4,6-Dinitro-o-cresol	ND		ug/kg	550	100	1
Pentachlorophenol	ND		ug/kg	170	47.	1
Phenol	ND		ug/kg	210	32.	1
2-Methylphenol	ND		ug/kg	210	33.	1
3-Methylphenol/4-Methylphenol	57	J	ug/kg	310	33.	1
2,4,5-Trichlorophenol	ND		ug/kg	210	41.	1
Carbazole	1100		ug/kg	210	21.	1
Atrazine	ND		ug/kg	170	74.	1
Benzaldehyde	ND		ug/kg	280	58.	1
Caprolactam	ND		ug/kg	210	65.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	210	43.	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18
Client ID: SB21 (1-4')
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 08:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	81		25-120
Phenol-d6	85		10-120
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	76		30-120
2,4,6-Tribromophenol	83		10-136
4-Terphenyl-d14	63		18-120

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18 D
Client ID: SB21 (1-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/04/17 18:53
Analyst: MW
Percent Solids: 78%

Date Collected: 12/23/16 08:30
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Fluoranthene	13000		ug/kg	260	49.	2
Phenanthrene	9600		ug/kg	260	52.	2
Pyrene	10000		ug/kg	260	42.	2

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-19
Client ID: SB25 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/02/17 19:53
Analyst: KV
Percent Solids: 88%

Date Collected: 12/23/16 10:15
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	290		ug/kg	150	19.	1
Hexachlorobenzene	ND		ug/kg	110	21.	1
Bis(2-chloroethyl)ether	ND		ug/kg	170	25.	1
2-Chloronaphthalene	ND		ug/kg	190	18.	1
3,3'-Dichlorobenzidine	ND		ug/kg	190	50.	1
2,4-Dinitrotoluene	ND		ug/kg	190	37.	1
2,6-Dinitrotoluene	ND		ug/kg	190	32.	1
Fluoranthene	4900		ug/kg	110	21.	1
4-Chlorophenyl phenyl ether	ND		ug/kg	190	20.	1
4-Bromophenyl phenyl ether	ND		ug/kg	190	28.	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	220	32.	1
Bis(2-chloroethoxy)methane	ND		ug/kg	200	19.	1
Hexachlorobutadiene	ND		ug/kg	190	27.	1
Hexachlorocyclopentadiene	ND		ug/kg	540	170	1
Hexachloroethane	ND		ug/kg	150	30.	1
Isophorone	ND		ug/kg	170	24.	1
Naphthalene	260		ug/kg	190	23.	1
Nitrobenzene	ND		ug/kg	170	28.	1
NDPA/DPA	ND		ug/kg	150	21.	1
n-Nitrosodi-n-propylamine	ND		ug/kg	190	29.	1
Bis(2-ethylhexyl)phthalate	ND		ug/kg	190	65.	1
Butyl benzyl phthalate	ND		ug/kg	190	47.	1
Di-n-butylphthalate	ND		ug/kg	190	35.	1
Di-n-octylphthalate	ND		ug/kg	190	64.	1
Diethyl phthalate	ND		ug/kg	190	17.	1
Dimethyl phthalate	ND		ug/kg	190	39.	1
Benzo(a)anthracene	2600		ug/kg	110	21.	1
Benzo(a)pyrene	2300		ug/kg	150	46.	1
Benzo(b)fluoranthene	3000		ug/kg	110	32.	1
Benzo(k)fluoranthene	980		ug/kg	110	30.	1

Project Name: BCP PH. II ESA **Lab Number:** L1642311

Project Number: E1609 **Report Date:** 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-19 Date Collected: 12/23/16 10:15

Client ID: SB25 (2-6') Date Received: 12/28/16

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Chrysene	2700		ug/kg	110	19.	1
Acenaphthylene	110	J	ug/kg	150	29.	1
Anthracene	780		ug/kg	110	36.	1
Benzo(ghi)perylene	1200		ug/kg	150	22.	1
Fluorene	290		ug/kg	190	18.	1
Phenanthrene	3800		ug/kg	110	23.	1
Dibenzo(a,h)anthracene	370		ug/kg	110	22.	1
Indeno(1,2,3-cd)pyrene	1400		ug/kg	150	26.	1
Pyrene	4300		ug/kg	110	19.	1
Biphenyl	49	J	ug/kg	430	43.	1
4-Chloroaniline	ND		ug/kg	190	34.	1
2-Nitroaniline	ND		ug/kg	190	36.	1
3-Nitroaniline	ND		ug/kg	190	35.	1
4-Nitroaniline	ND		ug/kg	190	77.	1
Dibenzofuran	180	J	ug/kg	190	18.	1
2-Methylnaphthalene	250		ug/kg	220	23.	1
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	190	20.	1
Acetophenone	ND		ug/kg	190	23.	1
2,4,6-Trichlorophenol	ND		ug/kg	110	35.	1
p-Chloro-m-cresol	ND		ug/kg	190	28.	1
2-Chlorophenol	ND		ug/kg	190	22.	1
2,4-Dichlorophenol	ND		ug/kg	170	30.	1
2,4-Dimethylphenol	ND		ug/kg	190	62.	1
2-Nitrophenol	ND		ug/kg	400	70.	1
4-Nitrophenol	ND		ug/kg	260	76.	1
2,4-Dinitrophenol	ND		ug/kg	900	87.	1
4,6-Dinitro-o-cresol	ND		ug/kg	490	90.	1
Pentachlorophenol	ND		ug/kg	150	41.	1
Phenol	ND		ug/kg	190	28.	1
2-Methylphenol	ND		ug/kg	190	29.	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	270	29.	1
2,4,5-Trichlorophenol	ND		ug/kg	190	36.	1
Carbazole	360		ug/kg	190	18.	1
Atrazine	ND		ug/kg	150	66.	1
Benzaldehyde	ND		ug/kg	250	50.	1
Caprolactam	ND		ug/kg	190	57.	1
2,3,4,6-Tetrachlorophenol	ND		ug/kg	190	38.	1

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-19
Client ID: SB25 (2-6')
Sample Location: MPC BUFFALO, NY
Date Collected: 12/23/16 10:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	56		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	83		23-120
2-Fluorobiphenyl	75		30-120
2,4,6-Tribromophenol	67		10-136
4-Terphenyl-d14	72		18-120

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/01/17 23:07
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG965831-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Isophorone	ND		ug/l	5.0	0.60
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63
Dimethyl phthalate	ND		ug/l	5.0	0.65
Biphenyl	ND		ug/l	2.0	0.76
4-Chloroaniline	ND		ug/l	5.0	0.63
2-Nitroaniline	ND		ug/l	5.0	1.1
3-Nitroaniline	ND		ug/l	5.0	1.2
4-Nitroaniline	ND		ug/l	5.0	1.3
Dibenzofuran	ND		ug/l	2.0	0.66
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67
Acetophenone	ND		ug/l	5.0	0.85
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/01/17 23:07
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG965831-1					
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Phenol	ND		ug/l	5.0	1.9
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72
Carbazole	ND		ug/l	2.0	0.63
Atrazine	ND		ug/l	10	1.8
Benzaldehyde	ND		ug/l	5.0	1.1
Caprolactam	ND		ug/l	10	3.6
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/01/17 23:07
Analyst: ALS

Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG965831-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		21-120
Phenol-d6	34		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	71		15-120
2,4,6-Tribromophenol	78		10-120
4-Terphenyl-d14	75		41-149

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/30/16 12:06
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-04 Batch: WG965832-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	ND		ug/l	0.20	0.04
Benzo(a)anthracene	ND		ug/l	0.20	0.02
Benzo(a)pyrene	ND		ug/l	0.20	0.04
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04
Chrysene	ND		ug/l	0.20	0.04
Acenaphthylene	ND		ug/l	0.20	0.04
Anthracene	ND		ug/l	0.20	0.04
Benzo(ghi)perylene	ND		ug/l	0.20	0.04
Fluorene	ND		ug/l	0.20	0.04
Phenanthrene	ND		ug/l	0.20	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04
Pyrene	ND		ug/l	0.20	0.04
2-Methylnaphthalene	ND		ug/l	0.20	0.05
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 12/30/16 12:06
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 12/29/16 19:27

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 02-04 Batch: WG965832-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	43		21-120
Phenol-d6	32		10-120
Nitrobenzene-d5	81		23-120
2-Fluorobiphenyl	75		15-120
2,4,6-Tribromophenol	75		10-120
4-Terphenyl-d14	84		41-149

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/17 23:57
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-10,12,15,17-19 Batch: WG966076-1					
Acenaphthene	ND		ug/kg	130	17.
Hexachlorobenzene	ND		ug/kg	98	18.
Bis(2-chloroethyl)ether	ND		ug/kg	150	22.
2-Chloronaphthalene	ND		ug/kg	160	16.
3,3'-Dichlorobenzidine	ND		ug/kg	160	44.
2,4-Dinitrotoluene	ND		ug/kg	160	33.
2,6-Dinitrotoluene	ND		ug/kg	160	28.
Fluoranthene	ND		ug/kg	98	19.
4-Chlorophenyl phenyl ether	ND		ug/kg	160	18.
4-Bromophenyl phenyl ether	ND		ug/kg	160	25.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	28.
Bis(2-chloroethoxy)methane	ND		ug/kg	180	16.
Hexachlorobutadiene	ND		ug/kg	160	24.
Hexachlorocyclopentadiene	ND		ug/kg	470	150
Hexachloroethane	ND		ug/kg	130	26.
Isophorone	ND		ug/kg	150	21.
Naphthalene	ND		ug/kg	160	20.
Nitrobenzene	ND		ug/kg	150	24.
NDPA/DPA	ND		ug/kg	130	19.
n-Nitrosodi-n-propylamine	ND		ug/kg	160	25.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	57.
Butyl benzyl phthalate	ND		ug/kg	160	41.
Di-n-butylphthalate	ND		ug/kg	160	31.
Di-n-octylphthalate	ND		ug/kg	160	56.
Diethyl phthalate	ND		ug/kg	160	15.
Dimethyl phthalate	ND		ug/kg	160	34.
Benzo(a)anthracene	ND		ug/kg	98	18.
Benzo(a)pyrene	ND		ug/kg	130	40.
Benzo(b)fluoranthene	ND		ug/kg	98	28.

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/17 23:57
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-10,12,15,17-19 Batch: WG966076-1					
Benzo(k)fluoranthene	ND		ug/kg	98	26.
Chrysene	ND		ug/kg	98	17.
Acenaphthylene	ND		ug/kg	130	25.
Anthracene	ND		ug/kg	98	32.
Benzo(ghi)perylene	ND		ug/kg	130	19.
Fluorene	ND		ug/kg	160	16.
Phenanthrene	ND		ug/kg	98	20.
Dibenzo(a,h)anthracene	ND		ug/kg	98	19.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	23.
Pyrene	ND		ug/kg	98	16.
Biphenyl	ND		ug/kg	370	38.
4-Chloroaniline	ND		ug/kg	160	30.
2-Nitroaniline	ND		ug/kg	160	32.
3-Nitroaniline	ND		ug/kg	160	31.
4-Nitroaniline	ND		ug/kg	160	68.
Dibenzofuran	ND		ug/kg	160	15.
2-Methylnaphthalene	ND		ug/kg	200	20.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160	17.
Acetophenone	ND		ug/kg	160	20.
2,4,6-Trichlorophenol	ND		ug/kg	98	31.
p-Chloro-m-cresol	ND		ug/kg	160	24.
2-Chlorophenol	ND		ug/kg	160	19.
2,4-Dichlorophenol	ND		ug/kg	150	26.
2,4-Dimethylphenol	ND		ug/kg	160	54.
2-Nitrophenol	ND		ug/kg	350	62.
4-Nitrophenol	ND		ug/kg	230	67.
2,4-Dinitrophenol	ND		ug/kg	790	76.
4,6-Dinitro-o-cresol	ND		ug/kg	420	79.
Pentachlorophenol	ND		ug/kg	130	36.

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/04/17 23:57
Analyst: KV

Extraction Method: EPA 3546
Extraction Date: 12/30/16 13:22

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 06-10,12,15,17-19 Batch: WG966076-1					
Phenol	ND		ug/kg	160	25.
2-Methylphenol	ND		ug/kg	160	25.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	26.
2,4,5-Trichlorophenol	ND		ug/kg	160	31.
Carbazole	ND		ug/kg	160	16.
Atrazine	ND		ug/kg	130	57.
Benzaldehyde	ND		ug/kg	220	44.
Caprolactam	ND		ug/kg	160	50.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160	33.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	80		25-120
Phenol-d6	82		10-120
Nitrobenzene-d5	82		23-120
2-Fluorobiphenyl	74		30-120
2,4,6-Tribromophenol	96		10-136
4-Terphenyl-d14	88		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG965831-2 WG965831-3								
Acenaphthene	74		74		37-111	0		30
Benzidine	**4**	Q	**4**	Q	10-75	5		30
1,2,4-Trichlorobenzene	72		65		39-98	10		30
Hexachlorobenzene	74		76		40-140	3		30
Bis(2-chloroethyl)ether	68		64		40-140	6		30
2-Chloronaphthalene	78		73		40-140	7		30
1,2-Dichlorobenzene	66		60		40-140	10		30
1,3-Dichlorobenzene	63		59		40-140	7		30
1,4-Dichlorobenzene	64		59		36-97	8		30
3,3'-Dichlorobenzidine	67		72		40-140	7		30
2,4-Dinitrotoluene	80		82		48-143	2		30
2,6-Dinitrotoluene	87		86		40-140	1		30
Azobenzene	77		77		40-140	0		30
Fluoranthene	75		76		40-140	1		30
4-Chlorophenyl phenyl ether	75		74		40-140	1		30
4-Bromophenyl phenyl ether	75		77		40-140	3		30
Bis(2-chloroisopropyl)ether	65		62		40-140	5		30
Bis(2-chloroethoxy)methane	77		73		40-140	5		30
Hexachlorobutadiene	73		68		40-140	7		30
Hexachlorocyclopentadiene	75		68		40-140	10		30
Hexachloroethane	68		63		40-140	8		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG965831-2 WG965831-3								
Isophorone	81		77		40-140	5		30
Naphthalene	72		67		40-140	7		30
Nitrobenzene	77		72		40-140	7		30
NitrosoDiPhenylAmine(NDPA)/DPA	76		76		40-140	0		30
n-Nitrosodi-n-propylamine	79		74		29-132	7		30
Bis(2-Ethylhexyl)phthalate	87		88		40-140	1		30
Butyl benzyl phthalate	82		83		40-140	1		30
Di-n-butylphthalate	83		84		40-140	1		30
Di-n-octylphthalate	91		90		40-140	1		30
Diethyl phthalate	80		80		40-140	0		30
Dimethyl phthalate	83		80		40-140	4		30
Benzo(a)anthracene	77		75		40-140	3		30
Benzo(a)pyrene	77		76		40-140	1		30
Benzo(b)fluoranthene	79		79		40-140	0		30
Benzo(k)fluoranthene	72		72		40-140	0		30
Chrysene	74		72		40-140	3		30
Acenaphthylene	81		77		45-123	5		30
Anthracene	75		77		40-140	3		30
Benzo(ghi)perylene	76		77		40-140	1		30
Fluorene	77		76		40-140	1		30
Phenanthrene	72		73		40-140	1		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG965831-2 WG965831-3								
Dibenzo(a,h)anthracene	77		78		40-140	1		30
Indeno(1,2,3-cd)Pyrene	81		82		40-140	1		30
Pyrene	72		74		26-127	3		30
Biphenyl	83		78		40-140	6		30
Aniline	**33**	Q	**35**	Q	40-140	6		30
4-Chloroaniline	62		56		40-140	10		30
1-Methylnaphthalene	77		75		41-103	3		30
2-Nitroaniline	90		86		52-143	5		30
3-Nitroaniline	66		65		25-145	2		30
4-Nitroaniline	77		77		51-143	0		30
Dibenzofuran	74		75		40-140	1		30
2-Methylnaphthalene	77		70		40-140	10		30
1,2,4,5-Tetrachlorobenzene	79		75		2-134	5		30
Pentachloronitrobenzene	100		101		4-189	1		30
Acetophenone	80		75		39-129	6		30
n-Nitrosodimethylamine	47		42		22-74	11		30
2,4,6-Trichlorophenol	88		85		30-130	3		30
P-Chloro-M-Cresol	88		84		23-97	5		30
2-Chlorophenol	74		68		27-123	8		30
2,4-Dichlorophenol	85		79		30-130	7		30
2,4-Dimethylphenol	77		68		30-130	12		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG965831-2 WG965831-3								
2-Nitrophenol	84		78		30-130	7		30
4-Nitrophenol	54		55		10-80	2		30
2,4-Dinitrophenol	76		75		20-130	1		30
4,6-Dinitro-o-cresol	80		81		20-164	1		30
Pentachlorophenol	71		70		9-103	1		30
Phenol	38		36		12-110	5		30
2-Methylphenol	71		67		30-130	6		30
3-Methylphenol/4-Methylphenol	70		66		30-130	6		30
2,4,5-Trichlorophenol	90		86		30-130	5		30
Benzoic Acid	35		22		10-164	**46**	Q	30
Benzyl Alcohol	77		72		26-116	7		30
Carbazole	75		76		55-144	1		30
Pyridine	16		22		10-66	**32**	Q	30
Parathion, ethyl	105		107		40-140	2		30
Atrazine	105		105		40-140	0		30
Benzaldehyde	74		66		40-140	11		30
Caprolactam	31		29		10-130	7		30
2,3,4,6-Tetrachlorophenol	79		79		40-140	0		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG965831-2 WG965831-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	53		48		21-120
Phenol-d6	40		36		10-120
Nitrobenzene-d5	79		73		23-120
2-Fluorobiphenyl	76		73		15-120
2,4,6-Tribromophenol	85		84		10-120
4-Terphenyl-d14	71		74		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-04 Batch: WG965832-2 WG965832-3								
Acenaphthene	61		75		37-111	21		40
2-Chloronaphthalene	57		68		40-140	18		40
Fluoranthene	73		84		40-140	14		40
Hexachlorobutadiene	46		54		40-140	16		40
Naphthalene	52		63		40-140	19		40
Benzo(a)anthracene	70		81		40-140	15		40
Benzo(a)pyrene	75		86		40-140	14		40
Benzo(b)fluoranthene	76		87		40-140	13		40
Benzo(k)fluoranthene	79		90		40-140	13		40
Chrysene	76		89		40-140	16		40
Acenaphthylene	65		79		40-140	19		40
Anthracene	71		84		40-140	17		40
Benzo(ghi)perylene	67		76		40-140	13		40
Fluorene	65		79		40-140	19		40
Phenanthrene	68		81		40-140	17		40
Dibenzo(a,h)anthracene	67		77		40-140	14		40
Indeno(1,2,3-cd)pyrene	66		75		40-140	13		40
Pyrene	73		84		26-127	14		40
1-Methylnaphthalene	56		66		40-140	16		40
2-Methylnaphthalene	56		66		40-140	16		40
Pentachlorophenol	62		79		9-103	24		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 02-04 Batch: WG965832-2 WG965832-3								
Hexachlorobenzene	64		77		40-140	18		40
Hexachloroethane	50		60		40-140	18		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	35		40		21-120
Phenol-d6	28		31		10-120
Nitrobenzene-d5	61		75		23-120
2-Fluorobiphenyl	58		68		15-120
2,4,6-Tribromophenol	67		82		10-120
4-Terphenyl-d14	81		80		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966076-2 WG966076-3								
Acenaphthene	74		62		31-137	18		50
Benzidine	20		14		10-66	35		50
1,2,4-Trichlorobenzene	66		60		38-107	10		50
Hexachlorobenzene	80		68		40-140	16		50
Bis(2-chloroethyl)ether	67		57		40-140	16		50
2-Chloronaphthalene	70		58		40-140	19		50
1,2-Dichlorobenzene	69		58		40-140	17		50
1,3-Dichlorobenzene	68		58		40-140	16		50
1,4-Dichlorobenzene	67		58		28-104	14		50
3,3'-Dichlorobenzidine	48		**37**	Q	40-140	26		50
2,4-Dinitrotoluene	86		70		40-132	21		50
2,6-Dinitrotoluene	88		68		40-140	26		50
Azobenzene	74		62		40-140	18		50
Fluoranthene	77		61		40-140	23		50
4-Chlorophenyl phenyl ether	70		59		40-140	17		50
4-Bromophenyl phenyl ether	76		63		40-140	19		50
Bis(2-chloroisopropyl)ether	56		47		40-140	17		50
Bis(2-chloroethoxy)methane	68		62		40-117	9		50
Hexachlorobutadiene	64		55		40-140	15		50
Hexachlorocyclopentadiene	61		50		40-140	20		50
Hexachloroethane	71		62		40-140	14		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966076-2 WG966076-3								
Isophorone	65		57		40-140	13		50
Naphthalene	72		62		40-140	15		50
Nitrobenzene	76		65		40-140	16		50
NDPA/DPA	76		62		36-157	20		50
n-Nitrosodi-n-propylamine	66		56		32-121	16		50
Bis(2-ethylhexyl)phthalate	90		74		40-140	20		50
Butyl benzyl phthalate	90		70		40-140	25		50
Di-n-butylphthalate	82		69		40-140	17		50
Di-n-octylphthalate	93		76		40-140	20		50
Diethyl phthalate	78		63		40-140	21		50
Dimethyl phthalate	70		58		40-140	19		50
Benzo(a)anthracene	76		64		40-140	17		50
Benzo(a)pyrene	86		67		40-140	25		50
Benzo(b)fluoranthene	82		65		40-140	23		50
Benzo(k)fluoranthene	85		67		40-140	24		50
Chrysene	76		63		40-140	19		50
Acenaphthylene	74		61		40-140	19		50
Anthracene	80		67		40-140	18		50
Benzo(ghi)perylene	79		68		40-140	15		50
Fluorene	76		62		40-140	20		50
Phenanthrene	78		66		40-140	17		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966076-2 WG966076-3								
Dibenzo(a,h)anthracene	75		67		40-140	11		50
Indeno(1,2,3-cd)pyrene	76		68		40-140	11		50
Pyrene	76		61		35-142	22		50
Biphenyl	77		62		54-104	22		50
4-Chloroaniline	**28**	Q	**22**	Q	40-140	24		50
1-Methylnaphthalene	69		56		26-130	21		50
2-Nitroaniline	92		73		47-134	23		50
3-Nitroaniline	66		53		26-129	22		50
4-Nitroaniline	84		70		41-125	18		50
Dibenzofuran	75		62		40-140	19		50
2-Methylnaphthalene	73		60		40-140	20		50
1,2,4,5-Tetrachlorobenzene	70		57		40-117	20		50
Acetophenone	73		61		14-144	18		50
n-Nitrosodimethylamine	67		57		22-100	16		50
2,4,6-Trichlorophenol	75		60		30-130	22		50
p-Chloro-m-cresol	82		65		26-103	23		50
2-Chlorophenol	78		65		25-102	18		50
2,4-Dichlorophenol	76		67		30-130	13		50
2,4-Dimethylphenol	71		61		30-130	15		50
2-Nitrophenol	90		79		30-130	13		50
4-Nitrophenol	86		71		11-114	19		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966076-2 WG966076-3								
2,4-Dinitrophenol	58		46		4-130	23		50
4,6-Dinitro-o-cresol	88		71		10-130	21		50
Pentachlorophenol	64		51		17-109	23		50
Phenol	74		60		26-90	21		50
2-Methylphenol	79		65		30-130.	19		50
3-Methylphenol/4-Methylphenol	76		66		30-130	14		50
2,4,5-Trichlorophenol	80		64		30-130	22		50
Benzoic Acid	17		15		10-110	13		50
Benzyl Alcohol	70		60		40-140	15		50
Carbazole	81		67		54-128	19		50
Parathion, ethyl	108		89		40-140	19		50
Atrazine	84		70		40-140	18		50
Benzaldehyde	67		57		40-140	16		50
Caprolactam	74		60		15-130	21		50
2,3,4,6-Tetrachlorophenol	78		63		40-140	21		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966076-2 WG966076-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	80		66		25-120
Phenol-d6	82		67		10-120
Nitrobenzene-d5	79		67		23-120
2-Fluorobiphenyl	75		60		30-120
2,4,6-Tribromophenol	100		79		10-136
4-Terphenyl-d14	80		63		18-120

PCBS

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID:	L1642311-05	Date Collected:	12/23/16 12:30
Client ID:	SS1 (0-1')	Date Received:	12/28/16
Sample Location:	MPC BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/30/16 08:10
Analytical Date:	01/03/17 18:40	Cleanup Method:	EPA 3665A
Analyst:	AF	Cleanup Date:	12/30/16
Percent Solids:	83%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/30/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.2	3.10	1	A
Aroclor 1221	ND		ug/kg	39.2	3.62	1	A
Aroclor 1232	ND		ug/kg	39.2	4.60	1	A
Aroclor 1242	ND		ug/kg	39.2	4.80	1	A
Aroclor 1248	ND		ug/kg	39.2	3.31	1	A
Aroclor 1254	10.9	J	ug/kg	39.2	3.23	1	B
Aroclor 1260	17.9	J	ug/kg	39.2	2.99	1	B
Aroclor 1262	ND		ug/kg	39.2	1.95	1	A
Aroclor 1268	ND		ug/kg	39.2	5.69	1	A
PCBs, Total	28.8	J	ug/kg	39.2	2.99	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	49		30-150	A
2,4,5,6-Tetrachloro-m-xylene	53		30-150	B
Decachlorobiphenyl	62		30-150	B

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID:	L1642311-10	Date Collected:	12/22/16 09:05
Client ID:	SB8 (2-6')	Date Received:	12/28/16
Sample Location:	MPC BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/30/16 08:10
Analytical Date:	01/03/17 18:54	Cleanup Method:	EPA 3665A
Analyst:	AF	Cleanup Date:	12/30/16
Percent Solids:	80%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/30/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	39.2	3.10	1	A
Aroclor 1221	ND		ug/kg	39.2	3.61	1	A
Aroclor 1232	ND		ug/kg	39.2	4.59	1	A
Aroclor 1242	ND		ug/kg	39.2	4.80	1	A
Aroclor 1248	ND		ug/kg	39.2	3.31	1	A
Aroclor 1254	ND		ug/kg	39.2	3.22	1	A
Aroclor 1260	3.72	J	ug/kg	39.2	2.98	1	A
Aroclor 1262	ND		ug/kg	39.2	1.94	1	A
Aroclor 1268	ND		ug/kg	39.2	5.68	1	A
PCBs, Total	3.72	J	ug/kg	39.2	1.94	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	87		30-150	A
Decachlorobiphenyl	69		30-150	A
2,4,5,6-Tetrachloro-m-xylene	75		30-150	B
Decachlorobiphenyl	96		30-150	B

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID:	L1642311-11	Date Collected:	12/23/16 14:15
Client ID:	SB9 (0-2')	Date Received:	12/28/16
Sample Location:	MPC BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/30/16 08:10
Analytical Date:	01/03/17 19:09	Cleanup Method:	EPA 3665A
Analyst:	AF	Cleanup Date:	12/30/16
Percent Solids:	86%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/30/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.2	2.94	1	A
Aroclor 1221	ND		ug/kg	37.2	3.43	1	A
Aroclor 1232	ND		ug/kg	37.2	4.36	1	A
Aroclor 1242	ND		ug/kg	37.2	4.56	1	A
Aroclor 1248	ND		ug/kg	37.2	3.14	1	A
Aroclor 1254	ND		ug/kg	37.2	3.06	1	A
Aroclor 1260	11.7	J	ug/kg	37.2	2.84	1	A
Aroclor 1262	ND		ug/kg	37.2	1.84	1	A
Aroclor 1268	ND		ug/kg	37.2	5.40	1	A
PCBs, Total	11.7	J	ug/kg	37.2	1.84	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	75		30-150	A
Decachlorobiphenyl	50		30-150	A
2,4,5,6-Tetrachloro-m-xylene	61		30-150	B
Decachlorobiphenyl	64		30-150	B

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-13
Client ID: SB10 (1-3')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/03/17 19:24
Analyst: AF
Percent Solids: 87%

Date Collected: 12/22/16 10:30
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 08:10
Cleanup Method: EPA 3665A
Cleanup Date: 12/30/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/30/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.3	2.95	1	A
Aroclor 1221	ND		ug/kg	37.3	3.44	1	A
Aroclor 1232	ND		ug/kg	37.3	4.37	1	A
Aroclor 1242	ND		ug/kg	37.3	4.57	1	A
Aroclor 1248	ND		ug/kg	37.3	3.15	1	A
Aroclor 1254	ND		ug/kg	37.3	3.07	1	A
Aroclor 1260	69.5		ug/kg	37.3	2.84	1	B
Aroclor 1262	ND		ug/kg	37.3	1.85	1	A
Aroclor 1268	97.0		ug/kg	37.3	5.41	1	B
PCBs, Total	167		ug/kg	37.3	2.84	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	84		30-150	A
Decachlorobiphenyl	48		30-150	A
2,4,5,6-Tetrachloro-m-xylene	66		30-150	B
Decachlorobiphenyl	92		30-150	B

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID:	L1642311-14	Date Collected:	12/22/16 11:00
Client ID:	SB11 (1-3')	Date Received:	12/28/16
Sample Location:	MPC BUFFALO, NY	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8082A	Extraction Date:	12/30/16 08:10
Analytical Date:	01/03/17 16:52	Cleanup Method:	EPA 3665A
Analyst:	AF	Cleanup Date:	12/30/16
Percent Solids:	88%	Cleanup Method:	EPA 3660B
		Cleanup Date:	12/30/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	37.1	2.93	1	A
Aroclor 1221	ND		ug/kg	37.1	3.42	1	A
Aroclor 1232	ND		ug/kg	37.1	4.34	1	A
Aroclor 1242	ND		ug/kg	37.1	4.54	1	A
Aroclor 1248	ND		ug/kg	37.1	3.13	1	A
Aroclor 1254	19.8	J	ug/kg	37.1	3.05	1	B
Aroclor 1260	28.8	J	ug/kg	37.1	2.82	1	B
Aroclor 1262	ND		ug/kg	37.1	1.84	1	A
Aroclor 1268	ND		ug/kg	37.1	5.38	1	A
PCBs, Total	48.6	J	ug/kg	37.1	2.82	1	B

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	64		30-150	A
Decachlorobiphenyl	84		30-150	A
2,4,5,6-Tetrachloro-m-xylene	70		30-150	B
Decachlorobiphenyl	57		30-150	B

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-16
Client ID: SB14 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 01/03/17 17:06
Analyst: AF
Percent Solids: 87%

Date Collected: 12/22/16 15:50
Date Received: 12/28/16
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/30/16 08:10
Cleanup Method: EPA 3665A
Cleanup Date: 12/30/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/30/16

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
Polychlorinated Biphenyls by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	35.9	2.84	1	A
Aroclor 1221	ND		ug/kg	35.9	3.31	1	A
Aroclor 1232	ND		ug/kg	35.9	4.21	1	A
Aroclor 1242	ND		ug/kg	35.9	4.40	1	A
Aroclor 1248	ND		ug/kg	35.9	3.03	1	A
Aroclor 1254	ND		ug/kg	35.9	2.95	1	A
Aroclor 1260	ND		ug/kg	35.9	2.74	1	A
Aroclor 1262	ND		ug/kg	35.9	1.78	1	A
Aroclor 1268	ND		ug/kg	35.9	5.21	1	A
PCBs, Total	ND		ug/kg	35.9	1.78	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	73		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	73		30-150	B
Decachlorobiphenyl	68		30-150	B

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8082A
Analytical Date: 01/03/17 20:23
Analyst: AF

Extraction Method: EPA 3546
Extraction Date: 12/30/16 08:00
Cleanup Method: EPA 3665A
Cleanup Date: 12/30/16
Cleanup Method: EPA 3660B
Cleanup Date: 12/30/16

Parameter	Result	Qualifier	Units	RL	MDL	Column
Polychlorinated Biphenyls by GC - Westborough Lab for sample(s): 05,10-11,13-14,16 Batch: WG965948-1						
Aroclor 1016	ND		ug/kg	31.9	2.52	A
Aroclor 1221	ND		ug/kg	31.9	2.94	A
Aroclor 1232	ND		ug/kg	31.9	3.74	A
Aroclor 1242	ND		ug/kg	31.9	3.90	A
Aroclor 1248	ND		ug/kg	31.9	2.69	A
Aroclor 1254	ND		ug/kg	31.9	2.62	A
Aroclor 1260	ND		ug/kg	31.9	2.43	A
Aroclor 1262	ND		ug/kg	31.9	1.58	A
Aroclor 1268	ND		ug/kg	31.9	4.62	A
PCBs, Total	ND		ug/kg	31.9	1.58	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	103		30-150	A
Decachlorobiphenyl	38		30-150	A
2,4,5,6-Tetrachloro-m-xylene	88		30-150	B
Decachlorobiphenyl	49		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
Polychlorinated Biphenyls by GC - Westborough Lab Associated sample(s): 05,10-11,13-14,16 Batch: WG965948-2 WG965948-3									
Aroclor 1016	88		90		40-140	2		50	A
Aroclor 1260	42		40		40-140	5		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	110		101		30-150	A
Decachlorobiphenyl	39		36		30-150	A
2,4,5,6-Tetrachloro-m-xylene	92		84		30-150	B
Decachlorobiphenyl	50		45		30-150	B

METALS

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-06
Client ID: SS2 (0-1')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 86%

Date Collected: 12/23/16 13:35
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5400		mg/kg	8.9	2.4	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Antimony, Total	3.8	J	mg/kg	4.4	0.34	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Arsenic, Total	34		mg/kg	0.89	0.18	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Barium, Total	80		mg/kg	0.89	0.16	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Beryllium, Total	0.44		mg/kg	0.44	0.03	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.89	0.09	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Calcium, Total	7200		mg/kg	8.9	3.1	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Chromium, Total	16		mg/kg	0.89	0.09	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Cobalt, Total	6.8		mg/kg	1.8	0.15	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Copper, Total	66		mg/kg	0.89	0.23	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Iron, Total	56000		mg/kg	44	8.0	20	12/30/16 18:40	01/04/17 01:50	EPA 3050B	1,6010C	AB
Lead, Total	160		mg/kg	4.4	0.24	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Magnesium, Total	1100		mg/kg	8.9	1.4	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Manganese, Total	860		mg/kg	0.89	0.14	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Mercury, Total	0.26		mg/kg	0.08	0.02	1	01/04/17 14:00	01/04/17 21:29	EPA 7471B	1,7471B	EA
Nickel, Total	27		mg/kg	2.2	0.22	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Potassium, Total	660		mg/kg	220	13.	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.8	0.23	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.89	0.25	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Sodium, Total	100	J	mg/kg	180	2.8	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.28	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Vanadium, Total	20		mg/kg	0.89	0.18	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB
Zinc, Total	130		mg/kg	4.4	0.26	2	12/30/16 18:40	01/03/17 23:16	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-07
Client ID: SB1 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 90%

Date Collected: 12/21/16 10:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	7300		mg/kg	8.8	2.4	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.4	0.34	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Arsenic, Total	4.8		mg/kg	0.88	0.18	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Barium, Total	41		mg/kg	0.88	0.15	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Beryllium, Total	0.84		mg/kg	0.44	0.03	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.88	0.09	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Calcium, Total	40000		mg/kg	8.8	3.1	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Chromium, Total	7.1		mg/kg	0.88	0.09	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Cobalt, Total	2.4		mg/kg	1.8	0.15	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Copper, Total	12		mg/kg	0.88	0.23	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Iron, Total	10000		mg/kg	4.4	0.80	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Lead, Total	22		mg/kg	4.4	0.24	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Magnesium, Total	7100		mg/kg	8.8	1.4	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Manganese, Total	390		mg/kg	0.88	0.14	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.08	0.02	1	01/04/17 14:00	01/04/17 21:31	EPA 7471B	1,7471B	EA
Nickel, Total	5.2		mg/kg	2.2	0.21	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Potassium, Total	740		mg/kg	220	13.	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.8	0.23	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.88	0.25	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Sodium, Total	380		mg/kg	180	2.8	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.28	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Vanadium, Total	13		mg/kg	0.88	0.18	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB
Zinc, Total	29		mg/kg	4.4	0.26	2	12/30/16 18:40	01/04/17 00:00	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08
Client ID: SB6 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 86%

Date Collected: 12/21/16 15:00
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5300		mg/kg	9.1	2.4	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.5	0.34	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Arsenic, Total	6.3		mg/kg	0.91	0.19	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Barium, Total	33		mg/kg	0.91	0.16	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Beryllium, Total	0.23	J	mg/kg	0.45	0.03	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.91	0.09	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Calcium, Total	28000		mg/kg	9.1	3.2	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Chromium, Total	8.4		mg/kg	0.91	0.09	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Cobalt, Total	3.3		mg/kg	1.8	0.15	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Copper, Total	15		mg/kg	0.91	0.23	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Iron, Total	15000		mg/kg	4.5	0.82	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Lead, Total	50		mg/kg	4.5	0.24	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Magnesium, Total	3200		mg/kg	9.1	1.4	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Manganese, Total	290		mg/kg	0.91	0.14	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Mercury, Total	0.96		mg/kg	0.08	0.02	1	01/04/17 14:00	01/04/17 21:33	EPA 7471B	1,7471B	EA
Nickel, Total	7.4		mg/kg	2.3	0.22	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Potassium, Total	380		mg/kg	230	13.	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.8	0.23	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.91	0.26	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Sodium, Total	74	J	mg/kg	180	2.9	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.29	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Vanadium, Total	18		mg/kg	0.91	0.18	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB
Zinc, Total	88		mg/kg	4.5	0.27	2	12/30/16 18:40	01/04/17 00:05	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-09
Client ID: SB7 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 86%

Date Collected: 12/21/16 15:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4400		mg/kg	9.1	2.4	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Antimony, Total	1.6	J	mg/kg	4.5	0.34	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Arsenic, Total	5.9		mg/kg	0.91	0.19	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Barium, Total	40		mg/kg	0.91	0.16	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Beryllium, Total	0.26	J	mg/kg	0.45	0.03	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.91	0.09	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Calcium, Total	110000		mg/kg	91	32.	20	12/30/16 18:40	01/04/17 02:07	EPA 3050B	1,6010C	AB
Chromium, Total	9.8		mg/kg	0.91	0.09	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Cobalt, Total	2.2		mg/kg	1.8	0.15	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Copper, Total	24		mg/kg	0.91	0.23	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Iron, Total	16000		mg/kg	4.5	0.82	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Lead, Total	35		mg/kg	4.5	0.24	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Magnesium, Total	44000		mg/kg	9.1	1.4	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Manganese, Total	740		mg/kg	0.91	0.14	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Mercury, Total	0.03	J	mg/kg	0.08	0.02	1	01/04/17 14:00	01/04/17 21:35	EPA 7471B	1,7471B	EA
Nickel, Total	6.3		mg/kg	2.3	0.22	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Potassium, Total	420		mg/kg	230	13.	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.8	0.23	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.91	0.26	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Sodium, Total	170	J	mg/kg	180	2.9	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.29	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Vanadium, Total	10		mg/kg	0.91	0.18	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB
Zinc, Total	61		mg/kg	4.5	0.27	2	12/30/16 18:40	01/04/17 00:09	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10
Client ID: SB8 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 80%

Date Collected: 12/22/16 09:05
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4900		mg/kg	9.6	2.6	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Antimony, Total	0.64	J	mg/kg	4.8	0.36	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Arsenic, Total	38		mg/kg	0.96	0.20	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Barium, Total	33		mg/kg	0.96	0.17	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Beryllium, Total	0.22	J	mg/kg	0.48	0.03	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.96	0.09	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Calcium, Total	22000		mg/kg	9.6	3.4	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Chromium, Total	6.8		mg/kg	0.96	0.09	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Cobalt, Total	3.3		mg/kg	1.9	0.16	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Copper, Total	11		mg/kg	0.96	0.25	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Iron, Total	35000		mg/kg	4.8	0.86	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Lead, Total	470		mg/kg	4.8	0.26	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Magnesium, Total	2700		mg/kg	9.6	1.5	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Manganese, Total	400		mg/kg	0.96	0.15	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.09	0.02	1	01/04/17 14:00	01/04/17 21:37	EPA 7471B	1,7471B	EA
Nickel, Total	6.8		mg/kg	2.4	0.23	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Potassium, Total	500		mg/kg	240	14.	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.9	0.25	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.96	0.27	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Sodium, Total	170	J	mg/kg	190	3.0	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.9	0.30	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Vanadium, Total	15		mg/kg	0.96	0.19	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB
Zinc, Total	50		mg/kg	4.8	0.28	2	12/30/16 18:40	01/04/17 00:13	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-12
Client ID: SB9 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 86%

Date Collected: 12/22/16 09:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5800		mg/kg	9.0	2.4	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Antimony, Total	1.0	J	mg/kg	4.5	0.34	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Arsenic, Total	22		mg/kg	0.90	0.19	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Barium, Total	79		mg/kg	0.90	0.16	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Beryllium, Total	0.46		mg/kg	0.45	0.03	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Cadmium, Total	0.60	J	mg/kg	0.90	0.09	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Calcium, Total	27000		mg/kg	9.0	3.1	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Chromium, Total	19		mg/kg	0.90	0.09	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Cobalt, Total	5.6		mg/kg	1.8	0.15	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Copper, Total	130		mg/kg	0.90	0.23	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Iron, Total	40000		mg/kg	4.5	0.81	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Lead, Total	250		mg/kg	4.5	0.24	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Magnesium, Total	3600		mg/kg	9.0	1.4	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Manganese, Total	660		mg/kg	0.90	0.14	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Mercury, Total	0.12		mg/kg	0.09	0.02	1	01/04/17 14:00	01/04/17 21:38	EPA 7471B	1,7471B	EA
Nickel, Total	19		mg/kg	2.2	0.22	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Potassium, Total	510		mg/kg	220	13.	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.8	0.23	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.90	0.25	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Sodium, Total	140	J	mg/kg	180	2.8	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.28	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Vanadium, Total	24		mg/kg	0.90	0.18	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB
Zinc, Total	180		mg/kg	4.5	0.26	2	12/30/16 18:40	01/04/17 00:18	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-15
Client ID: SB13 (1-5')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 89%

Date Collected: 12/22/16 12:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	4100		mg/kg	8.8	2.4	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.4	0.34	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Arsenic, Total	34		mg/kg	0.88	0.18	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Barium, Total	41		mg/kg	0.88	0.15	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Beryllium, Total	0.23	J	mg/kg	0.44	0.03	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.88	0.09	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Calcium, Total	33000		mg/kg	8.8	3.1	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Chromium, Total	60		mg/kg	0.88	0.09	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Cobalt, Total	14		mg/kg	1.8	0.15	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Copper, Total	42		mg/kg	0.88	0.23	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Iron, Total	180000		mg/kg	44	8.0	20	12/30/16 18:40	01/04/17 02:16	EPA 3050B	1,6010C	AB
Lead, Total	31		mg/kg	4.4	0.24	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Magnesium, Total	2800		mg/kg	8.8	1.4	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Manganese, Total	1400		mg/kg	0.88	0.14	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Mercury, Total	0.31		mg/kg	0.08	0.02	1	01/04/17 14:00	01/04/17 21:40	EPA 7471B	1,7471B	EA
Nickel, Total	24		mg/kg	2.2	0.21	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Potassium, Total	390		mg/kg	220	13.	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	18	2.3	20	12/30/16 18:40	01/04/17 02:16	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.88	0.25	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Sodium, Total	120	J	mg/kg	180	2.8	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.28	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Vanadium, Total	95		mg/kg	0.88	0.18	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB
Zinc, Total	37		mg/kg	4.4	0.26	2	12/30/16 18:40	01/04/17 00:22	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-17
Client ID: SB16 (.5-4.5)
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 88%

Date Collected: 12/22/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	2300		mg/kg	9.0	2.4	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Antimony, Total	ND		mg/kg	4.5	0.34	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Arsenic, Total	2.2		mg/kg	0.90	0.19	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Barium, Total	15		mg/kg	0.90	0.16	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Beryllium, Total	0.10	J	mg/kg	0.45	0.03	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.90	0.09	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Calcium, Total	38000		mg/kg	9.0	3.1	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Chromium, Total	2.7		mg/kg	0.90	0.09	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Cobalt, Total	1.3	J	mg/kg	1.8	0.15	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Copper, Total	2.2		mg/kg	0.90	0.23	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Iron, Total	5200		mg/kg	4.5	0.81	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Lead, Total	130		mg/kg	4.5	0.24	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Magnesium, Total	4600		mg/kg	9.0	1.4	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Manganese, Total	150		mg/kg	0.90	0.14	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Mercury, Total	ND		mg/kg	0.08	0.02	1	01/04/17 14:00	01/04/17 21:42	EPA 7471B	1,7471B	EA
Nickel, Total	2.3		mg/kg	2.2	0.22	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Potassium, Total	180	J	mg/kg	220	13.	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.8	0.23	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.90	0.25	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Sodium, Total	90	J	mg/kg	180	2.8	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.28	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Vanadium, Total	6.0		mg/kg	0.90	0.18	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB
Zinc, Total	11		mg/kg	4.5	0.26	2	12/30/16 18:40	01/04/17 00:27	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18
Client ID: SB21 (1-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 78%

Date Collected: 12/23/16 08:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	14000		mg/kg	9.9	2.7	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Antimony, Total	3.3	J	mg/kg	5.0	0.38	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Arsenic, Total	12		mg/kg	0.99	0.21	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Barium, Total	77		mg/kg	0.99	0.17	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Beryllium, Total	0.48	J	mg/kg	0.50	0.03	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.99	0.10	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Calcium, Total	8600		mg/kg	9.9	3.5	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Chromium, Total	15		mg/kg	0.99	0.10	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Cobalt, Total	6.2		mg/kg	2.0	0.16	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Copper, Total	370		mg/kg	0.99	0.26	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Iron, Total	37000		mg/kg	5.0	0.90	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Lead, Total	200		mg/kg	5.0	0.27	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Magnesium, Total	3300		mg/kg	9.9	1.5	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Manganese, Total	570		mg/kg	0.99	0.16	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Mercury, Total	0.04	J	mg/kg	0.09	0.02	1	01/04/17 14:00	01/04/17 21:44	EPA 7471B	1,7471B	EA
Nickel, Total	18		mg/kg	2.5	0.24	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Potassium, Total	770		mg/kg	250	14.	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	2.0	0.26	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.99	0.28	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Sodium, Total	280		mg/kg	200	3.1	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	2.0	0.31	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Vanadium, Total	24		mg/kg	0.99	0.20	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB
Zinc, Total	170		mg/kg	5.0	0.29	2	12/30/16 18:40	01/04/17 00:31	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Lab Number: L1642311
Project Number: E1609
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-19
Client ID: SB25 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Percent Solids: 88%

Date Collected: 12/23/16 10:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Aluminum, Total	5200		mg/kg	8.8	2.4	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Antimony, Total	0.36	J	mg/kg	4.4	0.34	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Arsenic, Total	24		mg/kg	0.88	0.18	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Barium, Total	78		mg/kg	0.88	0.15	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Beryllium, Total	1.2		mg/kg	0.44	0.03	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Cadmium, Total	0.27	J	mg/kg	0.88	0.09	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Calcium, Total	19000		mg/kg	8.8	3.1	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Chromium, Total	7.0		mg/kg	0.88	0.09	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Cobalt, Total	4.4		mg/kg	1.8	0.15	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Copper, Total	39		mg/kg	0.88	0.23	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Iron, Total	16000		mg/kg	4.4	0.80	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Lead, Total	78		mg/kg	4.4	0.24	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Magnesium, Total	1800		mg/kg	8.8	1.4	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Manganese, Total	340		mg/kg	0.88	0.14	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Mercury, Total	0.077	J	mg/kg	0.079	0.017	1	01/04/17 14:00	01/04/17 21:46	EPA 7471B	1,7471B	EA
Nickel, Total	9.8		mg/kg	2.2	0.21	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Potassium, Total	500		mg/kg	220	13.	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Selenium, Total	ND		mg/kg	1.8	0.23	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Silver, Total	ND		mg/kg	0.88	0.25	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Sodium, Total	300		mg/kg	180	2.8	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Thallium, Total	ND		mg/kg	1.8	0.28	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Vanadium, Total	14		mg/kg	0.88	0.18	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB
Zinc, Total	77		mg/kg	4.4	0.26	2	12/30/16 18:40	01/04/17 00:57	EPA 3050B	1,6010C	AB

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 06-10,12,15,17-19 Batch: WG966156-1										
Aluminum, Total	ND		mg/kg	4.0	1.1	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Antimony, Total	ND		mg/kg	2.0	0.15	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Arsenic, Total	ND		mg/kg	0.40	0.08	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Barium, Total	ND		mg/kg	0.40	0.07	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Beryllium, Total	ND		mg/kg	0.20	0.01	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Cadmium, Total	ND		mg/kg	0.40	0.04	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Calcium, Total	ND		mg/kg	4.0	1.4	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Chromium, Total	ND		mg/kg	0.40	0.04	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Cobalt, Total	ND		mg/kg	0.80	0.07	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Copper, Total	ND		mg/kg	0.40	0.10	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Iron, Total	ND		mg/kg	2.0	0.36	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Lead, Total	ND		mg/kg	2.0	0.11	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Magnesium, Total	ND		mg/kg	4.0	0.62	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Manganese, Total	ND		mg/kg	0.40	0.06	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Nickel, Total	ND		mg/kg	1.0	0.10	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Potassium, Total	ND		mg/kg	100	5.8	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Selenium, Total	ND		mg/kg	0.80	0.10	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Silver, Total	ND		mg/kg	0.40	0.11	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Sodium, Total	ND		mg/kg	80	1.3	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Thallium, Total	ND		mg/kg	0.80	0.13	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Vanadium, Total	ND		mg/kg	0.40	0.08	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB
Zinc, Total	ND		mg/kg	2.0	0.12	1	12/30/16 18:40	01/03/17 23:08	1,6010C	AB

Prep Information

Digestion Method: EPA 3050B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 06-10,12,15,17-19 Batch: WG966836-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	01/04/17 14:00	01/04/17 21:14	1,7471B	EA

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Prep Information

Digestion Method: EPA 7471B

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966156-2 SRM Lot Number: D091-540								
Aluminum, Total	69		-		52-148	-		
Antimony, Total	187		-		1-200	-		
Arsenic, Total	103		-		80-121	-		
Barium, Total	96		-		84-117	-		
Beryllium, Total	100		-		83-117	-		
Cadmium, Total	112		-		83-117	-		
Calcium, Total	95		-		81-118	-		
Chromium, Total	98		-		80-119	-		
Cobalt, Total	91		-		84-115	-		
Copper, Total	104		-		82-117	-		
Iron, Total	80		-		47-154	-		
Lead, Total	103		-		82-118	-		
Magnesium, Total	83		-		77-123	-		
Manganese, Total	94		-		82-118	-		
Nickel, Total	116		-		83-117	-		
Potassium, Total	83		-		72-128	-		
Selenium, Total	101		-		79-121	-		
Silver, Total	89		-		75-124	-		
Sodium, Total	104		-		73-126	-		
Thallium, Total	106		-		80-121	-		
Vanadium, Total	96		-		78-122	-		

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	LCSD %Recovery	%Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966156-2 SRM Lot Number: D091-540					
Zinc, Total	103	-	82-118	-	
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG966836-2 SRM Lot Number: D091-540					
Mercury, Total	89	-	72-128	-	

Matrix Spike Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG966156-3 QC Sample: L1642311-06 Client ID: SS2 (0-1')												
Aluminum, Total	5400	178	6200	**448**	Q	-	-		75-125	-		20
Antimony, Total	3.8J	44.6	42	94		-	-		75-125	-		20
Arsenic, Total	34.	10.7	33	**0**	Q	-	-		75-125	-		20
Barium, Total	80.	178	260	101		-	-		75-125	-		20
Beryllium, Total	0.44	4.46	4.6	103		-	-		75-125	-		20
Cadmium, Total	ND	4.55	4.4	97		-	-		75-125	-		20
Calcium, Total	7200	892	5200	**0**	Q	-	-		75-125	-		20
Chromium, Total	16.	17.8	31	84		-	-		75-125	-		20
Cobalt, Total	6.8	44.6	48	92		-	-		75-125	-		20
Copper, Total	66.	22.3	110	**197**	Q	-	-		75-125	-		20
Iron, Total	56000	89.2	70000	**15700**	Q	-	-		75-125	-		20
Lead, Total	160	45.5	190	**66**	Q	-	-		75-125	-		20
Magnesium, Total	1100	892	1800	78		-	-		75-125	-		20
Manganese, Total	860	44.6	590	**0**	Q	-	-		75-125	-		20
Nickel, Total	27.	44.6	82	123		-	-		75-125	-		20
Potassium, Total	660	892	1500	94		-	-		75-125	-		20
Selenium, Total	ND	10.7	8.9	83		-	-		75-125	-		20
Silver, Total	ND	26.8	26	97		-	-		75-125	-		20
Sodium, Total	100J	892	1000	112		-	-		75-125	-		20
Thallium, Total	ND	10.7	8.1	76		-	-		75-125	-		20
Vanadium, Total	20.	44.6	62	94		-	-		75-125	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	MSD Found	MSD %Recovery	Recovery Limits	RPD	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG966156-3 QC Sample: L1642311-06 Client ID: SS2 (0-1')									
Zinc, Total	130	44.6	170	90	-	-	75-125	-	20
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG966836-3 QC Sample: L1641908-01 Client ID: MS Sample									
Mercury, Total	0.97	0.193	1.2	119	-	-	80-120	-	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG966156-4 QC Sample: L1642311-06 Client ID: SS2 (0-1')						
Aluminum, Total	5400	4700	mg/kg	14		20
Antimony, Total	3.8J	5.7	mg/kg	NC		20
Arsenic, Total	34.	28	mg/kg	19		20
Barium, Total	80.	83	mg/kg	4		20
Beryllium, Total	0.44	0.36J	mg/kg	NC		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Calcium, Total	7200	4600	mg/kg	**44**	Q	20
Chromium, Total	16.	21	mg/kg	**27**	Q	20
Cobalt, Total	6.8	7.6	mg/kg	11		20
Copper, Total	66.	79	mg/kg	18		20
Lead, Total	160	170	mg/kg	6		20
Magnesium, Total	1100	820	mg/kg	**29**	Q	20
Manganese, Total	860	770	mg/kg	11		20
Nickel, Total	27.	25	mg/kg	8		20
Potassium, Total	660	540	mg/kg	20		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20
Sodium, Total	100J	150J	mg/kg	NC		20
Thallium, Total	ND	ND	mg/kg	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	Native Sample	Duplicate Sample	Units	RPD		RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG966156-4 QC Sample: L1642311-06 Client ID: SS2 (0-1')						
Vanadium, Total	20.	29	mg/kg	**37**	Q	20
Zinc, Total	130	130	mg/kg	0		20
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG966156-4 QC Sample: L1642311-06 Client ID: SS2 (0-1')						
Iron, Total	56000	68000	mg/kg	19		20
Total Metals - Mansfield Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG966836-4 QC Sample: L1641908-01 Client ID: DUP Sample						
Mercury, Total	0.97	0.85	mg/kg	13		20

INORGANICS
&
MISCELLANEOUS

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-05
Client ID: SS1 (0-1')
Sample Location: MPC BUFFALO, NY
Matrix: Soil

Date Collected: 12/23/16 12:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.2		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-06
Client ID: SS2 (0-1')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/23/16 13:35
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	0.53	J	mg/kg	1.1	0.18	1	12/29/16 10:15	12/29/16 14:15	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-07
Client ID: SB1 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/21/16 10:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.7		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	0.35	J	mg/kg	1.0	0.17	1	12/29/16 10:15	12/29/16 14:16	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-08
Client ID: SB6 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/21/16 15:00
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.9		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	0.36	J	mg/kg	1.1	0.18	1	12/29/16 10:15	12/29/16 14:17	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-09
Client ID: SB7 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/21/16 15:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	85.7		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	0.29	J	mg/kg	1.1	0.18	1	12/29/16 10:15	12/29/16 14:17	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-10
Client ID: SB8 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/22/16 09:05
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	80.1		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	0.49	J	mg/kg	1.2	0.19	1	12/29/16 10:15	12/29/16 14:20	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-11
Client ID: SB9 (0-2')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/23/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-12
Client ID: SB9 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/22/16 09:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.4		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	0.44	J	mg/kg	1.1	0.18	1	12/29/16 10:15	12/29/16 14:21	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-13
Client ID: SB10 (1-3')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/22/16 10:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.2		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-14
Client ID: SB11 (1-3')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/22/16 11:00
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.9		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-15
Client ID: SB13 (1-5')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/22/16 12:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.9		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	0.33	J	mg/kg	1.1	0.18	1	12/29/16 10:15	12/29/16 14:21	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-16
Client ID: SB14 (0-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/22/16 15:50
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.2		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-17
Client ID: SB16 (.5-4.5)
Sample Location: MPC BUFFALO, NY
Matrix: Soil

Date Collected: 12/22/16 14:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.5		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	ND		mg/kg	1.1	0.18	1	12/29/16 10:15	12/29/16 14:22	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-18
Client ID: SB21 (1-4')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/23/16 08:30
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	78.1		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	2.8		mg/kg	1.2	0.21	1	12/29/16 10:15	12/29/16 14:32	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

SAMPLE RESULTS

Lab ID: L1642311-19
Client ID: SB25 (2-6')
Sample Location: MPC BUFFALO, NY
Matrix: Soil
Date Collected: 12/23/16 10:15
Date Received: 12/28/16
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.9		%	0.100	NA	1	-	12/29/16 10:53	121,2540G	RI
Cyanide, Total	2.1		mg/kg	1.1	0.18	1	12/29/16 10:15	12/29/16 14:33	1,9010C/9012B	ML

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 06-10,12,15,17-19 Batch: WG965568-1										
Cyanide, Total	ND		mg/kg	0.84	0.14	1	12/29/16 10:15	12/29/16 13:59	1,9010C/9012B	ML

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1642311

Report Date: 01/05/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 06-10,12,15,17-19 Batch: WG965568-2 WG965568-3								
Cyanide, Total	80		110		80-120	33		35

Matrix Spike Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 06-10,12,15,17-19 QC Batch ID: WG965568-4 WG965568-5 QC Sample: L1642311-09 Client ID: SB7 (2-6')												
Cyanide, Total	0.29J	11	11	93		12	100		65-135	9		35

Lab Duplicate Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 05-19 QC Batch ID: WG965611-1 QC Sample: L1642311-05 Client ID: SS1 (0-1')						
Solids, Total	83.2	82.9	%	0		20

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1642311-01A	Vial HCl preserved	A	N/A	3.9	Y	Absent	HOLD-8260(14)
L1642311-01B	Vial HCl preserved	A	N/A	3.9	Y	Absent	HOLD-8260(14)
L1642311-01C	Vial HCl preserved	A	N/A	3.9	Y	Absent	HOLD-8260(14)
L1642311-01D	Amber 1000ml unpreserved	A	7	3.9	Y	Absent	HOLD-8270(7)
L1642311-02A	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-02B	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-02C	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-02D	Amber 1000ml unpreserved	A	7	3.9	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1642311-03A	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-03B	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-03C	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-03D	Amber 1000ml unpreserved	A	7	3.9	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1642311-04A	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-04B	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-04C	Vial HCl preserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-04D	Amber 1000ml unpreserved	A	7	3.9	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1642311-05A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	TS(7),NYTCL-8082(14)
L1642311-06A	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)
L1642311-06B	Glass 60ml unpreserved split	A	N/A	3.9	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)
L1642311-07A	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)

*Values in parentheses indicate holding time in days

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1642311-07B	Glass 120ml/4oz unpreserved	A	N/A	3.9	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)
L1642311-08A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-08A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-08B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)
L1642311-08C	Glass 60ml unpreserved split	A	N/A	3.9	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)
L1642311-09A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-09A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-09B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)
L1642311-09C	Glass 60ml unpreserved split	A	N/A	3.9	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)
L1642311-10A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-10A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-10B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7),NYTCL-8082(14)

*Values in parentheses indicate holding time in days

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1642311-10C	Glass 120ml/4oz unpreserved	A	N/A	3.9	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)
L1642311-11A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	TS(7),NYTCL-8082(14)
L1642311-12A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-12A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-12B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)
L1642311-12C	Glass 60ml unpreserved split	A	N/A	3.9	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)
L1642311-13A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	TS(7),NYTCL-8082(14)
L1642311-14A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	TS(7),NYTCL-8082(14)
L1642311-15A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-15A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-15B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)
L1642311-15C	Glass 60ml unpreserved split	A	N/A	3.9	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)
L1642311-16A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	TS(7),NYTCL-8082(14)
L1642311-17A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-17A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-17B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)

*Values in parentheses indicate holding time in days

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1642311
Report Date: 01/05/17

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1642311-17C	Glass 60ml unpreserved split	A	N/A	3.9	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)
L1642311-18A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-18A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-18B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)
L1642311-18C	Glass 60ml unpreserved split	A	N/A	3.9	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)
L1642311-19A	Glass 120ml/4oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-19A9	Vial MeOH preserved split	A	N/A	3.9	Y	Absent	NYTCL-8260-R2(14)
L1642311-19B	Glass 250ml/8oz unpreserved	A	N/A	3.9	Y	Absent	NYTCL-8270(14),TCN-9010(14),TS(7)
L1642311-19C	Glass 60ml unpreserved split	A	N/A	3.9	Y	Absent	BE-TI(180),AS-TI(180),BA-TI(180),AG-TI(180),AL-TI(180),CR-TI(180),NI-TI(180),TL-TI(180),CU-TI(180),PB-TI(180),SB-TI(180),SE-TI(180),ZN-TI(180),CO-TI(180),V-TI(180),FE-TI(180),HG-T(28),MG-TI(180),MN-TI(180),CA-TI(180),CD-TI(180),K-TI(180),NA-TI(180)

*Values in parentheses indicate holding time in days

Project Name:	BCP PH. II ESA	**Lab Number:**	L1642311
Project Number:	E1609	**Report Date:**	01/05/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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.

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.

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	BCP PH. II ESA	**Lab Number:**	L1642311
Project Number:	E1609	**Report Date:**	01/05/17

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1642311
Report Date: 01/05/17

REFERENCES

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

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: ***EPA 3050B***

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

ALPHA ANALYTICAL

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8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
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NEW YORK CHAIN OF CUSTODY

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

Page 1 of 2

Date Rec'd in Lab: 12/29/16

ALPHA Job #: L1642311

Client Information
Client: Hazard Evaluations Inc.
Address: 3752 N. Buffalo Rd. Orchard Park NY 14127
Phone: 716 667-3130
Fax: 716-667-3156
Email: mwittman@hazardevaluations.com

Project Information
Project Name: BCP Ph. II ESA
Project Location: MPC Buffalo, NY
Project # e1609
(Use Project name as Project #) ☐
Project Manager: Candy Fox
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days: 5 day Firm

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Additionally email results to ebetzold@hazardevaluations.com

Please specify Metals or TAL.

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☒ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8260 TCLP STARS	SVOC 8270 TCL	TAL Metals + Cyanide	T. PCBs	VOC 8260 TCLP STARS				Sample Specific Comments	Total Bottle
42311-01	SB2	12/21/16	12:00pm	GW	EB		X			X					4
-02	SB8	12/23/16	1:10pm				X			X					4
-03	SB10	12/23/16	12:45pm				X			X					4
-04	SB14	12/23/16	2:15pm	↓			X			X					4
-05	SS1 (0-1')	12/23/16	12:30pm	Soil					X						1
-06	SS2 (0-1')	12/23/16	1:35pm	Soil			X	X							1
-07	SB1 (2-6')	12/21/16	10:30am	Soil			X	X							1
-08	SB6 (0-4')	12/21/16	3:00pm	Soil		X	X	X							2
-09	SB7 (2-6')	12/21/16	3:30pm	Soil		X	X	X							2
-10	SB8 (2-6')	12/22/16	9:05am	Soil	↓	X	X	X	X						3
	Container Type					A	A	A	A	V					
	Preservative					A	A	A	A	B					

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

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

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Eric Betzold	12/28/16 3:05p	Audrey Tilley AAL	12/28/16 15:05
Audrey Tilley AAL	12/28/16 15:15		12/29/16 0811

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

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

ALPHA

NEW YORK CHAIN OF CUSTODY

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

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

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

Page 2 of 2

Date Rec'd in Lab: 12/29/16

ALPHA Job #: L1642311

Project Information
Project Name: BCP Ph. II ESA
Project Location: MPC Buffalo, NY
Project # e1609
(Use Project name as Project #) ☐
Project Manager: Candy Fox
ALPHAQuote #:

Turn-Around Time
Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days: 5 day Firm

Client Information
Client: Hazard Evaluations Inc.
Address: 3752 N. Buffalo Rd
Orchard Park, NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: mwittman@hazardevaluations.com

Deliverables
☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information
☒ Same as Client Info
PO #

Regulatory Requirement
☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information
Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Additionally email results to ebetzold@hazardevaluations.com

Please specify Metals or TAL.

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8260 TCL + STARS	SVOC 8270 TCL	TAL Metals + Cyanide	T. PCBs					Sample Specific Comments	Total Bottles
42311-11	SB9 (0-2')	12/22/16	9:30am	Soil	EB				X						1
-12	SB9 (0-4')	12/22/16	9:30am	Soil	EB	X	X	X							3
-13	SB10 (1-3')	12/22/16	10:30am	Soil	EB				X						1
-14	SB11 (1-3')	12/22/16	11:00am	Soil	EB				X						1
-15	SB13 (1-5')	12/22/16	12:30Pm	Soil	EB	X	X	X							2
-16	SB14 (0-4')	12/22/16	12:50Pm	Soil	EB				X						1
-17	SB16 (.5-4.5')	12/22/16	2:15Pm	Soil	EB	X	X	X							2
-18	SB21 (1-4')	12/23/16	8:30am	Soil	EB	X	X	X							2
-19	SB25 (2-6')	12/23/16	10:15am	Soil	EB	X	X	X							2

	VOC	SVOC	Metals	PCBs				
Container Type	A	A	A	A				
Preservative	A	A	A	A				

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

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

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
Eric [illegible] 3:05p	12/28/16	Audrey Filey AAL	12/28/16 15:05
Audrey Filey AAL	12/28/16 15:15	[illegible]	12/29/16 0[illegible]

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

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

ANALYTICAL REPORT

Lab Number:	L1700083
Client:	Hazard Evaluations, Inc. 3752 North Buffalo Road Orchard Park, NY 14127
ATTN:	Michele Wittman
Phone:	(716) 667-3130
Project Name:	BCP PH. II ESA
Project Number:	E1609
Report Date:	01/10/17

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1700083-01	SB-2	WATER	MPC BUFFALO, NY	01/02/17 10:20	01/03/17
L1700083-02	SB-25	WATER	MPC BUFFALO, NY	01/02/17 10:40	01/03/17
L1700083-03	SB-16	WATER	MPC BUFFALO, NY	01/02/17 11:15	01/03/17

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Case Narrative

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

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

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

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

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

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

Project Name:	BCP PH. II ESA	**Lab Number:**	L1700083
Project Number:	E1609	**Report Date:**	01/10/17

Case Narrative (continued)

Report Submission

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

Semivolatile Organics

The surrogate recoveries for L1700083-03 were outside the acceptance criteria for 2-fluorophenol (9%) and 2,4,6-tribromophenol (8%); however, re-extraction could not be performed due to lack of additional sample. The results of the original analysis are reported.

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: 01/10/17

ORGANICS

VOLATILES

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-01
Client ID: SB-2
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/05/17 17:40
Analyst: KD

Date Collected: 01/02/17 10:20
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: BCP PH. II ESA **Lab Number:** L1700083

Project Number: E1609 **Report Date:** 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-01 Date Collected: 01/02/17 10:20

Client ID: SB-2 Date Received: 01/03/17

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	16		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	125		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	103		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-02
Client ID: SB-25
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/05/17 18:08
Analyst: KD

Date Collected: 01/02/17 10:40
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-02
Client ID: SB-25
Sample Location: MPC BUFFALO, NY
Date Collected: 01/02/17 10:40
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	21		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	126		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	103		70-130
Dibromofluoromethane	104		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-03
Client ID: SB-16
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 01/05/17 18:36
Analyst: KD

Date Collected: 01/02/17 11:15
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	ND		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	ND		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-03
Client ID: SB-16
Sample Location: MPC BUFFALO, NY
Date Collected: 01/02/17 11:15
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	87		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
Naphthalene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	123		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	103		70-130

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/05/17 09:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG967222-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/05/17 09:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG967222-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
Naphthalene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/05/17 09:47
Analyst: PD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG967222-5					
Methyl cyclohexane	ND		ug/l	10	0.40

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	120		70-130
Toluene-d8	103		70-130
4-Bromofluorobenzene	107		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG967222-3 WG967222-4								
Methylene chloride	81		81		70-130	0		20
1,1-Dichloroethane	92		94		70-130	2		20
Chloroform	89		88		70-130	1		20
2-Chloroethylvinyl ether	**63**	Q	**68**	Q	70-130	8		20
Carbon tetrachloride	80		78		63-132	3		20
1,2-Dichloropropane	96		94		70-130	2		20
Dibromochloromethane	82		82		63-130	0		20
1,1,2-Trichloroethane	96		97		70-130	1		20
Tetrachloroethene	82		80		70-130	2		20
Chlorobenzene	89		88		75-130	1		20
Trichlorofluoromethane	80		78		62-150	3		20
1,2-Dichloroethane	97		98		70-130	1		20
1,1,1-Trichloroethane	84		82		67-130	2		20
Bromodichloromethane	85		85		67-130	0		20
trans-1,3-Dichloropropene	90		89		70-130	1		20
cis-1,3-Dichloropropene	86		85		70-130	1		20
1,1-Dichloropropene	89		88		70-130	1		20
Bromoform	82		82		54-136	0		20
1,1,2,2-Tetrachloroethane	98		100		67-130	2		20
Benzene	90		88		70-130	2		20
Toluene	93		92		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG967222-3 WG967222-4								
Ethylbenzene	91		90		70-130	1		20
Chloromethane	100		100		64-130	0		20
Bromomethane	74		73		39-139	1		20
Vinyl chloride	97		93		55-140	4		20
Chloroethane	96		95		55-138	1		20
1,1-Dichloroethene	80		77		61-145	4		20
trans-1,2-Dichloroethene	80		78		70-130	3		20
Trichloroethene	87		85		70-130	2		20
1,2-Dichlorobenzene	87		87		70-130	0		20
1,3-Dichlorobenzene	89		88		70-130	1		20
1,4-Dichlorobenzene	88		88		70-130	0		20
Methyl tert butyl ether	82		83		63-130	1		20
p/m-Xylene	85		85		70-130	0		20
o-Xylene	85		85		70-130	0		20
cis-1,2-Dichloroethene	86		84		70-130	2		20
Dibromomethane	86		86		70-130	0		20
1,2,3-Trichloropropane	98		100		64-130	2		20
Acrylonitrile	100		100		70-130	0		20
Isopropyl Ether	100		100		70-130	0		20
tert-Butyl Alcohol	114		114		70-130	0		20
Styrene	85		85		70-130	0		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG967222-3 WG967222-4								
Dichlorodifluoromethane	92		89		36-147	3		20
Acetone	91		93		58-148	2		20
Carbon disulfide	73		71		51-130	3		20
2-Butanone	99		100		63-138	1		20
Vinyl acetate	110		110		70-130	0		20
4-Methyl-2-pentanone	94		96		59-130	2		20
2-Hexanone	93		95		57-130	2		20
Bromochloromethane	84		84		70-130	0		20
2,2-Dichloropropane	88		86		63-133	2		20
1,2-Dibromoethane	88		90		70-130	2		20
1,3-Dichloropropane	97		96		70-130	1		20
1,1,1,2-Tetrachloroethane	83		84		64-130	1		20
Bromobenzene	88		87		70-130	1		20
n-Butylbenzene	87		84		53-136	4		20
sec-Butylbenzene	91		89		70-130	2		20
tert-Butylbenzene	75		74		70-130	1		20
o-Chlorotoluene	95		95		70-130	0		20
p-Chlorotoluene	95		94		70-130	1		20
1,2-Dibromo-3-chloropropane	77		81		41-144	5		20
Hexachlorobutadiene	78		75		63-130	4		20
Isopropylbenzene	92		91		70-130	1		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG967222-3 WG967222-4								
p-Isopropyltoluene	84		81		70-130	4		20
Naphthalene	91		92		70-130	1		20
n-Propylbenzene	96		95		69-130	1		20
1,2,3-Trichlorobenzene	82		81		70-130	1		20
1,2,4-Trichlorobenzene	81		80		70-130	1		20
1,3,5-Trimethylbenzene	91		89		64-130	2		20
1,2,4-Trimethylbenzene	88		87		70-130	1		20
Methyl Acetate	94		97		70-130	3		20
Ethyl Acetate	110		110		70-130	0		20
Cyclohexane	110		100		70-130	10		20
Ethyl-Tert-Butyl-Ether	97		98		70-130	1		20
Tertiary-Amyl Methyl Ether	85		87		66-130	2		20
1,4-Dioxane	122		116		56-162	5		20
1,1,2-Trichloro-1,2,2-Trifluoroethane	86		82		70-130	5		20
p-Diethylbenzene	89		87		70-130	2		20
p-Ethyltoluene	96		94		70-130	2		20
1,2,4,5-Tetramethylbenzene	110		110		70-130	0		20
Tetrahydrofuran	110		110		58-130	0		20
Ethyl ether	87		87		59-134	0		20
trans-1,4-Dichloro-2-butene	110		120		70-130	9		20
Iodomethane	**59**	Q	**62**	Q	70-130	5		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1700083

Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG967222-3 WG967222-4								
Methyl cyclohexane	93		92		70-130	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	108		108		70-130
Toluene-d8	104		104		70-130
4-Bromofluorobenzene	104		104		70-130
Dibromofluoromethane	95		95		70-130

SEMIVOLATILES

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-01
Client ID: SB-2
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 01/08/17 00:34
Analyst: PS

Date Collected: 01/02/17 10:20
Date Received: 01/03/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-01
Client ID: SB-2
Sample Location: MPC BUFFALO, NY
Date Collected: 01/02/17 10:20
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	23		10-120
Nitrobenzene-d5	84		23-120
2-Fluorobiphenyl	77		15-120
2,4,6-Tribromophenol	69		10-120
4-Terphenyl-d14	84		41-149

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-01
Client ID: SB-2
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 01/06/17 14:28
Analyst: KL

Date Collected: 01/02/17 10:20
Date Received: 01/03/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	ND		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	ND		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	ND		ug/l	0.20	0.04	1
Benzo(a)anthracene	0.02	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	ND		ug/l	0.20	0.04	1
Acenaphthylene	ND		ug/l	0.20	0.04	1
Anthracene	ND		ug/l	0.20	0.04	1
Benzo(ghi)perylene	ND		ug/l	0.20	0.04	1
Fluorene	ND		ug/l	0.20	0.04	1
Phenanthrene	0.02	J	ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	ND		ug/l	0.20	0.04	1
2-Methylnaphthalene	ND		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-01
Client ID: SB-2
Sample Location: MPC BUFFALO, NY
Date Collected: 01/02/17 10:20
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	21		10-120
Nitrobenzene-d5	75		23-120
2-Fluorobiphenyl	78		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	68		41-149

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-02
Client ID: SB-25
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 01/08/17 01:01
Analyst: PS

Date Collected: 01/02/17 10:40
Date Received: 01/03/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	ND		ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-02
Client ID: SB-25
Sample Location: MPC BUFFALO, NY
Date Collected: 01/02/17 10:40
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	ND		ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	27		21-120
Phenol-d6	20		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	71		41-149

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-02
Client ID: SB-25
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 01/06/17 15:17
Analyst: KL

Date Collected: 01/02/17 10:40
Date Received: 01/03/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.50		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	0.25		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	0.11	J	ug/l	0.20	0.04	1
Benzo(a)anthracene	0.03	J	ug/l	0.20	0.02	1
Benzo(a)pyrene	ND		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	0.08	J	ug/l	0.20	0.02	1
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04	1
Chrysene	0.06	J	ug/l	0.20	0.04	1
Acenaphthylene	0.05	J	ug/l	0.20	0.04	1
Anthracene	0.08	J	ug/l	0.20	0.04	1
Benzo(ghi)perylene	0.05	J	ug/l	0.20	0.04	1
Fluorene	0.20		ug/l	0.20	0.04	1
Phenanthrene	0.48		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04	1
Pyrene	0.15	J	ug/l	0.20	0.04	1
2-Methylnaphthalene	0.06	J	ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: BCP PH. II ESA **Lab Number:** L1700083

Project Number: E1609 **Report Date:** 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-02 Date Collected: 01/02/17 10:40

Client ID: SB-25 Date Received: 01/03/17

Sample Location: MPC BUFFALO, NY Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	23		21-120
Phenol-d6	16		10-120
Nitrobenzene-d5	62		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	65		10-120
4-Terphenyl-d14	55		41-149

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-03
Client ID: SB-16
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D
Analytical Date: 01/08/17 01:28
Analyst: PS

Date Collected: 01/02/17 11:15
Date Received: 01/03/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:47

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67	1
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4	1
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84	1
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1	1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62	1
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73	1
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70	1
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63	1
Hexachlorocyclopentadiene	ND		ug/l	20	7.8	1
Isophorone	ND		ug/l	5.0	0.60	1
Nitrobenzene	ND		ug/l	2.0	0.75	1
NDPA/DPA	ND		ug/l	2.0	0.64	1
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70	1
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91	1
Butyl benzyl phthalate	ND		ug/l	5.0	1.3	1
Di-n-butylphthalate	ND		ug/l	5.0	0.69	1
Di-n-octylphthalate	ND		ug/l	5.0	1.1	1
Diethyl phthalate	ND		ug/l	5.0	0.63	1
Dimethyl phthalate	ND		ug/l	5.0	0.65	1
Biphenyl	ND		ug/l	2.0	0.76	1
4-Chloroaniline	ND		ug/l	5.0	0.63	1
2-Nitroaniline	ND		ug/l	5.0	1.1	1
3-Nitroaniline	ND		ug/l	5.0	1.2	1
4-Nitroaniline	ND		ug/l	5.0	1.3	1
Dibenzofuran	1.0	J	ug/l	2.0	0.66	1
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67	1
Acetophenone	ND		ug/l	5.0	0.85	1
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68	1
p-Chloro-m-cresol	ND		ug/l	2.0	0.62	1
2-Chlorophenol	ND		ug/l	2.0	0.63	1

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-03
Client ID: SB-16
Sample Location: MPC BUFFALO, NY
Date Collected: 01/02/17 11:15
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2,4-Dichlorophenol	ND		ug/l	5.0	0.77	1
2,4-Dimethylphenol	ND		ug/l	5.0	1.6	1
2-Nitrophenol	ND		ug/l	10	1.5	1
4-Nitrophenol	ND		ug/l	10	1.8	1
2,4-Dinitrophenol	ND		ug/l	20	5.5	1
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1	1
Phenol	ND		ug/l	5.0	1.9	1
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1	1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72	1
Carbazole	1.3	J	ug/l	2.0	0.63	1
Atrazine	ND		ug/l	10	1.8	1
Benzaldehyde	ND		ug/l	5.0	1.1	1
Caprolactam	ND		ug/l	10	3.6	1
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**9**	Q	21-120
Phenol-d6	11		10-120
Nitrobenzene-d5	53		23-120
2-Fluorobiphenyl	49		15-120
2,4,6-Tribromophenol	**8**	Q	10-120
4-Terphenyl-d14	49		41-149

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-03
Client ID: SB-16
Sample Location: MPC BUFFALO, NY
Matrix: Water
Analytical Method: 1,8270D-SIM
Analytical Date: 01/06/17 15:41
Analyst: KL

Date Collected: 01/02/17 11:15
Date Received: 01/03/17
Field Prep: Not Specified
Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:51

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	0.83		ug/l	0.10	0.04	1
2-Chloronaphthalene	ND		ug/l	0.20	0.04	1
Fluoranthene	7.7		ug/l	0.20	0.04	1
Hexachlorobutadiene	ND		ug/l	0.50	0.04	1
Naphthalene	1.4		ug/l	0.20	0.04	1
Benzo(a)anthracene	3.2		ug/l	0.20	0.02	1
Benzo(a)pyrene	3.0		ug/l	0.20	0.04	1
Benzo(b)fluoranthene	6.8		ug/l	0.20	0.02	1
Benzo(k)fluoranthene	1.8		ug/l	0.20	0.04	1
Chrysene	3.8		ug/l	0.20	0.04	1
Acenaphthylene	0.54		ug/l	0.20	0.04	1
Anthracene	1.3		ug/l	0.20	0.04	1
Benzo(ghi)perylene	4.2		ug/l	0.20	0.04	1
Fluorene	1.2		ug/l	0.20	0.04	1
Phenanthrene	6.8		ug/l	0.20	0.02	1
Dibenzo(a,h)anthracene	1.2		ug/l	0.20	0.04	1
Indeno(1,2,3-cd)pyrene	3.7		ug/l	0.20	0.04	1
Pyrene	6.3		ug/l	0.20	0.04	1
2-Methylnaphthalene	0.41		ug/l	0.20	0.05	1
Pentachlorophenol	ND		ug/l	0.80	0.22	1
Hexachlorobenzene	ND		ug/l	0.80	0.03	1
Hexachloroethane	ND		ug/l	0.80	0.03	1

Project Name: BCP PH. II ESA
Lab Number: L1700083
Project Number: E1609
Report Date: 01/10/17

SAMPLE RESULTS

Lab ID: L1700083-03
Client ID: SB-16
Sample Location: MPC BUFFALO, NY
Date Collected: 01/02/17 11:15
Date Received: 01/03/17
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor

Semivolatile Organics by GC/MS-SIM - Westborough Lab

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	**12**	Q	21-120
Phenol-d6	10		10-120
Nitrobenzene-d5	39		23-120
2-Fluorobiphenyl	42		15-120
2,4,6-Tribromophenol	24		10-120
4-Terphenyl-d14	**35**	Q	41-149

Project Name: BCP PH. II ESA
Project Number: E1609
Lab Number: L1700083
Report Date: 01/10/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/06/17 16:30
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG966985-1					
Bis(2-chloroethyl)ether	ND		ug/l	2.0	0.67
3,3'-Dichlorobenzidine	ND		ug/l	5.0	1.4
2,4-Dinitrotoluene	ND		ug/l	5.0	0.84
2,6-Dinitrotoluene	ND		ug/l	5.0	1.1
4-Chlorophenyl phenyl ether	ND		ug/l	2.0	0.62
4-Bromophenyl phenyl ether	ND		ug/l	2.0	0.73
Bis(2-chloroisopropyl)ether	ND		ug/l	2.0	0.70
Bis(2-chloroethoxy)methane	ND		ug/l	5.0	0.63
Hexachlorocyclopentadiene	ND		ug/l	20	7.8
Isophorone	ND		ug/l	5.0	0.60
Nitrobenzene	ND		ug/l	2.0	0.75
NDPA/DPA	ND		ug/l	2.0	0.64
n-Nitrosodi-n-propylamine	ND		ug/l	5.0	0.70
Bis(2-ethylhexyl)phthalate	ND		ug/l	3.0	0.91
Butyl benzyl phthalate	ND		ug/l	5.0	1.3
Di-n-butylphthalate	ND		ug/l	5.0	0.69
Di-n-octylphthalate	ND		ug/l	5.0	1.1
Diethyl phthalate	ND		ug/l	5.0	0.63
Dimethyl phthalate	ND		ug/l	5.0	0.65
Biphenyl	ND		ug/l	2.0	0.76
4-Chloroaniline	ND		ug/l	5.0	0.63
2-Nitroaniline	ND		ug/l	5.0	1.1
3-Nitroaniline	ND		ug/l	5.0	1.2
4-Nitroaniline	ND		ug/l	5.0	1.3
Dibenzofuran	ND		ug/l	2.0	0.66
1,2,4,5-Tetrachlorobenzene	ND		ug/l	10	0.67
Acetophenone	ND		ug/l	5.0	0.85
2,4,6-Trichlorophenol	ND		ug/l	5.0	0.68
p-Chloro-m-cresol	ND		ug/l	2.0	0.62

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/06/17 16:30
Analyst: CB

Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:47

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG966985-1					
2-Chlorophenol	ND		ug/l	2.0	0.63
2,4-Dichlorophenol	ND		ug/l	5.0	0.77
2,4-Dimethylphenol	ND		ug/l	5.0	1.6
2-Nitrophenol	ND		ug/l	10	1.5
4-Nitrophenol	ND		ug/l	10	1.8
2,4-Dinitrophenol	ND		ug/l	20	5.5
4,6-Dinitro-o-cresol	ND		ug/l	10	2.1
Phenol	ND		ug/l	5.0	1.9
3-Methylphenol/4-Methylphenol	ND		ug/l	5.0	1.1
2,4,5-Trichlorophenol	ND		ug/l	5.0	0.72
Carbazole	ND		ug/l	2.0	0.63
Atrazine	ND		ug/l	10	1.8
Benzaldehyde	ND		ug/l	5.0	1.1
Caprolactam	ND		ug/l	10	3.6
2,3,4,6-Tetrachlorophenol	ND		ug/l	5.0	0.93

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	41		21-120
Phenol-d6	28		10-120
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	73		15-120
2,4,6-Tribromophenol	74		10-120
4-Terphenyl-d14	75		41-149

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/06/17 13:13
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG966987-1					
Acenaphthene	ND		ug/l	0.10	0.04
2-Chloronaphthalene	ND		ug/l	0.20	0.04
Fluoranthene	ND		ug/l	0.20	0.04
Hexachlorobutadiene	ND		ug/l	0.50	0.04
Naphthalene	0.11	J	ug/l	0.20	0.04
Benzo(a)anthracene	ND		ug/l	0.20	0.02
Benzo(a)pyrene	ND		ug/l	0.20	0.04
Benzo(b)fluoranthene	ND		ug/l	0.20	0.02
Benzo(k)fluoranthene	ND		ug/l	0.20	0.04
Chrysene	ND		ug/l	0.20	0.04
Acenaphthylene	ND		ug/l	0.20	0.04
Anthracene	ND		ug/l	0.20	0.04
Benzo(ghi)perylene	ND		ug/l	0.20	0.04
Fluorene	ND		ug/l	0.20	0.04
Phenanthrene	ND		ug/l	0.20	0.02
Dibenzo(a,h)anthracene	ND		ug/l	0.20	0.04
Indeno(1,2,3-cd)pyrene	ND		ug/l	0.20	0.04
Pyrene	ND		ug/l	0.20	0.04
2-Methylnaphthalene	ND		ug/l	0.20	0.05
Pentachlorophenol	ND		ug/l	0.80	0.22
Hexachlorobenzene	ND		ug/l	0.80	0.03
Hexachloroethane	ND		ug/l	0.80	0.03

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 01/06/17 13:13
Analyst: KL

Extraction Method: EPA 3510C
Extraction Date: 01/04/17 19:51

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-03 Batch: WG966987-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	29		21-120
Phenol-d6	19		10-120
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	63		15-120
2,4,6-Tribromophenol	70		10-120
4-Terphenyl-d14	67		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG966985-2 WG966985-3								
Acenaphthene	89		93		37-111	4		30
Benzidine	**5**	Q	**9**	Q	10-75	**47**	Q	30
1,2,4-Trichlorobenzene	74		86		39-98	15		30
Hexachlorobenzene	96		101		40-140	5		30
Bis(2-chloroethyl)ether	80		94		40-140	16		30
2-Chloronaphthalene	84		93		40-140	10		30
1,2-Dichlorobenzene	64		78		40-140	20		30
1,3-Dichlorobenzene	62		76		40-140	20		30
1,4-Dichlorobenzene	61		76		36-97	22		30
3,3'-Dichlorobenzidine	76		77		40-140	1		30
2,4-Dinitrotoluene	105		107		48-143	2		30
2,6-Dinitrotoluene	98		107		40-140	9		30
Azobenzene	94		99		40-140	5		30
Fluoranthene	95		100		40-140	5		30
4-Chlorophenyl phenyl ether	93		96		40-140	3		30
4-Bromophenyl phenyl ether	98		101		40-140	3		30
Bis(2-chloroisopropyl)ether	74		84		40-140	13		30
Bis(2-chloroethoxy)methane	89		98		40-140	10		30
Hexachlorobutadiene	72		85		40-140	17		30
Hexachlorocyclopentadiene	65		75		40-140	14		30
Hexachloroethane	62		76		40-140	20		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG966985-2 WG966985-3								
Isophorone	85		95		40-140	11		30
Naphthalene	76		86		40-140	12		30
Nitrobenzene	89		99		40-140	11		30
NitrosoDiPhenylAmine(NDPA)/DPA	93		96		40-140	3		30
n-Nitrosodi-n-propylamine	88		98		29-132	11		30
Bis(2-Ethylhexyl)phthalate	102		109		40-140	7		30
Butyl benzyl phthalate	100		108		40-140	8		30
Di-n-butylphthalate	96		103		40-140	7		30
Di-n-octylphthalate	105		113		40-140	7		30
Diethyl phthalate	96		100		40-140	4		30
Dimethyl phthalate	90		96		40-140	6		30
Benzo(a)anthracene	94		97		40-140	3		30
Benzo(a)pyrene	96		97		40-140	1		30
Benzo(b)fluoranthene	97		99		40-140	2		30
Benzo(k)fluoranthene	93		97		40-140	4		30
Chrysene	93		96		40-140	3		30
Acenaphthylene	84		91		45-123	8		30
Anthracene	93		97		40-140	4		30
Benzo(ghi)perylene	94		97		40-140	3		30
Fluorene	91		96		40-140	5		30
Phenanthrene	93		98		40-140	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG966985-2 WG966985-3								
Dibenzo(a,h)anthracene	93		98		40-140	5		30
Indeno(1,2,3-cd)Pyrene	98		100		40-140	2		30
Pyrene	94		98		26-127	4		30
Biphenyl	90		99		40-140	10		30
Aniline	**33**	Q	**39**	Q	40-140	17		30
4-Chloroaniline	57		57		40-140	0		30
1-Methylnaphthalene	83		95		41-103	13		30
2-Nitroaniline	94		103		52-143	9		30
3-Nitroaniline	64		57		25-145	12		30
4-Nitroaniline	97		97		51-143	0		30
Dibenzofuran	88		93		40-140	6		30
2-Methylnaphthalene	82		91		40-140	10		30
1,2,4,5-Tetrachlorobenzene	87		96		2-134	10		30
Pentachloronitrobenzene	116		120		4-189	3		30
Acetophenone	100		109		39-129	9		30
n-Nitrosodimethylamine	34		40		22-74	16		30
2,4,6-Trichlorophenol	99		108		30-130	9		30
P-Chloro-M-Cresol	**98**	Q	**107**	Q	23-97	9		30
2-Chlorophenol	79		89		27-123	12		30
2,4-Dichlorophenol	98		104		30-130	6		30
2,4-Dimethylphenol	83		86		30-130	4		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1700083

Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG966985-2 WG966985-3								
2-Nitrophenol	94		102		30-130	8		30
4-Nitrophenol	64		66		10-80	3		30
2,4-Dinitrophenol	91		91		20-130	0		30
4,6-Dinitro-o-cresol	97		100		20-164	3		30
Pentachlorophenol	86		86		9-103	0		30
Phenol	32		35		12-110	9		30
2-Methylphenol	76		81		30-130	6		30
3-Methylphenol/4-Methylphenol	71		77		30-130	8		30
2,4,5-Trichlorophenol	96		107		30-130	11		30
Benzoic Acid	38		32		10-164	17		30
Benzyl Alcohol	75		83		26-116	10		30
Carbazole	97		100		55-144	3		30
Pyridine	11		21		10-66	**63**	Q	30
Parathion, ethyl	115		124		40-140	8		30
Atrazine	124		124		40-140	0		30
Benzaldehyde	84		98		40-140	15		30
Caprolactam	22		22		10-130	0		30
2,3,4,6-Tetrachlorophenol	100		103		40-140	3		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1700083

Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG966985-2 WG966985-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	47		53		21-120
Phenol-d6	34		38		10-120
Nitrobenzene-d5	87		96		23-120
2-Fluorobiphenyl	83		91		15-120
2,4,6-Tribromophenol	98		100		10-120
4-Terphenyl-d14	91		95		41-149

Lab Control Sample Analysis
Batch Quality Control

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG966987-2 WG966987-3								
Acenaphthene	75		78		37-111	4		40
2-Chloronaphthalene	72		78		40-140	8		40
Fluoranthene	78		79		40-140	1		40
Hexachlorobutadiene	78		80		40-140	3		40
Naphthalene	69		72		40-140	4		40
Benzo(a)anthracene	74		80		40-140	8		40
Benzo(a)pyrene	81		87		40-140	7		40
Benzo(b)fluoranthene	81		87		40-140	7		40
Benzo(k)fluoranthene	77		85		40-140	10		40
Chrysene	71		77		40-140	8		40
Acenaphthylene	74		80		40-140	8		40
Anthracene	77		82		40-140	6		40
Benzo(ghi)perylene	82		90		40-140	9		40
Fluorene	77		82		40-140	6		40
Phenanthrene	70		78		40-140	11		40
Dibenzo(a,h)anthracene	82		88		40-140	7		40
Indeno(1,2,3-cd)pyrene	81		89		40-140	9		40
Pyrene	76		77		26-127	1		40
1-Methylnaphthalene	61		75		40-140	21		40
2-Methylnaphthalene	65		74		40-140	13		40
Pentachlorophenol	82		96		9-103	16		40

Lab Control Sample Analysis

Batch Quality Control

Project Name: BCP PH. II ESA

Project Number: E1609

Lab Number: L1700083

Report Date: 01/10/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-03 Batch: WG966987-2 WG966987-3								
Hexachlorobenzene	88		96		40-140	9		40
Hexachloroethane	69		72		40-140	4		40

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	34		37		21-120
Phenol-d6	21		23		10-120
Nitrobenzene-d5	72		81		23-120
2-Fluorobiphenyl	65		74		15-120
2,4,6-Tribromophenol	91		100		10-120
4-Terphenyl-d14	72		74		41-149

Project Name: BCP PH. II ESA
Project Number: E1609

Lab Number: L1700083
Report Date: 01/10/17

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1700083-01A	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-01B	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-01C	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-01D	Amber 1000ml unpreserved	A	7	2.7	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1700083-02A	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-02B	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-02C	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-02D	Amber 1000ml unpreserved	A	7	2.7	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)
L1700083-03A	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-03B	Vial HCl preserved	A	N/A	2.7	Y	Absent	NYTCL-8260-R2(14)
L1700083-03C	Amber 1000ml unpreserved	A	7	2.7	Y	Absent	NYTCL-8270(7),NYTCL-8270-SIM(7)

*Values in parentheses indicate holding time in days

Project Name:	BCP PH. II ESA	**Lab Number:**	L1700083
Project Number:	E1609	**Report Date:**	01/10/17

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

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

Terms

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.

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.

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

Report Format: DU Report with 'J' Qualifiers

Project Name:	BCP PH. II ESA	**Lab Number:**	L1700083
Project Number:	E1609	**Report Date:**	01/10/17

Data Qualifiers

reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	BCP PH. II ESA	**Lab Number:**	L1700083
Project Number:	E1609	**Report Date:**	01/10/17

REFERENCES

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

LIMITATION OF LIABILITIES

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

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

Certification Information

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA 8082A: NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
Biological Tissue Matrix: ***EPA 3050B***

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

Westborough Facility:

Drinking Water
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1** Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

NEW YORK CHAIN OF CUSTODY

ALPHA ANALYTICAL

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

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

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

Page: 1 of 1

Date Rec'd in Lab: 1/4/17

ALPHA Job #: L1700883

Client Information

Client: Hazard Evaluations Inc
Address: 3752 N. Buffalo Rd
Orchard Park NY 14127
Phone: 716-667-3130
Fax: 716-667-3156
Email: MWittman@hazardevaluations.com

Project Information

Project Name: BCP Ph. II ESA
Project Location: MPC Buffalo, NY
Project #: e1609
(Use Project name as Project #): ☐
Project Manager: Candy Fox
ALPHAQuote #:

Turn-Around Time

Standard: ☒ Due Date:
Rush (only if pre approved): ☐ # of Days: 5 day Firm

Deliverables

☐ ASP-A ☐ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Billing Information

☐ Same as Client Info
PO #

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:
Additionally email results to ebetzold@hazardevaluations.com

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	VOC 8260 TCL + STARS	SVOC 8270 TCL	Sample Specific Comments	Total Bottle
00883-01	SB2	1/2/17	10:20am	GW	EB	X	X		4
02	SB25	↓	10:40am	↓	↓	X	X		4
03	SB16	↓	11:15am	↓	↓	X	X		3

Container Type	V	A						
Preservative	B	A						

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

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

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	1/3/17 14:30	D. Brown ASL	1/3/17 14:30
D. Brown ASL	1/3/17 18:00	[signature]	1/4/17 0040

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)

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

Section IV

Property Information

Figure IV-A – Site Locus – USGS Map

1. Tax Map Information

Figure IV-B – Tax Map

Figure IV-C – Site survey

Metes and Bounds /Legal Description

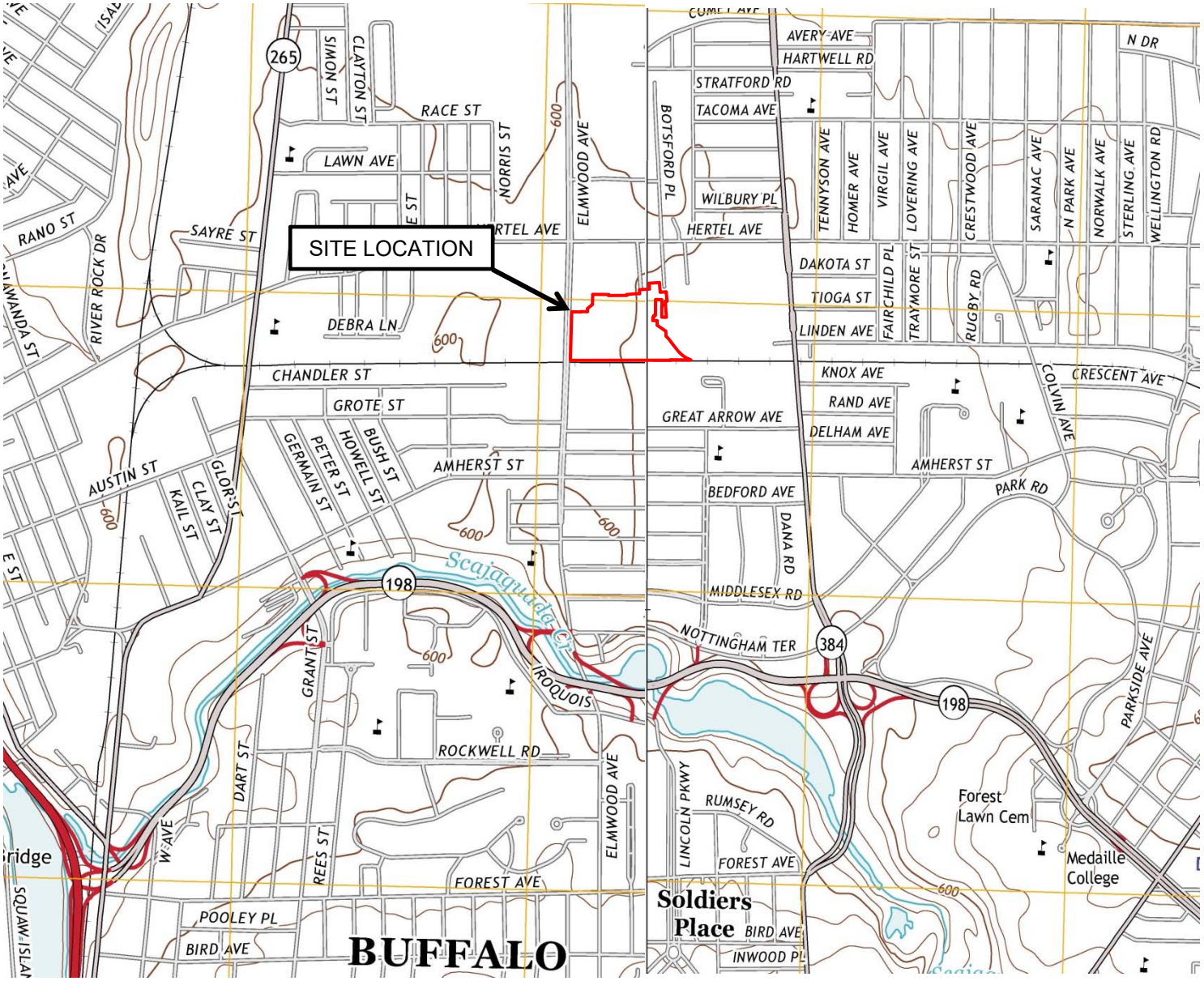
Figure IV-D – Site Base Map

Figure IV-E – En-Zone Designation

6. Article 12 of Navigation Law

9. List of Permits issued by NYSDEC or USEPA relating to the proposed BCP Site

10. Property Description Narrative



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AND WAS ADAPTED FROM USGS, BUFFALO NE & NW, NEW YORK 2013 QUADRANGLE.

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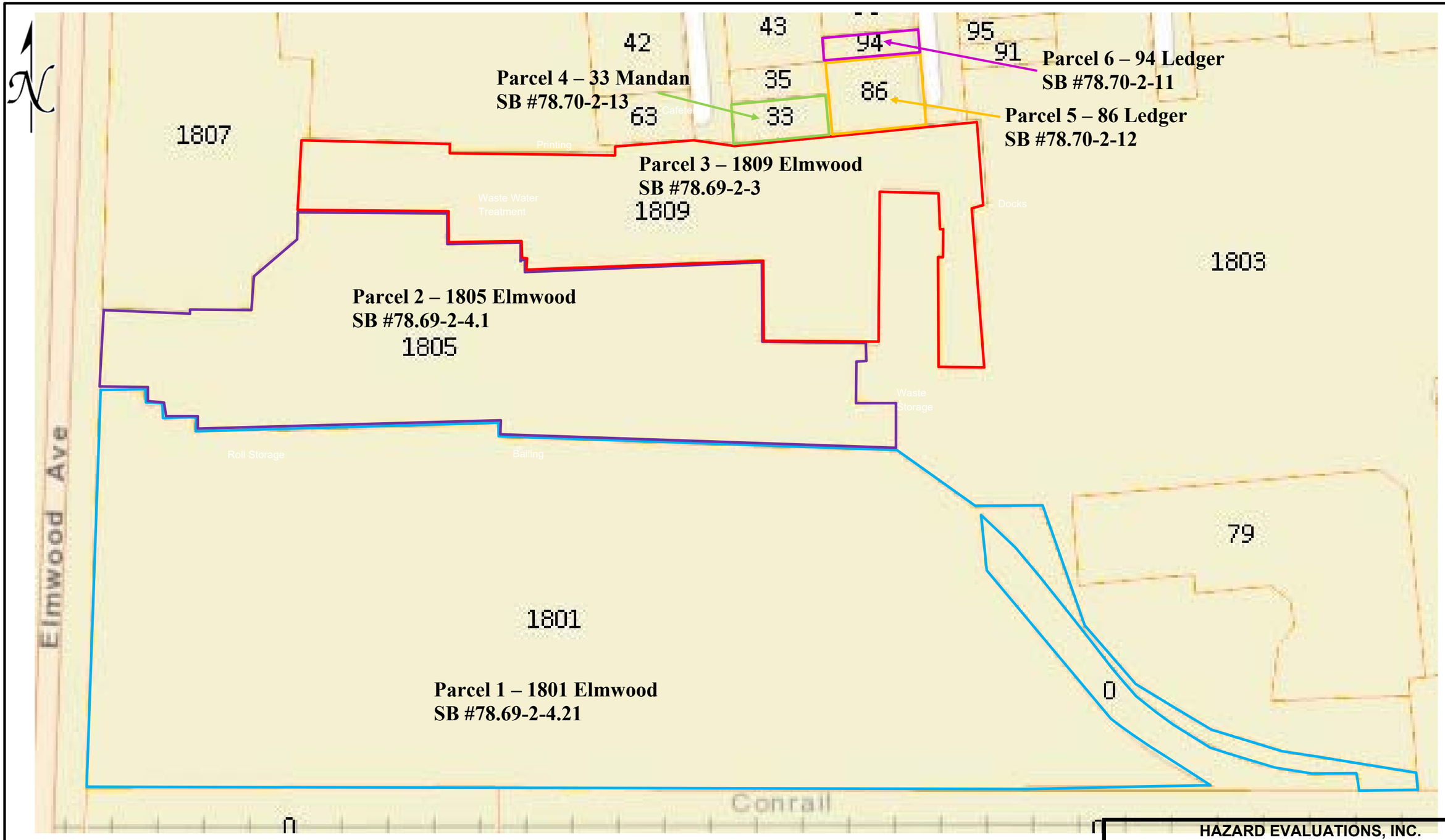
HAZARD EVALUATIONS, INC.		
Phase I/II Audits – Site Investigations – Facility Inspections		
SITE LOCATION MOD-PAC CORP. 1801 ELMWOOD AVE. BUFFALO, NEW YORK		
DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY: EB	DATE: 02/17	FIGURE NO: IV-A

1. Tax Map Information

Parcel	Section	Block	Lot	Acreage
1801 Elmwood	78.69	2	4.21	12.2139 acres
1805 Elmwood	78.69	2	4.1	4.3728 acres
1809 Elmwood	78.69	2	3	2.9759 acres
86 Ledger	78.70	2	12	0.248 acres
94 Ledger	78.70	2	11	0.0848 acres
33 Mandan	78.70	2	13	0.1416 acres
			Total:	20.037 acres

A tax map is included as Figure IV-B. The boundaries of the Site do correspond with the tax map boundaries. However, the BCP Site Limit was formerly 6 tax ID parcels which have been combined into one parcel. A new SBL number has not been assigned to the one parcel. The new metes and bounds/legal description is attached.



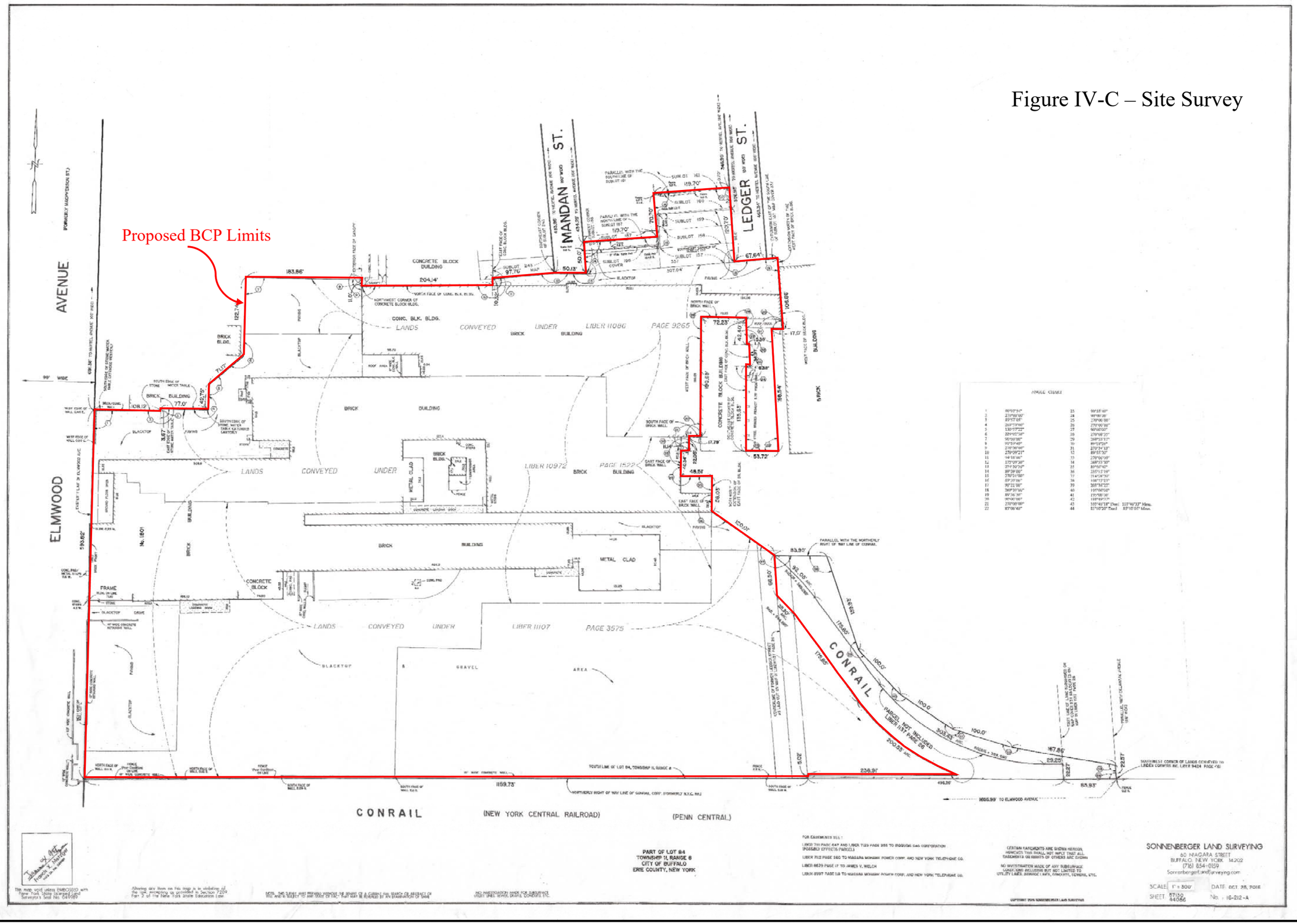
HAZARD EVALUATIONS, INC.

Phase I/II Audits – Site Investigations – Facility Inspections

Tax Parcel Limits
MOD-PAC CORP.
1801 ELMWOOD AVENUE
BUFFALO, NEW YORK

DRAWN BY: LSH	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY: MMW	DATE: 02/17	FIGURE NO: IV-B

Figure IV-C – Site Survey



Proposed Description

Job No. 16-212 DEC

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey and more particularly bounded and described as follows:

BEGINNING at the point of intersection of the east line of Elmwood Avenue (99 feet wide) with the south line of Lot No. 84, Township 11, Range 8, which Lot line is also the northerly right of way line of Conrail (formerly N.Y.C. R.R.Co.);

Thence northerly along said east line of Elmwood Avenue, a distance of 593.82 feet to its intersection with a south edge of a stone water table, extended westerly;

Thence easterly along the westerly extension of a south edge of a stone water table and a south edge thereof, at an interior angle of 90°07'54", a distance of 108.12 feet to a point, which point is on an east edge of the said stone water table;

Thence northerly along an east edge of the said stone water table at an interior angle of 270°00'00", a distance of 3.67 feet to a south edge of a stone water table;

Thence easterly along a south edge of the said stone water table and the easterly extension thereof, at an interior angle of 89°57'05", a distance of 77.0 feet to a point;

Thence northerly along a line forming an interior angle of 269°59'00", a distance of 42.75' to a point;

Thence northeasterly along a line forming an interior angle of 130°57'22", a distance of 71.17 feet to a point;

Thence northerly along a line forming an interior angle of 229°02'38", a distance of 122.74 feet to a point;

Thence easterly along a line forming an interior angle of 90°00'00", a distance of 183.86 feet to a point;

Thence southerly along a line forming an interior angle of 91°59'40" and also being along the exterior face of a canopy which projects from the north face of an existing concrete block building, a distance of 11.0 feet to a point;

Thence easterly along the face of an existing concrete block and brick building and along a line forming an interior angle of 270°00'00", a distance of 204.14 feet to a point on the east face of an existing concrete block wall;

Thence northerly along the east face of said concrete block wall forming an interior angle of 270°09'21", a distance of 10.32 feet to a point on the south line of Sublot No. 243, as shown on a map filed in Erie County Clerk's Office under Map Cover 337;

Thence easterly along the south line of Sublot No. 243, Map Cover 337 and forming an interior angle of 94°18'00", a distance of 97.76 feet to a point on the southeast corner of said Sublot No. 243, Map Cover 337;

Thence continuing easterly along a line forming an interior angle of 175°09'30", a distance of 50.13 feet to a point on the easterly line of Mandan Street (50 feet wide) also being the southwest corner of Sublot No. 188, Map Cover 337;

Thence northerly along the easterly line of Mandan Street and forming an interior angle of 274°49'55", a distance of 50.0 feet to a point on a line parallel with the north line of Sublot No. 187, Map Cover 337;

Thence easterly along the line parallel with the north line of Sublot No. 187, Map Cover 337 and forming an interior angle of 89°39'35", a distance of 119.70 feet to a point on a line being the west lines of Sublots 158, 159, 160 and 161, Map Cover 337:

Thence northerly along the west lines of Sublots 158, 159, 160 &161, Map Cover 337 and forming an interior angle of 270°01'55", a distance of 70.70 feet to a point on a line parallel with the south line of Sublot No. 161, Map Cover 337 and 0.70 feet north therefrom:

Thence easterly along the line parallel with the south line of Sublot No. 161, Map Cover 337 and 0.70 feet north therefrom and forming an interior angle of 89°39'35", a distance of 119.70 to a point on the west line of Ledger Street (50 feet wide);

Thence south along the west line of Ledger Street and forming an interior angle of 90°20'25", a distance of 120.70 feet to a point being the southeast corner of Sublot No. 157, Map Cover 337;

Thence easterly along the easterly extension of the south line of Sublot No. 157, Map Cover 337 and forming an interior angle of 269°39'35", a distance of 67.64 feet to a point in a line being the northerly extension of the west face of an existing brick building;

Thence southerly along the west face of aforementioned brick building and its extension northerly forming an interior angle of 89°56'30", a distance of 106.66 feet to a point;

Thence westerly along a line forming an interior angle of 90°00'00", a distance of 17.0 feet to a point;

Thence southerly along a line forming an interior angle of 270°00'00", a distance of 198.54 feet to a point;

Thence westerly along a line forming an interior angle of 85°06'40", a distance of 53.72 feet to a point on the southeast corner of an existing concrete block building;

Thence northerly along an easterly face of aforementioned concrete block building, forming an interior angle of 90°55'40", a distance of 135.63 feet to a point;

Thence easterly along a southerly face of aforementioned concrete block building, forming an interior angle of 90°00'00", a distance of 5.38 feet to a point;

Thence northerly being along an easterly face of aforementioned concrete block building, forming an interior angle of 270°00'00", a distance of 34.97 feet to a point;

Thence westerly along a northerly face of aforementioned concrete block building, forming an interior angle of 270°00'00", a distance of 5.38 feet to a point;

Thence northerly along an easterly face of aforementioned concrete block building, forming an interior angle of 90°00'00", a distance of 42.40 feet to a point on a north face of an existing brick wall;

Thence westerly along a north face of an existing brick wall, forming an interior angle of 270°08'35", a distance of 72.23 feet to a point on the west face of an existing brick wall;

Thence southerly along a west face of an existing brick wall, forming an interior angle of 269°55'17", a distance of 190.69 feet to a point on a south face of an existing brick wall;

Thence westerly along the south face of an existing brick wall, forming an interior angle of 89°18'26", a distance of 17.79 feet to a point;

Thence southerly along a line forming an interior angle of 270°34'13", a distance of 22.05 feet to a point;

Thence westerly along a line forming an interior angle of 89°55'20", a distance of 11.14 feet to a point on an east face of an existing brick wall;

Thence southerly along an east face of an existing brick wall, forming an interior angle of 270°06'00", a distance of 40.34 feet to a point;

Thence easterly along a line forming an interior angle of 269°53'30", a distance of 48.51 feet to a point on a line being the extension northerly of an east face of an existing brick wall;

Thence southerly along an east face of an existing brick wall and its extension northerly, forming an interior angle of 89°56'40", a distance of 58.03 feet to a point;

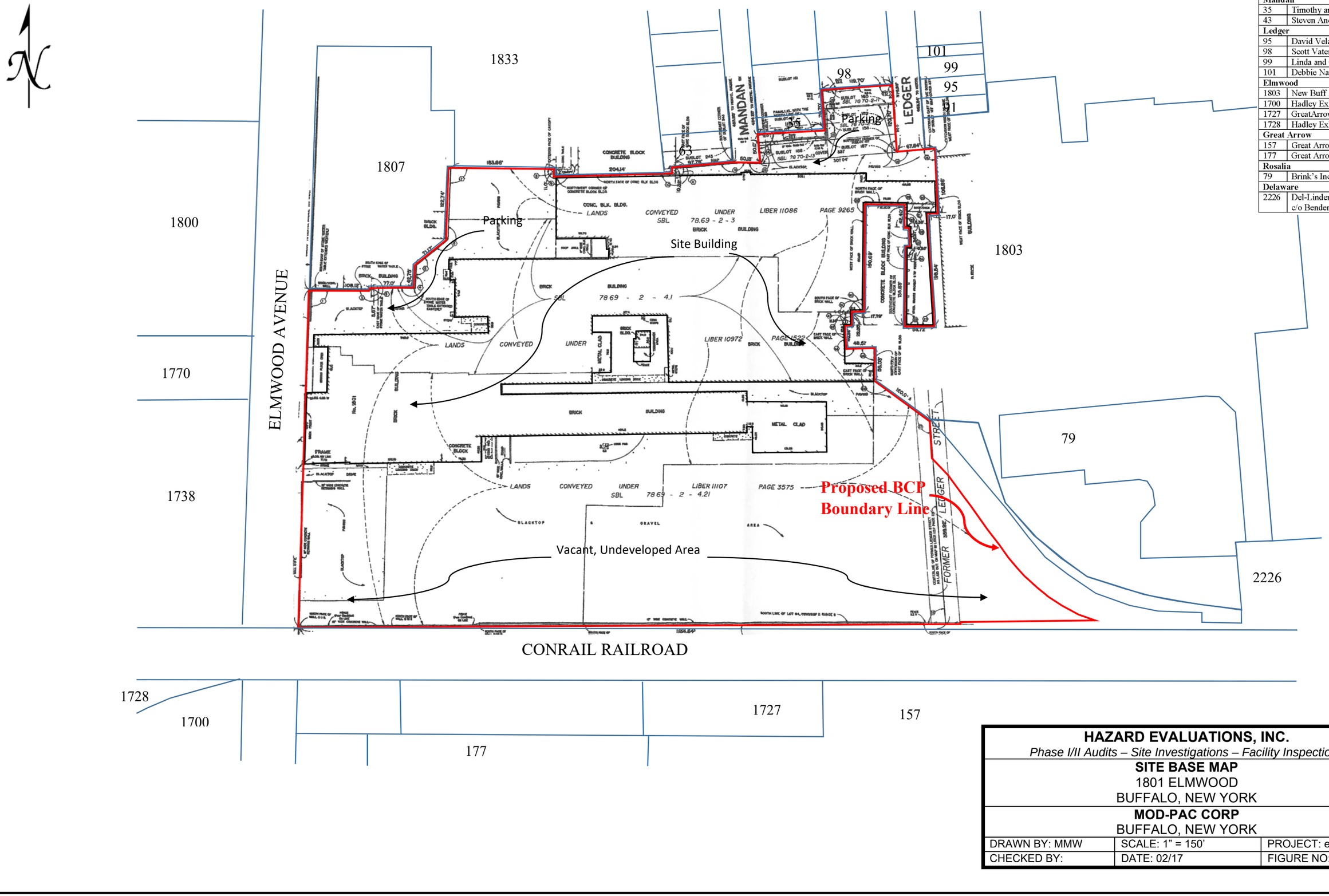
Thence southeasterly along a line forming an interior angle of 235°15'19", a distance of 120.0 feet more or less to a point on the centerline of former Ledger Street (50 feet wide) as shown on a map filed in the Erie County Clerk's Office in Liber 1137 of Deeds at page 26;

Thence southerly along the centerline of former Ledger Street as shown on a map filed in the Erie County Clerk's Office in Liber 1137 of Deeds at page 26, forming an interior angle of 128°06'50", a distance of 359.92 feet to a point on the north right of way line of Conrail, said right of way line also being the south line of Lot 84, Township 11, Range 8;

Thence westerly along the south line of Conrail, also being the south line of Lot 84, forming an interior angle of 85°33'05", a distance of 1134.64 feet to the POINT OR PLACE OF BEGINNING.

Containing 18.99 ± Acres
or 827,050 ± Sq. Ft.

ADJACENT PROPERTY OWNERS	
Mandan	
35	Timothy and Tracy Salter
43	Steven Andres
Ledger	
95	David Velasquez
98	Scott Vater
99	Linda and Gary Storm
101	Debbie Nappo
Elmwood	
1803	New Buff Associates LLC
1700	Hadley Exhibits Inc.
1727	GreatArrow Inc
1728	Hadley Exhibits Inc.
Great Arrow	
157	Great Arrow Development LLC
177	Great Arrow Acquisition Inc
Rosalia	
79	Brink's Inc.
Delaware	
2226	Del-Linden LLC c/o Benderson Development



HAZARD EVALUATIONS, INC.		
Phase I/II Audits – Site Investigations – Facility Inspections		
SITE BASE MAP 1801 ELMWOOD BUFFALO, NEW YORK		
MOD-PAC CORP BUFFALO, NEW YORK		
DRAWN BY: MMW	SCALE: 1" = 150'	PROJECT: e1605
CHECKED BY:	DATE: 02/17	FIGURE NO: IV-D

Notes:
1 – Site located in pink shaded area, indicating Type AB En-Zone

HAZARD EVALUATIONS, INC. *Phase I/II Audits – Site Investigations – Facility Inspections*		
EN-ZONE MOD-PAC CORP. 1801, 1805, 1809 Elmwood Ave, Buffalo, New York		
MOD-PAC CORP. BUFFALO, NEW YORK		
DRAWN BY: MMW	SCALE: NOT TO SCALE	PROJECT: e1605
CHECKED BY:	DATE: 02/17	FIGURE NO: IV-E

6. Article 12 of Navigation Law

Spill #9505712 – listed on August 9, 1995 due to oil water and sludge in vicinity of railroad siding. Four underground storage tanks (USTs) were ultimately discovered. One of the tanks were removed, whereas three tanks were closed in place. Confirmatory soil samples identified residual contamination and the spill was given an "inactive" status on August 14, 1996. Copy of the Spill Report Form is attached.

Spill #0651320 was identified for 1801 Elmwood. However, the spill was associated with a former tank located on the northwestern adjoining property, formerly part of the Site. The spill is therefore not located within proposed BCP limits.

NYSDEC SPILL REPORT FORM

DEC REGION: 9 **SPILL NUMBER:** 9505712

SPILL NAME: MOD-PAC CORP **DEC LEAD:** JFOTTO

CALLER NAME: ANONYMOUS **NOTIFIER'S NAME:**

CLR'S AGENCY: CITIZEN **NOTIFIER'S AGENCY:**

CALLER'S PHONE: **NOTIFIER'S PHONE:**

SPILL DATE: 08/09/1995 **SPILL TIME:** 8:00 am

CALL RECEIVED DATE: 08/09/1995 **RECEIVED TIME:** 8:30 am

SPILL LOCATION

PLACE: MOD-PAC CORP **COUNTY:** Erie

STREET: 1801 ELMWOOD AVENUE **TOWN/CITY:** Buffalo (c)

COMMUNITY: BUFFALO

CONTACT: **CONTACT PHONE:**

CONT. FACTOR: Tank Failure **SPILL REPORTED BY:** Citizen

FACILITY TYPE: Commercial/Industrial **WATERBODY:**

CALLER REMARKS:

CONRAIL EMPLOYEE COMPLAINED OF OILY WATER & SLUGE IN VICINITY OF RAIL SIDING LEADING UP TO LOADING DOCK AT ARMOR BOX

MATERIAL	CLASS	SPILLED	RECOVERED	RESOURCES AFFECTED
#6 fuel oil	Petroleum	0 G	0 G	GW,

POTENTIAL SPILLERS

COMPANY	ADDRESS	CONTACT
MOD-PAC CORP	1801 ELMWOOD AVENUE BUFFALO NY 14207	KEVIN KEANE (716) 873-0640

Tank Number	Tank Size	Test Method	Leak Rate	Gross Failure
	0.00	00	0.00	

DEC REMARKS:

Prior to Sept, 2004 data translation this spill Lead_DEC Field was "JFO"
08/07/95: 09/06/95 JFO SITE VISIT MET W/ PHIL HIRTZEL, NO WORK STARTED, WAITING FOR SAMP RESULTS SO SAFETY-CLEAN CAN PUMP OUT TANKS.

08/07/95: JFO TEL/CON WITH KEVIN KEANE, TANKS ARE PUMPED OUT BY SAFETY KLEEN, TANKS WILL BE REMOVED WITHIN 2 WEEKS. MR. KEANE WILL FORWARD COPIES OF DISPOSAL RECEIPTS & SAMP RESULTS FOR WATER & PRODUCT FROM TAN.

08/09/95: JFO SITE VISIT MET WITH MR KEVIN KEANE (V.P.) OF CO. DISCOVERED F. O. LEAKING OUT OF LOADING PLATFORM WALL ONTO RR TRACKS. EXPLAINED CLEANUP OPTIONS AND TANK REMOVAL

PROCEDURE SENT LETTER TO MR.KEA.

08/10/95: JFO SENT CLEANUP LETTER.

08/14/95: JFO SITE VISIT MET WITH KEVIN KEANE DISCUSSED REQUIREMENTS LISTED IN CLEANUP LETTER OF 08/10/95.

08/17/95: JFO REC'D LETTER FROM RP, CLEANUP AND TANK CLOSURE UNDERWAY.

09/06/95:JFO SITE VISIT MET WITH PHIL HIRTZEL. INSPECTED TANK FARM REMEDIATION NOT STARTED WAITING SAMP RESULTS SO SAFETY KLEEN CAN PUMP OUT TANKS.

09/21/95 JFO TEL/CON WITH KEVIN KEANE, TANKS ARE PUMPED OUT BY SAFETY KLEEN. TANKS WILL BE REMOVED WITH 3WEEKS. MR KEANE WILL FORWARD WOPIES OF DISPOSAL RECEIPTS AND SAMP RESULTS FOR WATER AND PRODUCT THAT WAS REMOVED FROM TANKS. HE WILL FORWARD NOTIFICATION FOR TANK REMOVALS BEFORE THEY START CLOSURE.

10/02/95 JFO REC'D DISPOSAL RECEIPTS AND SAMP RESULTS FOR WASTE OIL AND OILY WATER.

10/06/95 JFO SITE VISIT MET W/STEVE ANDERSON AND NICK GEIBEN-CONRTACTOR AND DAVID MYERS CONSULTANTS (LBM) WE AGREED TO SAMP SOIL AROUND TANKS #2 AND #3 IF RESULTS MEET SOIL GUID VALUES TANK WILL BE CLEANED AND FILLED IN PLACE. TANK #1 WILL BE REMOVED FROM THE GROUND. SURFACE AREA ON RR TRACK WILL ALSO BE CLEANED UP.

10/17/95 JFO SITE VISIT MET W/MR GEIBEN 2 TANKS BEING CLEANED AND FILLED IN PLACE. OTHER TANK CUT OPEN AND READY TO BE CLEANED.

10/18/95 JFO SITE VISIT MET W/MR GEIBEN FILLING TANKS TODAY WILL EXCAVATE AROUND OTHER TANK TO SEE EXTENT OF CONTAMINATION. IF CONTAMINATION CAN BE REMOVED, THIS TANK WILL ALSO BE FILLED IN PLACE. ALSO DISCOVERED 4TH TANK

10/31/95 JFO TELCON WITH GEIBEN SAMPLING SOIL AROUND 4TH TANK. ALSO, APPROX 20 YDS OF CONTAM SOIL REMOVED FROM AROUND TANK #1 AND STAGED ON SITE.

NYSDEC SPILL REPORT FORM

DEC REGION: 9 **SPILL NUMBER:** 9505712

SPILL NAME: MOD-PAC CORP **DEC LEAD:** JFOTTO

12/16/95 JFO MET W/N. GEIBEN HE INFORMED ME THAT SAMP RESULTS INDICATE CONTAM AROUND 4TH TANK (MP-6).

01/30/96 JFO REC'D DISPOSAL RECEIPTS AND SAMP RESULTS FOR 4TH TANK, 8270 RESULTS HIGH

02/20/96 JFO SENT LETTER TO KEVIN KEANE (VP), FURTHER REMED IS REQUIRED.

02/22/96 JFO TEL/CON WITH STEVE ANDERSON (MOD-PAC) ABOUT LETTER, HE WILL CALL LBM FOR REMED PROPOSAL.

05/23/96 JFO ON SITE WITH TODD OVERHOFF OF HAZ-EVAL FOR SAMPLING.

SAMPLES TAKEN FROM 4 SIDES OF TANK. ON EAST SIDE OF TANK (SAMPLE D) PRODUCT WAS VISIBLE IN SAMPLE HOLE. ALSO ON SITE WAS SAL CALANDRA.

06/19/96 JFO REC'D RESULTS FOR FOUR SAMPLES (A,B,C&D) A,B,&C ARE HIGH.

06/24/96 JFO TEL/CON WITH MARK HANNA, SUGGESTED REANALIZE SAMPLE A, TCLP FOR POSSIBLE INACTIVE STATUS, OR TCLP ON A,B&C FOR POSSIBLE CLOSURE. HE WILL SPEAK TO THE PEOPLE AT MOD-PAC FOR THEIR DECISION. (OK RNL)

08/13/96 JFO REC'D RESULTS FOR SAMPLE A, RESULTS ARE BELOW STARS MEMO, THE SITE STATUS IS NOW INACTIVE. A LETTER STATING THE SITE IS INACTIVE IS REQUESTED BY MOD-PAC, CC:HEI.

PIN **T & A** **COST CENTER**

CLASS: B3 **CLOSE DATE:** 08/14/1996 **MEETS STANDARDS:** False

9. List of Permits issued by NYSDEC or USEPA relating to the proposed BCP Site

Program Name/Type	Identification #	Issued By	Date Issued	Expiration Date	Status
Air Facility Registration	9140200808/00001	NYSDEC	1/11/2005	8/15/2016	Inactive
Air State Facility Permit	Permit No.: 91402-00808/00003	NYSDEC	8/15/2016	8/14/2021	Active
Hazardous Waste Generator	NYD000379248	USEPA	Unknown	Upon Facility Closure	Active
SARA TRI Reporting	14207MDPCC1801E	USEPA	7/1/2001	NA	Active
Petroleum Bulk Storage Registration	9-224499	NYSDEC	Unknown	8/17/1997	Inactive (all PBS tanks removed)
Process Wastewater Discharge	NA	BSA	NA	1/24/2014	Agency deemed permit unnecessary

10. Property Description Narrative

Location – The MOD-PAC Site is addressed as 1801 Elmwood Avenue located in the City of Buffalo, Erie County, New York. The Site most recently consisted of six contiguous parcels which have recently been combined into one parcel totaling approximately 20.03 acres of land. The Site is bound to the south by railroad tracks and to the west by Elmwood Avenue. Commerical and residential properties are located immediately to the north. Industrial occupants and the recently constructed Nardin Academy Athletic Center. The property is located within an urban area, utilized for industrial, commercial, and residential purposes.

Site Features – The MOD-PAC Site includes approximately 500,000 square foot manufacturing facility, producing high quality folding cartons for large companies and small businesses. The southern 1/3 of the property is vacant land that is overgrown and underutilized. Various debris, fill, and soil piles are present throughout the vacant area.

Current Zoning and Land Use – The Site is currently zoned "Heavy-Industrial" with the exception of the parcels located on Mandan and Ledger which are zoned "Residential". A 500,000-square foot manufacturing facility occupied by MOD-PAC is current occupant. The facility is used for the production of high quality folding cartons. The southern portion of the Site is vacant and underutilized. The existing operations are permitted as-of-right on the Site and the proposed athletic fields will require a rezoning. However, given the need for athletic fields in this neighborhood, we fully expect that this request will be welcomed by the City of Buffalo.

Past Uses of the Site – The entire Site was originally developed in the early 1900s by American Radiator and utilized as such until the 1970s. Since that time, the building has been utilized for various manufacturing purposes including warehousing, and box and product packaging. Mod-Pac has occupied a portion of the building since the 1950s and has been expanded since that time and currently occupies the entire facility. A railroad spur has historically traversed the Site, extending into the facility's courtyard. The southern portion of the Site was originally occupied by American Radiator until the 1950s, at which time the buildings were demolished. The southern area has remained vacant and unused since that time, currently identified as gravel parking and overgrown vegetation.

Prior remedial measures have not been completed at the Site. One NYSDEC Spill was identified within BCP limits, as summarized below:

- Spill #9505712 – listed on August 9, 1995 due to oil water and sludge in vicinity of railroad siding. Four underground storage tanks (USTs) were ultimately discovered. One of the tanks were removed, whereas three tanks were closed in place. Confirmatory soil samples identified residual contamination and the spill was given an "inactive" status on August 14, 1996.

Hazard Evaluations Inc. completed a limited Phase II investigation for Nardin Academy in October 2015 in order to assess if environmental factors that may impact the ability to develop the southern portion of the property as additional sports fields. The work included completion of 163 soil boring, 18 test pits and collection of soil and groundwater samples, which is included in Section III.

An additional investigation was completed in December 2016 to assess if historical industrial fill and impacts were present throughout the Site limits. Twenty six (26) additional soil borings, two hand augers, as well as additional analysis of soil and groundwater samples was completed. The 2016 investigation information is included in Section III.

Site Geology and Hydrogeology – Based on the soil borings and test pits completed, various fill materials were encountered at each location, generally extending to depth ranging from two feet below grade to up to 16 feet below grade, or the full depth drilled. The fill material appeared to be typical industrial fill, including foundry sand and/or sand intermixed with concrete, broken brick pieces, gravel, slag, flyash, and asphalt intermixed throughout. Miscellaneous debris was also found within the fill included metal strips, metal pieces, buried concrete slab, railroad siding, and apparent tunnels.

Naturally deposited cohesive silt and clay with lesser amounts of sand and gravel was generally encountered below the fill material. Groundwater was identified at a few locations and did not appear consistent throughout the Site. Depth to groundwater, where encountered, generally ranged from 2 to 9 feet below grade. Groundwater was not encountered within the silty clay.

Based on a review of the Site topographic conditions as depicted on the USGS 7.5 minute Topographic Quadrangle Map of Buffalo NE and Buffalo NW, New York, shallow regional groundwater flows is expected to flow in a southwesterly direction toward Scajaquada Creek located approximately 0.60 miles southwest and toward the Niagara River located approximately 1.50 miles west of the Site.

Environmental Assessment – Based on the investigation completed in October 2015 and December 2016, the primary contaminants of concern in the soil include semi-volatile organic compounds (SVOCs) including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, dibenzo(a,h)anthracene, and indeno(1,2,3-cd)pyrene; metals including arsenic copper, and lead. Groundwater impacts include limited chlorinated solvents including trichloroethene (TCE), cis-1,2-dichloroethent (DCE) and vinyl chloride (VC) in the groundwater.

Soil – The contamination at the Site is primarily due to fill which varies from 2 to 16 feet below ground surface. SVOCs (PAHs) and metals were encountered in the soil samples collected from the southern, underutilized portion of the Site at concentrations exceeding restricted residential soil cleanup objectives (RRSCO). The concentrations of the PAHs were up to 98.2 ppm of benzo(a)anthracene (RRSCO – 1 ppm); 85.6 ppm benzo(a)pyrene (RRSCO – 1 ppm); 69 ppm benzo(b)fluoranthene (RRSCO – 1 ppm); 3.9 ppm dibenzo(a,h)anthracene (RRSCO - 0.330 ppm); and 29.2 ppm indeno(1,2,3-cd)pyrene (RRSCO – 0.5 ppm). The concentrations of the metals were up to 28.4 ppm arsenic (RRSCO – 16 ppm); and 348 ppm copper (RRSCO – 270 ppm).

The soils located in the western, eastern and northern portion currently occupied by the MOD-PAC facility contained SVOCs (PAHs) and metals in the soil samples at concentrations exceeding commercial soil cleanup objectives (CSCO). The concentrations of the PAHs were up to 78 ppm of benzo(a)anthracene (CSCO – 5.6 ppm); 60 ppm benzo(a)pyrene (CSCO – 1 ppm); 80 ppm benzo(b)fluoranthene (CSCO – 5.6 ppm); 11 ppm dibenzo(a,h)anthracene (RRSCO -

0.560 ppm); and 37 ppm indeno(1,2,3-cd)pyrene (CSCO – 5.6 ppm). The concentrations of the metals were up to 38 ppm arsenic (CSCO – 16 ppm); and 370 ppm copper (CSCO – 270 ppm).

Groundwater – TCE and its associated degradation products were found in the groundwater samples collected from to location in the central areas of the Site, slightly exceeding groundwater standards (GS) of typically 5 ppb, with a maximum concentration of TCE of16 ppb; DEC of 32 ppb and VC of 42 ppb. Chlorinated solvents were not detected in estimated downgradient groundwater sample locations.

SVOCs (PAHs) were identified in the groundwater samples exceeding GS (typically 0.002 ppb), with a maximum concentration of benzo(a)anthracene of 40.1 ppb; benzo(b)fluoranthene of 37.2 ppb; benzo(k)fluoranthene of 33.5 ppb; chrysene of 40.1 ppb and ideno(1,2,3-cd)pyrene of 24.6 ppb. The concentration of additional SVOC were up to 46.1 ppb of benzo(a)pyrene (GS – 46.1 ppb); 77 ppb fluoranthene (GS – 50 ppb); 37.7 ppb phenol (GS 1 ppb); and 82.9 ppb pyrene (GS – 50 ppb).

Groundwater samples collected from the southern portion of the Site had several metals at concentration exceeding their respective GS including 130 ppb arsenic (GS - 25 ppb); 1,220 ppb barium (GS - 1,000 ppb); 7.4 ppb cadmium (GS - 5 ppb); 190 ppb chromium (GS - 50 ppb); 283 ppb copper (GS - 200 ppb); 216,000 ppb iron (GS - 300 ppb); 956 ppb lead (GS - 25 ppb); 145,000 ppb magnesium (GS - 35,000 ppb); 9,920 ppb manganese (GS – 300 ppb); 1.4 ppb mercury (GS – 0.7 ppb); 122 ppb nickel (100 ppb); 33,500 ppb sodium (GS – 20,000 ppb); 2,680 ppb zinc (GS – 2,000 ppb).

Section V

Additional Requestor Information

The Requestor is the current owner.

Section VI

Previous Property Owners and Operators

Requestor's Relationships

The Requestor is the current owner.

Past owners and relationship with owner: MOD-PAC Corp. has been associated with 1801, 1805 and 1809 Elmwood since September 18, 1980 when it entered into a twenty-year lease (recorded with the Erie County Clerk's Office in Liber 8943 of Deeds, page 482) with the Erie County Industrial Development Agency (ECIDA), who owned the properties at the time. Prior to that lease, ECIDA had also leased portions of the property to other entities, including Armor Box Corp. and Larry's Collision, Inc. At the End of Mod-Pac's lease, in October of 2000, Mod-Pac purchased 1801, 1805 and 1809 Elmwood.

1801 Elmwood

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
MOD-PAC CORP.	NORAMPAC Industries Inc.	12/29/2005	1801 Elmwood, Buffalo	Requestor
NORAMPAC Industries Inc.	MOD-PAC CORP.	10/3/2000	752 rue Sherbrooke Ouest, Montreal, Quebec CA H3A-161	None
MOD-PAC CORP.	Erie County Industrial Development Agency	10/3/2000	1801 Elmwood Avenue, Buffalo NY 14207	Requestor
Erie County Industrial Development Agency	Helen Schmincke	9/18/1980	95 Perry Street, Suite 403, Buffalo NY 14203	Lessor (Mod-Pac Corp., Armor Box Corp., Larry's Collision Inc., Lessees)
Helen Schmincke	Arnold Raynor and Marvin B. Tepper	2/13/1979	360 East 65th Street, New York NY 10065	None

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
Arnold Raynor and Marvin B. Tepper	Landeb, Inc.	12/6/1967	60 East 42nd Street, New York NY 10165	None
Landeb, Inc.	Senvick Corp.	12/6/1967	c/o Golenbock and Barell, 60 East 42nd Street, New York NY 10165	None
Senvick Corp.	Irving Levick	6/14/1964	701 Seneca Street, Buffalo NY 14210	None
Irving Levick	American Radiator & Standard Sanitary Corp.	3/1/1963	227 Nottingham Terrace, Buffalo NY 14216	None
American Radiator & Standard Sanitary Corp.	American Radiator Company	2/16/1939	40 West 40th Street, New York NY 10018	None

1805 Elmwood

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
MOD-PAC CORP.	Erie County Industrial Development Agency	10/3/2000	1801 Elmwood Avenue, Buffalo NY 14207	Requestor
Erie County Industrial Development Agency	Helen Schmincke	9/18/1980	95 Perry Street, Suite 403, Buffalo NY 14203	Lessor (Mod-Pac Corp., Armor Box Corp., Larry's Collision Inc., Lessees)
Helen Schmincke	Arnold Raynor and Marvin B. Tepper	2/13/1979	360 East 65th Street, New York NY 10065	None
Arnold Raynor and Marvin B. Tepper	Landeb, Inc.	12/6/1967	60 East 42nd Street, New	None

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
			York NY 10165	
Landeb, Inc.	Senvick Corp.	12/6/1967	c/o Golenbock and Barell, 60 East 42nd Street, New York NY 10165	None
Senvick Corp.	Irving Levick	6/14/1964	701 Seneca Street, Buffalo NY 14210	None
Irving Levick	American Radiator & Standard Sanitary Corp.	3/1/1963	227 Nottingham Terrace, Buffalo NY 14216	None
American Radiator & Standard Sanitary Corp.	American Radiator Company	2/16/1939	40 West 40th Street, New York NY 10018	None

1809 Elmwood

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
MOD-PAC CORP.	Erie County Industrial Development Agency	11/30/2004	1801 Elmwood Avenue, Buffalo NY 14207	Requestor
Erie County IDA	Helen Schmincke	6/15/1984	95 Perry Street, Suite 403, Buffalo NY 14203	Lessor (Mod-Pac Corp., Armor Box Corp., Larry's Collision Inc., Lessees)
Helen Schmincke	Arnold Raynor and Marvin B. Tepper	2/13/1979	360 East 65th Street, New York NY 10065	None
Arnold Raynor and Marvin B. Tepper	Landeb, Inc.	12/6/1967	60 East 42nd Street, New York NY 10165	None

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
Landeb, Inc.	Senvick Corp.	12/6/1967	c/o Golenbock and Barell, 60 East 42nd Street, New York NY 10165	None
Senvick Corp.	Irving Levick	6/14/1964	701 Seneca Street, Buffalo NY 14210	None
Irving Levick	American Radiator & Standard Sanitary Corp.	3/1/1963	227 Nottingham Terrace, Buffalo NY 14216	None
American Radiator & Standard Sanitary Corp.	American Radiator Company	2/16/1939	40 West 40th Street, New York NY 10018	None

33 Mandan

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
MOD-PAC CORP.	City of Buffalo	1/19/1988	1801 Elmwood Avenue, Buffalo NY 14207	Requestor
Senvick Corp.	Peter and Genevieve Cmiech	12/22/1964	701 Seneca Street, Buffalo NY 14210	None
Peter and Genevieve Cmiech	City of Buffalo	8/1/1962	34 Laforce Place, Buffalo NY 14207	None

86 Ledger

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
MOD-PAC CORP.	James H. Naples, Jr.	3/26/2002	1801 Elmwood Avenue, Buffalo NY 14207	Requestor
James H. Naples, Jr.	Joseph S. Augello	12/2/1983	233 E. 80th Street, Apt 2C, New York NY 10021	None
Joseph S. Augello	John D. Naples, Jr.	2/17/1982	161 Mt. Vernon Drive, Amherst NY 14226	None
John D. Naples, Jr.	James H. Naples, Jr.	2/17/1982	58 Dan Troy Drive, Williamsville NY 14221	None
James H. Naples, Jr.	William Cummer	2/1/1982	233 E. 80th Street, Apt 2C, New York NY 10021	None
William Cummer	James H. Naples	6/30/1978	75 North Nicholas Drive, Tonawanda NY 14150	None
James H. Naples	Joseph Kokoszka	1/30/1976	91 North Drive, Buffalo NY 14216	None
Joseph Koskoszka and Viola Koskoszka	Estate of Joseph A. Szeglowski, surviving spouse of Rose Szeglowski	4/20/1954	86 Ledger Street, Buffalo NY 14216	None
Rose Szeglowski	Joseph F. Worczak and Jennie Worczak	4/27/1946	860 Walden Avenue, Buffalo NY 14211	None

94 Ledger

Grantee	Grantor	Date	Last known address/phone	Relationship to Requestor
MOD-PAC CORP.	James Naples	3/26/2002	1801 Elmwood Avenue, Buffalo NY 14207	Requestor
James Naples	Barbara Hoesel	5/26/2000	68 Radcliffe Road, Stanton [sic] Island NY 10305	None
Barbara Hoesel	Estate of Louise Jane Langridge	10/6/1986	102 Ledger Street, Buffalo NY 14216	None
Arthur and Louise Langridge	Carrel W. Smith	6/8/1951	35 Auchinvole Avenue, Buffalo NY 14213	None
Carrel W. Smith	Wiley C. Clark and Pearl Clark	11/8/1950	794 Elk Street, Buffalo NY 14210	None
Wiley C. Clark and Pearl Clark	Carrel W. Smith	12/31/1948	94 Ledger Street, Buffalo NY 14216	None

1801, 1805, 1809 Elmwood Operators and Lessees

In addition to the various record owners of the parcels identified in the abstract of title, the Site has been occupied by a wide range of entities for a variety of uses for more than a century. The following historical information is to the best of the Volunteer's information and belief.

The earliest records of commercial or industrial uses at the Site date back to the late 1800s. Permit cards from 1899 and a sanborn map dated 1916-1940 reflect that the property was occupied by American Radiator Co. as the site of an equipment plant. American Radiator (which later became American Radiator & Standard Sanitary Corp., then American Standard Inc., and is now known as Trane U.S. Inc., headquartered in North Carolina) occupied 1801 Elmwood and 1803 Elmwood until at least 1964, when the property was sold.

The properties changed hands several times during the 1960s and 1970s, with owners including several individuals including Irving Levick, Arnold and Marivn Tepper, and Helen Schmincke, as well as Senvick Corp. and Landeb, Inc.

Upon information and belief, Astronics Corporation (first formed in 1968 as Astronics Luminescent, Inc.) acquired Mod-Pac Corp. in the 1970's and on September 18, 1980, Mod-Pac entered into a 20-year lease of the Site with the Erie County Industrial Development agency ("ECIDA"), and it continued in that capacity until purchasing the Site in October of 2000. Astronics occupied the Site for a time as well, having its corporate, accounting, and executive offices, at 1801 Elmwood from 1996 to 2003. Mod-Pac was spun off from Astronics and became a fully separate entity on March 14, 2003.

During the period of the lease from ECIDA to Mod-Pac, several other entities leased portions of the Site as well. Shosho Brothers, Inc., a wholesale nondurable goods distributor, listed its address as 1803 Elmwood, Buffalo NY, and an undated plot plan from the 1990s shows Shosho occupying the front building of the Site most recently known as 1809 Elmwood Avenue at the north end of the Site. This Site had also been occupied by FWS Furniture as storage space, and by Sattlers Department Store as a home funishings retail outlet. Larry's Collision, an auto repair service, also leased a portion of the Site.

Armor Box Corp., a company that made and printed corrugated packaging for venders, was also among the lessees of the Site in the 1980s. Armor Box later became Norampac, and bought 1801 Elmwood from Mod-Pac October 3, 2000. Norampac then sold the building back to Mod-Pac on December 29, 2005.

Several additional entities have occupied the Site during Mod-Pac's tenure as well. Krepe-Kraft, a Mod-Pac dba, has been located at the Site since 2010. American Veterans, Inc. (Amvets) had leased excess warehouse space in 1809 Elmwood since at least 2006 and subsequently moved to warehouse space in 1803 Elmwood on April 1, 2011. Morris & Lee Inc., a manufacturer of water sampling, plumbing and scientific equipment based in Florida, briefly leased 1,350 square feet of space from July 2008 to May 2009 on a month to month basis.

ABSTRACT OF TITLE MADE BY

TRINITY TITLE & ABSTRACT CORP.

74 Niagara Street
Buffalo, New York 14202
716-842-0333 • FAX: 716-842-1902

Search No. S17-2186

**Tax District 9, 494.42 feet front by 0 feet in depth, No. 1801 Elmwood, east side, 791.69 feet south of Hertel;
Tax District 9, 99.58 feet front by 0 feet in depth, No. 1805 Elmwood, east side, 692.29 feet south of Hertel;
Tax District 9, 87.74 feet front by 0 feet in depth, No. 1809 Elmwood, east side, 480 feet south of Hertel;
Tax District 9, 90 feet front by 119 feet in depth, No. 86 Ledger, west side, 376.95 feet south of Hertel;
Tax District 9, 30.70 feet front by 119 feet in depth, No. 94 Ledger, west side, 346.95 feet south of Hertel; and
Tax District 9, 50 feet front by 119 feet in depth, No. 33 Mandan, east side, 434.25 feet south of Hertel.**

Assessed on 2017 roll to Mod-Pac Corp.

SBL No. 78.69-2-4.21, 78.69-2-4.1, 78.70-2-11, 78.69-2-3, 78.70-2-12, and 78.70-2-13, respectively

TRINITY TITLE & ABSTRACT CORP., a corporation duly incorporated and existing under the laws of the State of New York, for a valuable consideration to it paid, hereby guarantees and warrants, that there are no STATE TAX SALES, CITY or COUNTY TAXES, or TAX SALES or LOCAL ASSESSMENTS, now payable, affecting the above described REAL ESTATE on the tax rolls of the City of Buffalo or County of Erie (Sewer Rents based on water consumption or water charges not included),

EXCEPT AS FOLLOWS

**NO SEARCH IS MADE FOR OCCUPANCY TAXES
NO SEARCH IS MADE FOR CITY OF BUFFALO USER FEES FOR SOLID WASTE COLLECTION**

PURSUANT TO NEW YORK REAL PROPERTY LAW, SECTIONS 302 AND 520, THE REAL ESTATE TAX LIABILITY MAY BE AFFECTED UPON THE TRANSFER OF TITLE, IF PREMISES HAVE A PARTIAL OR FULL EXEMPTION.

Dated: February 8 2017

Trinity Title & Abstract Corp.

By Cecilia Hall
Authorized Signature

- ***TITLE INSURANCE***
- ***ABSTRACTS OF TITLE***
- ***GUARANTEED TAX SEARCHES***
- ***FEDERAL COURT SEARCHES***
- ***UCC FINANCING SEARCHES***
- ***FRANCHISE TAX SEARCHES***

WFG National Title Insurance Company
a Williston Financial Group company

ABSTRACT CERTIFICATE (Erie / Niagara County)

SERIAL # S17-2186 WFG

Order No:

Certificate No.:

Abstract by: **Trinity Title & Abstract Corp.**

Recertified to:

Recertified Set-Out Number(s):

Recertified End Set-Out Number(s):

Recertified Date:

WFG National Title Insurance Company, a South Carolina Corporation, for good consideration paid, GUARANTEES (pursuant to New York Insurance Law section 6403(b)(1) to the current record owner(s) of an interest in or specific lien upon the premises described at Set-Out(s) No(s) **at head of search** immediately preceding this Certificate (the "Subject Premises") and their successors in interest of record that:

1. It has searched Abstract of Judgments pursuant to Title 28, Condominium Liens, Federal Tax Liens (10 years), Financing Statements (up to 5 years), Grantor/Grantee, In Rem Proceedings Incompetencies/Conservatee, Judgments (10 years), Mechanics Liens (1 Year) Lis Pendens, Mechanics Liens (1 year), Mortgage, Notice of Pendency, Orders Appointing Receivers, Surety Bond Liens, indices maintained in the County Clerk's Office and the surrogate indices maintained in the Surrogate's Court, for the county in which the Subject Premises is located, against the names of the parties appearing in this Abstract as owning or having an interest in the Subject Premises during the record periods of such ownership from and including the date **01/31/1939** to the date of this Certificate.

2. It has searched the bankruptcy indices in the office of the clerk of the United States Bankruptcy Court for the Federal District in which the Subject Premises is located against the names of all record owners of an interest in the Subject Premises for six (6) months prior and subsequent to their respective period of ownership for twenty (20) years last past.

3. It has searched the Inactive Hazardous Waste Disposal Site Registry Index.

4. It found the matters set forth in the Abstract at Set-Outs; **1** through **78** said matters are correctly set forth therein; and, there is nothing more in those indices which appears to affect the Subject Premises, or any part thereof.

5. This search does not set forth mortgages, judgments, liens, notices of pendency or encumbrances recorded or filed prior to or during the period of this search for which cancellations, discharges or satisfactions have been recorded or filed. This Certificate shall be null and void if the fees therefore are not paid.

6. If any covenant or restriction referenced or appearing in this search .violates any provision of the Federal Fair Housing Act (42 U.S.C. ' 3601 et seq.), as amended, it is set forth herein solely in the interest of complete and accurate reporting.

7. The Guaranty under this Certificate shall not be limited by time.

IN WITNESS WHEROF, Trinity Title & Abstract Corp. on behalf of WFG National Title Insurance Company has caused this Certificate to be issued by its Authorized Company on **02/08/2017** at **8:59 am**.

TRINITY TITLE & ABSTRACT CORP.

Authorized Company

Cecilia Hall

Authorized Signatory

WFG NATIONAL TITLE INSURANCE COMPANY

By: _____
President

ATTEST: _____
Secretary

WFG NATIONAL TITLE INSURANCE COMPANY INCORPORATED 1974 SOUTH CAROLINA

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey, and more particularly bounded and described as follows:

BEGINNING at the point of intersection of the east line of Elmwood Avenue (99 feet wide) with the south line of Lot No. 84, Township 11, Range 8, which lot line is also the northerly right of way line of Conrail (formerly N.Y.C.R.R. Co.); thence northerly along said east line of Elmwood Avenue, a distance of 593.82 feet to its intersection with a south edge of a stone water table, extended westerly; thence easterly along the westerly extension of a south edge of a stone water table and a south edge thereof at an interior angle of 90° 07' 54", a distance of 108.12 feet to a point, which point is on an east edge of the said stone water table; thence northerly along an east edge of the said stone water table at an interior angle of 270° 00' 00", a distance of 3.67 feet to a south edge of a stone water table; thence easterly along a south edge of the said stone water table and the easterly extension thereof at an interior angle of 89° 57' 05", a distance of 77.0 feet to a point; thence northerly along a line forming an interior angle of 269° 59' 00", a distance of 42.75 feet to a point; thence northeasterly along a line forming an interior angle of 130° 57' 22", a distance of 71.17 feet to a point; thence northerly along a line forming an interior angle of 229° 02' 38", a distance of 122.74 feet to a point; thence easterly along a line forming an interior angle of 90° 00' 00", a distance of 183.86 feet to a point; thence southerly along a line forming an interior angle of 91° 59' 40" and also being along the exterior face of a canopy which projects from the north face of an existing concrete block building, a distance of 11.0 feet to a point; thence easterly along the face of an existing concrete block and brick building and along a line forming an interior angle of 270° 00' 00", a distance of 204.14 feet to a point on the east face of an existing concrete block wall; thence northerly along the east face of said concrete block wall forming an interior angle of 270° 09' 21", a distance of 10.32 feet to a point on the south line of Sublot No. 243, as shown on a map filed in the Erie County Clerk's Office under Map Cover 337; thence easterly along the south line of Sublot No. 243, Map Cover 337, and forming an interior angle of 94° 18' 00", a distance of 97.76 feet to a point on the southeast corner of said Sublot

No. 243, Map Cover 337; thence continuing easterly along a line forming an interior angle of 175° 09' 30", a distance of 50.13 feet to a point on the easterly line of Mandan Street (50 feet wide), also being the southwest corner of Sublot No. 188, Map Cover 337; thence northerly along the easterly line of Mandan Street and forming an interior angle of 274° 50' 30", a distance of 50.0 feet to a point on a line parallel with the north line of Sublot No. 187, Map Cover 337; thence easterly along the line parallel with the north line of Sublot No. 187, Map Cover 337 and forming an interior angle of 89° 39' 00", a distance of 119.70 feet to a point on a line being the west lines of Sublots 158, 159, 160 and 161, Map Cover 337; thence northerly along the west lines of Sublots 158, 159, 160 and 161, Map Cover 337 and forming an interior angle of 270° 21' 00", a distance of 70.70 feet to a point on a line parallel with the south line of Sublot No. 161, Map Cover 337 and 0.70 feet north therefrom; thence easterly along the line parallel with the south line of Sublot No. 161, Map Cover 337 and 0.70 feet north therefrom and forming an interior angle of 89° 39' 00", a distance of 119.70 feet to a point on the west line of Ledger Street (50 feet wide); thence south along the west line of Ledger Street and forming an interior angle of 90° 21' 00", distance of 120.07 feet to a point being the southeast corner of Sublot No. 157, Map Cover 337; thence easterly along the easterly extension of the south line of Sublot No. 157, Map Cover 337 and forming an interior angle of 269° 39' 00", a distance of 67.64 feet to a point in a line being the northerly extension of the west face of an existing brick building; thence southerly along the west face of aforementioned brick building and its extension northerly forming an interior angle of 89° 56' 30", a distance of 106.66 feet to a point; thence westerly along a line forming an interior angle of 90° 00' 00", a distance of 17.0 feet to a point; thence southerly along a line forming an interior angle of 270° 00' 00", a distance of 198.54 feet to a point; thence westerly along a line forming an interior angle of 85° 06' 40", a distance of 53.72 feet to a point on the southeast corner of an existing concrete block building; thence northerly along an easterly face of aforementioned concrete block building forming an interior angle of 90° 55' 40", a distance of 135.63 feet to a point; thence easterly along a southerly face of aforementioned concrete block building forming an interior angle of 90° 00' 00", a distance of 5.38 feet to a point; thence northerly being along an

easterly face of aforementioned concrete block building forming an interior angle of 270° 00' 00", a distance of 34.97 feet to a point; thence westerly along a northerly face of aforementioned concrete block building forming an interior angle of 270° 00' 00", a distance of 5.38 feet to a point; thence northerly along an easterly face of aforementioned concrete block building forming an interior angle of 90° 00' 00", a distance of 42.40 feet to a point on the north face of an existing brick wall; thence westerly along a north face of an existing brick wall forming an interior angle of 270° 08' 35", a distance of 72.23 feet to a point on the west face of an existing brick wall; thence southerly along a west face of an existing brick wall forming an interior angle of 269° 55' 17", a distance of 190.69 feet to a point on a south face of an existing brick wall; thence westerly along the south face of an existing brick wall forming an interior angle of 89° 18' 26", a distance of 17.79 feet to a point; thence southerly along a line forming an interior angle of 270° 34' 13", a distance of 22.05 feet to a point; thence westerly along a line forming an interior angle of 89° 55' 20", a distance of 11.14 feet to a point on an east face of an existing brick wall; thence southerly along an east face of an existing brick wall forming an interior angle of 270° 06' 00", a distance of 40.34 feet to a point; thence easterly along a line forming an interior angle of 269° 53' 30", a distance of 48.51 feet to a point on a line being the extension northerly of an east face of an existing brick wall; thence southerly along an east face of an existing brick wall and its extension northerly forming an interior angle of 89° 56' 40", a distance of 58.03 feet to a point; thence southeasterly along a line forming an interior angle of 235° 15' 19", a distance of 120.01 feet to a point; thence easterly parallel with the northerly right of way of Conrail forming an interior angle of 214° 28' 20", a distance of 83.95 feet to a point; thence southerly along a line forming an interior angle of 108° 37' 23", a distance of 159.93 feet to a point; thence southeasterly along a line forming an interior angle of 203° 36' 22", a distance of 100.0 feet to a point; thence continuing southeasterly along a line forming an interior angle of 195° 00' 00", a distance of 100.0 feet to a point; thence continuing southeasterly along a line forming an interior angle of 195° 00' 00", a distance of 100.0 feet to a point; thence easterly along a line forming an interior angle of 188° 49' 37", a distance of 167.86 feet

to a point; thence southerly along a line drawn parallel with Delaware Avenue and forming an interior angle of 103° 46' 18" deed, 103° 46' 33" measured, a distance of 22.57 feet to a point on the southwest corner of land conveyed to Linden Corners Inc. by deed recorded in the Erie County Clerk's Office in Liber 9424 of Deeds at page 461, said point also being on the north right of way line of Conrail, said right of way line also being the south line of Lot 84, Township 11, Range 8; thence westerly along the south line of Lot 84, being also the north line of Conrail and forming an interior angle of 85° 10' 20" deed, 85° 10' 05 measured, a distance of 1655.99 feet to the point or place of beginning.

EXCEPTING THEREFROM the lands conveyed to New York Central & Hudson River Railroad by deed recorded in the Erie County Clerk's Office in Liber 1137 of Deeds at page 26.

American Radiator Company,
a corporation organized
under the laws of the
State of New Jersey

To

American Radiator &
Standard Sanitary
Corporation,
a corporation organized
under the laws of the
State of Delaware
(No search against
the grantor)

Deed
Dated January 31 1939
Recorded February 16 1939 in
Liber 2846 of Deeds at page 167

1 Conveys All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Farm Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey, bounded and described as follows:

Beginning at a point formed by the intersection of the easterly side of Elmwood Avenue with the southerly side of Hertel Avenue, and running thence easterly along the southerly side of Hertel Avenue 553.86 feet more or less to a monument on the northeasterly corner of land conveyed by John B. Pierce and Adelaide Leonard Pierce, his wife to the party of the first part by deed dated April 29 1913 and recorded in the office of the Clerk of the County of Erie on May 5 1913 in Liber 1271 of Deeds at page 198; thence southerly along said land to the northwesterly corner of Subdivision Lot No. 251 as shown on a revised subdivision map of Hertel Avenue Park made by M. Davey, Surveyor and filed in the Erie County Clerk's Office on September 4 1896 under Cover No. 337; thence easterly along the northerly line of said Subdivision Lot No. 251, 2.32 feet to a point distant 117.88 feet westerly of the intersection of said northerly line of said lot with the westerly side of Mandan Street as said street is shown on said map, which point on the westerly side of Mandan Street is the northeasterly corner of said Subdivision Lot No. 251 and is distant 213.95 feet southerly of the point of intersection of said westerly side of Mandan Street with the southerly side of Hertel Avenue; thence southerly in a straight line 30 feet to a point in the southerly line of Subdivision Lot No. 251 and distant 2.26 feet from the southwesterly corner of said Subdivision Lot No. 251; thence still southerly in a straight line 30 feet to the southerly line of Subdivision Lot No. 250 to a point in the southerly line of said Subdivision Lot No. 250, distant 2.19 feet from the

southwesterly corner of said lot; thence westerly 2.19 feet to the southwesterly corner of said lot; thence southerly still along said land conveyed by John B. Pierce and wife, as aforesaid, to the northwesterly corner of Subdivision Lot No. 242 on said map; thence easterly along the northerly line of said Subdivision Lot No. 242 to the westerly side of Mandan Street; thence still easterly in a straight line across Mandan Street to the northwesterly corner of Subdivision Lot No. 189; thence still easterly along the northerly lines of Subdivision Lots Nos. 189 and 156 to the westerly side of Ledge Street as said street is shown on said map; thence still easterly across Ledger Street in a straight line in continuation of the northerly line of said Subdivision Lot No. 156 to the easterly side of Ledger Street; thence northerly along the easterly side of Ledger Street to the northwesterly corner of Subdivision Lot No. 101; thence easterly along the northerly line of said Subdivision Lot No. 101 to the southwesterly corner of Subdivision Lot No. 73; thence northerly along the westerly lines of Subdivision Lots Nos. 73, 74 and 75 to the northwesterly corner of Subdivision Lot No. 75; thence easterly along the northerly line of Subdivision Lot No. 75 to Rosalia Street as said street is shown on said map; thence southerly along the westerly side of Rosalia Street to its point of intersection with the southerly line of Subdivision Lot No. 72; thence easterly in a straight line across Rosalia Street to the easterly side thereof at its intersection with the southerly line of Subdivision Lot No. 14; thence northerly along the easterly side of Rosalia Street to the northwesterly corner of Subdivision Lot No. 13; thence easterly along the northerly line of Subdivision Lot No. 13 to its northeasterly corner, which point is also the westerly line of land conveyed by The Fidelity Trust Company of Buffalo and Harry D. Kirkover, as Executors of and Trustees under the Last Will and Testament of Henry D. Kirkover, deceased to the party of the first part by deed dated August 9 1917 and recorded in the office of the Clerk of Erie County on August 10 1917 in Liber 1396 of Deeds at page 50; thence northerly along said westerly line of said land to the southwesterly corner of land conveyed by the party of the first part to Arco Building & Improvement Association, Inc. by deed dated June 9 1923 and recorded in the office of said Clerk of Erie County on June 14 1923 in Liber 1692 of Deeds at page 30, which point is approximately 150 feet southerly from the southerly side of Hertel Avenue measured at right

angles thereto; thence easterly parallel with Hertel Avenue 895.08 feet to the northwesterly corner of land conveyed by the party of the first part to H. W. Wolcott & Co., Inc. by deed dated July 20 1928 and recorded in the office of said Clerk of Erie County in Liber 1964 of Deeds at page 386; thence southerly and parallel with Delaware Avenue and 216 feet westerly from its westerly side 66.45 feet to the northwesterly corner of land conveyed by the party of the first part to Arco Building & Improvement Association, Inc. by deed dated September 20 1927 and recorded in the office of said Clerk of Erie County on October 25 1927 in Liber 1962 of Deeds at page 128; thence southerly along the westerly line of said land and parallel with Delaware Avenue 150 feet to the northwesterly corner of land conveyed by the party of the first part to Arco Building & Improvement Association, Inc. by deed dated October 10 1927 and recorded in the office of said Clerk of Erie County on October 25 1927 in Liber 1962 of Deeds at page 130; thence southerly along the westerly line of said land and parallel with Delaware Avenue 105 feet to the northwesterly corner of land conveyed by the party of the first part to Arco Building & Improvement Association, Inc. by deed dated December 16 1927 and recorded in the office of said Clerk of Erie County on December 23 1927 in Liber 1962 of Deeds at page 442; thence southerly along the westerly line of said land and parallel with Delaware Avenue 495 feet to the southwesterly corner of said land; thence easterly along the southerly line of said land 66 feet to land conveyed by the party of the first part to Arco Building & Improvement Association, Inc. by deed dated June 9 1923 and recorded in the office of said Clerk of Erie County on June 14 1923 in Liber 1692 of Deeds at page 30; thence southerly along the westerly line of said land and parallel with Delaware Avenue to the northerly line of land of The New York Central Railroad Company, which line is also the southerly line of said Farm Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey; thence westerly along said land of The New York Central Railroad Company 2533.11 feet more or less to the easterly side of Elmwood Avenue; and thence northerly along said easterly side of Elmwood Avenue 1285.95 feet to the point or place of beginning.

EXCEPTING so much of said premises as was conveyed by William H. Hotchkiss and wife to The New York Central and Hudson River Railroad Company by deed dated October 25 1909 and recorded in the office of said

Clerk of Erie County on October 29 1909 in Liber 1137 of Deeds at page 26.

Together with all the right, title and interest of the party of the first part of, in and to the land lying in the bed of Elmwood Avenue, Hertel Avenue and Delaware Avenue and to such parts of Rosalia Street and Ledger Street as have not heretofore been vacated and closed in front of said premises to the center line thereof.

All reference to streets being for the purpose of description only and not for the purpose of dedication.

In the Matter	Certified Copy of
2 Of	Certificate of Incorporation from
American Radiator &	State of Delaware
Standard Sanitary	Dated March 25 1929
Corporation	Filed October 22 1940
(File No. 22871)	

Affidavit	Affidavit
3 Of	Dated February 25 1963
David A. DeWahl	Recorded March 1 1963 in
	Liber 6865 of Deeds at page 451

Deposes and says that he is the duly elected, qualified and acting Secretary of American Radiator & Standard Sanitary Corporation, a Delaware corporation, and head of its legal staff; that as such Secretary and legal counsel, he has custody of the corporate books and records of the corporation and is generally familiar with the affairs of the corporation and its present and former subsidiary companies; that he has examined the records pertaining to the dissolution and liquidation in 1939 of American Radiator Company, a New Jersey corporation, which at the time of its dissolution, was a wholly owned subsidiary of the corporation and the owner of the so-called stamping plant property located within and constituting the major part of that block or tract bounded by Elmwood, Hertel and Delaware Avenues and the New York Central Railroad in Buffalo, New York; that as of January 31 1939, pursuant to a plan for its complete liquidation, American Radiator Company conveyed to the corporation all of its assets

of every kind and description, such conveyance being evidenced by bill of sale dated January 31 1939, a true copy of which is annexed to this affidavit against cancellation and redemption of all its outstanding capital stock.

American Radiator & Standard Sanitary Corporation, a corporation organized under the laws of the State of Delaware and duly authorized to do business in the State of New York	Deed Dated March 1 1963 Recorded March 1 1963 in Liber 6865 of Deeds at page 443
To	Conveys: Parcel A
Irving Levick	All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Farm Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey, bounded and described as follows:

4

Beginning at a point formed by the intersection of the easterly side of Elmwood Avenue with the southerly side of Hertel Avenue, and running thence easterly along the southerly side of Hertel Avenue 553.86 feet more or less to a monument on the northeasterly corner of land conveyed by John B. Pierce and Adelaide Leonard Pierce, his wife to American Radiator Company by deed dated April 29 1913 and recorded in the Erie County Clerk's Office on May 5 1913 in Liber 1271 of Deeds at page 198; thence southerly along said land to the northwesterly corner of Subdivision Lot No. 251 as shown on a revised subdivision map of Hertel Avenue Park made by M. Davey, Surveyor, and filed in the Erie County Clerk's Office on September 4 1896 under Cover No. 337; thence easterly along the northerly line of said Subdivision Lot No. 251, 2.32 feet to a point distance 117.88 feet westerly of the intersection of said northerly line of said lot with the westerly side of Mandan Street as said street is shown on said map, which point on the westerly side of Mandan Street is the northeasterly corner of said Subdivision Lot No. 251 and is distant 213.95 feet southerly of the point of intersection of said westerly side of Mandan Street with the southerly side of Hertel Avenue; thence southerly in a straight line 30 feet to a point in the southerly line of Subdivision Lot No. 251, distant 2.26 feet from the southwesterly

corner of said Subdivision Lot No. 251; thence still southerly in a straight line 30 feet to the southerly line of Subdivision Lot No. 250 to a point in the southerly line of said Subdivision Lot No. 250, distant 2.19 feet from the southwesterly corner of said lot; thence westerly 2.19 feet to the southwesterly corner of said lot; thence southerly still along said land conveyed by John B. Pierce and wife as aforesaid to the northwesterly corner of Subdivision Lot No. 242 on said map; thence easterly along the northerly line of said Subdivision Lot No. 242 to the westerly side of Mandan Street; thence still easterly in a straight line across Mandan Street to the northwesterly corner of Subdivision Lot No. 189; thence still easterly along the northerly lines of Subdivision Lots Nos. 189 and 156 to the westerly side of Ledger Street as said street is shown on said map; thence still easterly across Ledger Street in a straight line in continuation of the northerly line of said Subdivision Lot No. 156 to the easterly side of Ledger Street; thence northerly along the easterly side of Ledger Street 67.34 feet to the northwesterly corner of Subdivision Lot No. 100; thence easterly along the northerly line of said Subdivision Lot No. 100 to the northwesterly corner of Subdivision Lot No. 73; thence northerly along the westerly line of Subdivision Lots Nos. 74 and 75 to the northwesterly corner of Subdivision Lot No. 75; thence easterly along the northerly line of Subdivision Lot No. 75 to Rosalia Street as said street is shown on said map; thence southerly along the westerly side of Rosalia Street to its point of intersection with the southerly line of Subdivision Lot No. 72; thence easterly in a straight line across Rosalia Street to the easterly side thereof at its intersection with the southerly line of Subdivision Lot No. 14; thence northerly along the easterly side of Rosalia Street to the northwesterly corner of Subdivision Lot No. 13; thence easterly along the northerly line of Subdivision Lot No. 13 to its northeasterly corner, which point is also the westerly line of land conveyed by The Fidelity Trust Company of Buffalo and Harry D. Kirkover, as Executors of and Trustees under the Last Will and Testament of Henry D. Kirkover, deceased to American Radiator Company by deed dated August 9 1917 and recorded in the Erie County Clerk's Office on August 10 1917 in Liber 1396 of Deeds at page 50; thence northerly along said westerly line of said land 359.77 feet to the southerly line of Hertel Avenue; thence easterly along the southerly line of Hertel Avenue 41.74 feet to the northwest corner of

land conveyed to John Bagrowski by deed recorded in the Erie County Clerk's Office in Liber 1692 of Deeds at page 514; thence southerly along the westerly line of lands conveyed by said last deed 150 feet to the southwest corner thereof; thence easterly along the southerly line of said lands 40 feet to the southeast corner thereof; thence northerly along the easterly line of said lands 150 feet to the southerly line of Hertel Avenue; thence easterly along the southerly line of Hertel Avenue 420 feet to the northwest corner of lands conveyed to William J. Sernoffsky by deed recorded in said Clerk's Office in Liber 4231 of Deeds at page 488; thence southerly along the westerly line of Sernoffsky's land 150 feet to the southwest corner thereof; thence easterly along the southerly line of Sernoffsky's land 300 feet to the west line of lands conveyed to Twin City Auto Co. Inc. by deed recorded in said Clerk's Office in Liber 4199 of Deeds at page 426; thence southerly and along the said west line of lands conveyed to Twin City Auto Co. Inc. by deed aforesaid 224.09 feet to the southwest corner thereof; thence easterly along the south line of lands conveyed to Twin City Auto Co. Inc. 80 feet to an angle point in the southwest corner of lands conveyed to Twin City Auto Co. Inc. by deed recorded in said Clerk's Office in Liber 3580 of Deeds at page 308; thence continuing easterly along the southerly line of lands conveyed by said last mentioned deed 42.49 feet; thence southerly at right angles 595 feet to the southwest corner of lands conveyed to Pirson Auto Parts, Inc. by deed recorded in said Clerk's Office in Liber 3722 of Deeds at page 540; thence easterly at right angles 66 feet; thence southerly at right angles 160 feet; thence easterly at right angles 126 feet to the west line of Delaware Avenue as now laid out; thence southerly along said west line of Delaware Avenue 193.38 feet to the south line of Farm Lot No. 84 which is also the north line of New York Central Railroad lands; thence westerly along the south line of Farm Lot No. 84, a distance of 2657.96 feet to the east line of Elmwood Avenue; and thence northerly along the east line of Elmwood Avenue 1286.11 feet to the point or place of beginning.

EXCEPTING THEREFROM the part conveyed by William J. Hotchkiss and wife to New York Central and Hudson River Railroad Company by deed recorded in the Erie County Clerk's Office on October 29 1909 in Liber 1137 of Deeds at page 26.

Parcel B

All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Farm Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey, and more particularly bounded and described as follows:

BEGINNING at a point in the easterly line of Ledger Street discontinued and closed, said point being distant northerly 54.5 feet at right angles from the monumented center line of the railroad (New York Central); and running thence northerly along the easterly line of Ledge Street discontinued and closed 246 feet more or less to a point distant southwesterly 15 feet at right angles from the center line of the spur track leading to the Pierce Plant of American Radiator Company; thence southeasterly parallel with and distant 15 feet at right angles from the center line of said spur track to a point distant northerly 54.5 feet at right angles from said monumented center line; thence westerly parallel with said monumented center line 239 feet more or less to the place of beginning.

Together with all right, title and interest of the railroad in Ledger Street as recited in a deed recorded in the Erie County Clerk's Office in Liber 1373 of Deeds at page 64.

See resolution and consent to sell by Board of Directors attached hereto.

Irving Levick		Easement
5	To	Dated July 8 1963
Niagara Mohawk Power		Recorded July 16 1963 in
Corporation		Liber 6905 of Deeds at page 166
(No search against		Grants the right to construct,
second party)		operate and maintain poles, wires,
		guys and appurtenances for the purpose

of erecting and operating electric lines under, over and across the lands described in deed recorded in Liber 6865 of Deeds at page 443, together with rights of ingress and egress.

Recites that this easement shall be limited to the following described portion of the lands referred to in said deed, situate in the City of Buffalo, part of Lot No. 84, Township 11, Range 8, described as follows:

Beginning at a point in the easterly line of Elmwood Avenue, said point being 300 feet north of the intersection of the easterly line of Elmwood Avenue and the south line of Farm Lot No. 84; running thence easterly parallel with the south line of Farm Lot No. 84, 750 feet to a point; running thence northerly and parallel with the easterly line of Elmwood Avenue, 300 feet to a point; running thence westerly and parallel with the south line of Farm Lot No. 84, 750 feet to the easterly line of Elmwood Avenue; running thence southerly along the easterly line of Elmwood Avenue, 300 feet to the place of beginning.

	Irving Levick	Warranty Deed
6	To	Dated August 13 1964
	Senvick Corporation	Recorded August 14 1964 in
		Liber 7029 of Deeds at page 203
		Conveys same premises as described in deed recorded in Liber 6865 of Deeds at page 443.

	In the Matter	Certified Copy of
7	Of	Certificate of Incorporation
	Senvick Corporation	Dated May 25 1964
	(File No. 41065)	Filed June 16 1964

	Senvick Corporation	Right of Way
8	To	Dated April 27 1965
	Iroquois Gas Corporation	Recorded May 24 1965 in
	(No search against	Liber 7111 of Deeds at page 647
	second party)	Grants the right to place, maintain and operate a pipe line and accessories for the transportation of

oil or gas over and through lands described in deed recorded in Liber 7029 of Deeds at page 203, together with rights of ingress and egress.

Recites that said pipe line is to be laid as shown on print marked F-14278-A attached hereto and made a part hereof. See Assignment of Interest to National Fuel Gas Distribution Corporation recorded in Liber 8189 of Deeds at page 13. See terms and conditions contained herein.

	Senvick Corporation	Easement
9	To	Dated May 24 1965
	New York Telephone	Recorded May 26 1965 in
	Company and Niagara	Liber 7112 of Deeds at page 260
	Mohawk Power Corporation	Grants the right, privilege and
	(No search against	easement to place, maintain and
	second parties)	operate forever the necessary poles,

subways, conduits, wires, cables, anchors, fixtures and other appurtenances thereto for the purpose of erecting and operating electric and telephone lines in, under, upon, over and across property situate in the City of Buffalo, part of Lot No. 84, Township 11, Range 8 and described in deed recorded in Liber 7029 of Deeds at page 203. See terms and conditions contained herein.

	Senvick Corporation	Right of Way
10	To	Dated May 20 1965
	Iroquois Gas Corporation	Recorded June 29 1965 in
	(No search against	Liber 7123 of Deeds at page 355
	second party)	Grants the right to place,

maintain and operate a pipe line and accessories for the transportation of oil or gas over and through lands described in deed recorded in Liber 7029 of Deeds at page 203, together with rights of ingress and egress.

Recites that said pipe line is to be laid as shown on print marked F-14385 attached hereto and made a part hereof. See Assignment of Interest to National Fuel Gas Distribution Corporation recorded in Liber 8189 of Deeds at page 13. See terms and conditions contained herein.

	Senvick Corporation	Covenant Vs Grantor Deed
11	To	Dated December 4 1967
	Landeb, Inc.	Recorded December 6 1967 in
		Liber 7424 of Deeds at page 231
		Conveys same premises as described

in deed recorded in Liber 6865 of Deeds at page 443.

Recites that this conveyance has been made with the consent of the holders of at least two-thirds of the outstanding shares of the first party entitled to vote therein at a meeting duly called.

NOTE: We find no Certificate of Incorporation on record in the Erie County Clerk's Office for Landeb, Inc.

	Landeb, Inc.	Covenant Vs Grantor Deed
12	To	Dated December 4 1967
	Arnold Raynor and	Recorded December 6 1967 in
	Marvin B. Tepper,	Liber 7424 of Deeds at page 98
	as joint tenants and	Conveys same premises as described
	not as tenants in common	in deed recorded in Liber 6865 of Deeds at page 443.

Recites that this conveyance has been made with the unanimous consent of all the stockholders of the first party.

	Marvin B. Tepper,	Right of Way
	Arnold Raynor, and	Dated May 6 1968
	Seneca Warehouse &	Recorded May 14 1968 in
	Industrial Center, Inc.	Liber 7467 of Deeds at page 82
	(Lessee)	Grants the right to place,
	(No search against	maintain and operate a pipe line and
	Seneca Warehouse &	accessories for the transportation of
	Industrial Center, Inc.)	oil or gas over and through lands
13	To	described in Liber 7424 of Deeds at
	Iroquois Gas Corporation	page 231, together with rights of
	(No search against	ingress and egress.
	second party)	Recites that said pipe line is to be laid as shown on print attached hereto and made a part hereof.

See Assignment of Interest to National Fuel Gas Distribution Corporation recorded in Liber 8189 of Deeds at page 13. See terms and conditions contained herein.

	Arnold Raynor and	Easement Agreement
	Marvin B. Tepper	Dated October 28 1977

14 With
James V. Welch
(No search against
second party)

Recorded November 1 1977 in
Liber 8579 of Deeds at page 17

Recites that the first parties are the owners of premises et al. and the second party is the owner of lands adjacent thereto on the east, fronting on both Hertel and Delaware Avenues; that the parties hereto grant unto each other easements across their respective lands for the purpose of ingress and egress for pedestrian and motor vehicle traffic over and across the roadways existing from time to time on the respective lands. See additional agreements contained herein.

Arnold Raynor and
Marvin B. Tepper
15 To
Helen Schmincke

Quit Claim Deed
Dated January 9 1979
Recorded February 13 1979 in
Liber 8752 of Deeds at page 557

Conveys same premises as described in deed recorded in Liber 6865 of Deeds at page 443.

Helen Schmincke
16 To
Steven R. Frankel

Power of Attorney
Dated August 29 1980
Recorded September 18 1980 in
Liber 93 of Powers of Attorney
at page 451

Grants full power to act in all real estate transactions et al.

In the Matter
17 Of
Helen Schmincke
and others

Declaration
Dated September 18 1980
Recorded September 18 1980 in
Liber 8943 of Deeds at page 446

Establishes various easements, covenants and conditions for the benefit of premises et al. See terms and conditions contained herein.

Helen Schmincke signs and acknowledges by Steven R. Frankel, her Attorney-in-fact.

	Helen Schmincke	Easement
18	To	Dated March 16 1981
	New York Telephone	Recorded March 24 1981 in
	Company and Niagara	Liber 8997 of Deeds at page 118
	Mohawk Power Corporation	Grants the right to erect, operate
	(No search against	and maintain electric and communication
	second parties)	lines and appurtenances under, over and
		across premises et al., together with
		rights of ingress and egress. See terms
		and conditions contained herein.

	Helen Schmincke	Bargain and Sale Deed
19	To	Dated September 18 1980
	Erie County Industrial	Recorded September 18 1980 in
	Development Agency	Liber 8943 of Deeds at page 422
		Conveys All That Tract or Parcel
		of Land, situate in the City of
		Buffalo, County of Erie and State of

New York, being part of Lot No. 84, Township 11, Range 8, more particularly bounded and described as follows:

Beginning at the point of intersection of the west line of Elmwood Avenue (99 feet wide) with the south line of Lot No. 84, which line is also the northerly right of way line of Conrail (formerly N.Y.C.R.R.); running thence northerly along the said east line of Elmwood Avenue, a distance of 593.82 feet to its intersection with the south edge of a stone water table, extended westerly; running thence easterly along the westerly extension of the south edge of a stone water table and the south edge thereof at an interior angle with the last mentioned course of 90° 07' 54", a distance of 108.12 feet to a point, which is in the east edge of the said stone water table; running thence northerly along the east edge of the said stone water table at an interior angle with the last mentioned course of 270° 00', a distance of 3.67 feet to the south edge of a concrete water table; running thence easterly along the south edge of the said concrete water table and the easterly extension thereof at

an interior angle with the last mentioned course of 89° 57' 05", a distance of 77.0 feet to a point; running thence northerly along a line making an interior angle with the last mentioned course of 269° 59', a distance of 42.75 feet to a point; running thence northeasterly along a line making an interior angle with the last mentioned course of 130° 57' 22", a distance of 71.17 feet to a point; running thence northerly along a line making an interior angle with the last mentioned course of 229° 02' 38", a distance of 35.0 feet to a point; running thence easterly along a line making an interior angle with the last mentioned course of 91° 55' 53", a distance of 187.0 feet to the west face of a concrete block building; running thence southerly along the west face of the said concrete block building, and along a line making an interior angle with the last mentioned course of 90° 03' 44", a distance of 37.0 feet to the southwest corner of said concrete block building; running thence easterly along the south face of said concrete block building and along a line making an interior angle with the last mentioned course of 269° 54' 20", a distance of 93.70 feet to the west face of said concrete block building; running thence southerly along the west face of said concrete block building and along a line making an interior angle with the last mentioned course of 90° 41', a distance of 21.43 feet to a point; running thence easterly along an easterly jog of the west face of said concrete building and along a line making an interior angle with the last mentioned course of 269° 19' 00", a distance of 0.34 feet to a point; running thence southerly along the west face of said concrete block building and along a line making an interior angle with the last mentioned course of 90° 31' 38", a distance of 14.66 feet to a point; running thence easterly along the north face of a brick wall and along a line making an interior angle with the last mentioned course of 269° 47' 06", a distance of 133.84 feet to a point; running thence easterly along a line making an interior angle with the last mentioned course of 179° 46' 53", a distance of 100.46 feet to a point; running thence easterly along a line making an interior angle with the last mentioned course of 179° 59' 26", a distance of 62.66 feet to the east face of pilasters of a brick wall; running thence southerly along the east face of a series of building pilasters and the southerly extension thereof, along a line making an interior angle with the last mentioned course of 89° 59' 38", a distance of 98.83 feet to a point on the north face of a

brick wall; running thence easterly along the north face of said brick wall and along a line making an interior angle with the last mentioned course of 270° 01' 00", a distance of 130.49 feet to the east face of a brick wall; running thence southerly along the east face of a brick wall and along a line making an interior angle with the last mentioned course of 90° 01' 44", a distance of 23.07 feet to a point; running thence westerly along the south face of a brick wall and along a line making an interior angle with the last mentioned course of 89° 55' 20", a distance of 11.14 feet to a point; running thence southerly along the east face of a brick wall and along a line making an interior angle with the last mentioned course of 270° 06', a distance of 40.34 feet to a point; running thence easterly along the north face of a brick wall and the westerly extension thereof, along a line making an interior angle with the last mentioned course of 269° 53' 30", a distance of 48.51 feet to a point; running thence southerly along the east face of a brick building and the southerly extension thereof, along a line making an interior angle with the last mentioned course of 89° 56' 40", a distance of 202.0 feet to a point; running thence westerly along a line making an interior angle with the last mentioned course of 89° 43' 44", which line is parallel with the northerly right of way line of Con-Rail Corp., a distance of 368.0 feet to a point; running thence southerly parallel with Elmwood Avenue along a line making an interior angle with the last mentioned course of 268° 19' 25", a distance of 74.0 feet to a point; running thence westerly at right angles, a distance of 135.13 feet to a point; running thence southerly at right angles and parallel with Elmwood Avenue, a distance of 212.87 feet to the northerly right of way line of Con-Rail Corp., which is also the south line of Lot 84; running thence westerly along the south line of Lot 84, a distance of 497.0 feet to the point or place of beginning.

Subject, nevertheless to:

A. Any and all present and future zoning restrictions, regulations, requirements, laws, ordinances, resolutions and orders of any city, town or village in which the property lies and of all boards, bureaus, commissions, departments and bodies of any municipal, county, state or federal sovereign or other governmental authority now or hereafter having or acquiring jurisdiction of the property or the use and improvements thereof.

B. Any state of facts which would be shown by a current accurate survey of the property or any part thereof. provided such state of facts does not render title unmarketable.

C. Leases and tenancies between grantor and (1) grantee, (ii) Armor Box Corporation, and (iii) Larry's Collision, Inc. and rights and claims of parties not shown of record, and/or any further subleases and tenancies emanating therefrom and any non-disturbance or recognition agreements relating thereto.

D. Covenants, restrictions, easements, leases, mortgages and contracts and agreements of record.

E. Any state of facts a physical inspection of the property would show.

F. Real estate taxes and assessments for the fiscal year 1980/81.

Together with all right, title and interest, if any, of grantor in and to any streets and roads abutting the above described property to the center lines thereof.

Together with the appurtenances and all the estate and rights of grantor in and to said property.

	Erie County Industrial Development Agency	Easement Dated January 16 1992
20	To	Recorded January 27 1992 in
	Niagara Mohawk Power Corporation	Liber 10382 of Deeds at page 746
	(No search against second party)	Grants: See Easement recorded in Liber 10382 of Deeds at page 746 - copy attached hereto.

UTILITY EASEMENT

THE ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY, 300 Liberty Building, Buffalo, New York 14202 (hereafter referred to as the GRANTOR) and NIAGARA MOHAWK POWER CORPORATION, 535 Washington Street, Buffalo, New York 14203 (GRANTEE, hereafter referred to as the COMPANY).

W I T N E S S E T H :

That the GRANTOR for and in consideration of One Dollar ($1.00) and/or other good and valuable consideration, to it paid by the COMPANY, the receipt or waiver of which is hereby acknowledged, does hereby grant and release unto the COMPANY, its successors and assigns forever, the perpetual right, privilege and easement to install, construct, reconstruct, extend, renew, replace, repair, maintain, operate, inspect, and at its pleasure, remove electric facilities, including poles, cross arms, anchors, down guys, cables, conduits, wires, closures, pad mount transformer, lateral service lines, accessories, and other such appurtenant or supporting apparatus, and all other appurtenances incident to said systems, as the COMPANY, its successors and assigns may now or from time to time in the future deem reasonably necessary or proper for the transmission and distribution of electric service upon, across, over, and under the parcel of land in which the GRANTOR owns or has an interest, hereafter mentioned.

The easement area hereby granted is more particularly shown on a sketch entitled EXHIBIT "A", dated January 7, 1992 attached hereto and made a part hereof, which is all or a portion of that tract or parcel of land, more commonly known as 1805 Elmwood Avenue, situated in the City of Buffalo, County of Erie, State of New York, being part of Lot 84, Township 11, Range 8, said lands being described in a certain deed recorded in the Erie County Clerk's office on the 18th day of September, 1980, in Liber 8943 of Deeds at Page 422.

LIBER 10382 PAGE 747

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Together with the perpetual right, privilege and easement to trim, cut and remove any trees, brush, roots or other obstructions which in the reasonable judgement of the COMPANY may be a source of danger to the COMPANY'S facilities as the COMPANY may now or from time to time in the future deem reasonably necessary, provided that such right, privilege and easement to trim, cut and remove shall not violate or be in conflict with any and all applicable provisions of law, rules, regulations or restrictions applicable to the premises. Together with the right of way and easement for the passage of personnel, vehicles and machines as shall be deemed reasonably necessary by the COMPANY, and when using such right of ingress and egress, shall comply with all industry and governmental safety rules and regulations and shall use such right of way so as not to unreasonably interfere with the occupants' use and enjoyment of the premises.

It being the understanding of the parties hereto that the non-exclusive and permanent right of way and easement above-described and herein conveyed is intended to prohibit the longitudinal or parallel occupancy of said easement strip and surface or subsurface structures or excavating, mining or blasting within the limits of said easement and right of way, without the prior written consent of the COMPANY, which consent shall not be unreasonably withheld or delayed.

It is agreed and understood that the terms and provisions of this easement grant shall not be construed to prohibit the vehicular parking upon the easement area.

No covenant, stipulation, obligation or agreement contained in this document shall be deemed to be a covenant, stipulation, obligation or agreement of any member, officer, agent or employee of the GRANTOR in his individual capacity, and neither the members of GRANTOR nor any officer of GRANTOR shall be liable personally or be subject to any personal liability or accountability by reason of the execution and delivery hereof. No provision, covenant or agreement contained in this document or any obligations herein imposed upon GRANTOR or the breach thereof shall constitute or give rise to or impose upon the GRANTOR a pecuniary liability or a charge under its general credit. There shall be no recourse to GRANTOR hereunder other than to its interest in the premises.

No indebtedness or covenant herein contained shall be deemed to constitute a debt of the State of New York or the County of Erie, and neither the State of New York nor the County of Erie shall be liable on any indebtedness or covenant herein contained.

The GRANTOR agrees with the COMPANY, on behalf of the GRANTOR, its successors and assigns, and as a covenant running with the land, that the existing grade of the easement area following the installation of the COMPANY'S facilities will remain undisturbed and unchanged, except upon written agreement by both parties.

It is agreed that as consideration for the granting of this easement, the COMPANY shall repair or replace in a good and workmanlike manner any damaged surface paving material within a reasonable time after completion of their work, weather permitting.

To have and to hold these rights hereby granted unto the said COMPANY, its successors and assigns, forever.

And said GRANTOR covenants as follows: First, that the COMPANY shall quietly enjoy the said premises.

This easement shall expire, in whole or in part, upon the earlier of (a) written agreement of the COMPANY and the GRANTOR; or (b) failure of the COMPANY to actively use the easement area for a period of one (1) year.

IN WITNESS WHEREOF, the parties hereto have duly executed this instrument under seal this 10th day of January, 1992.

THE ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY

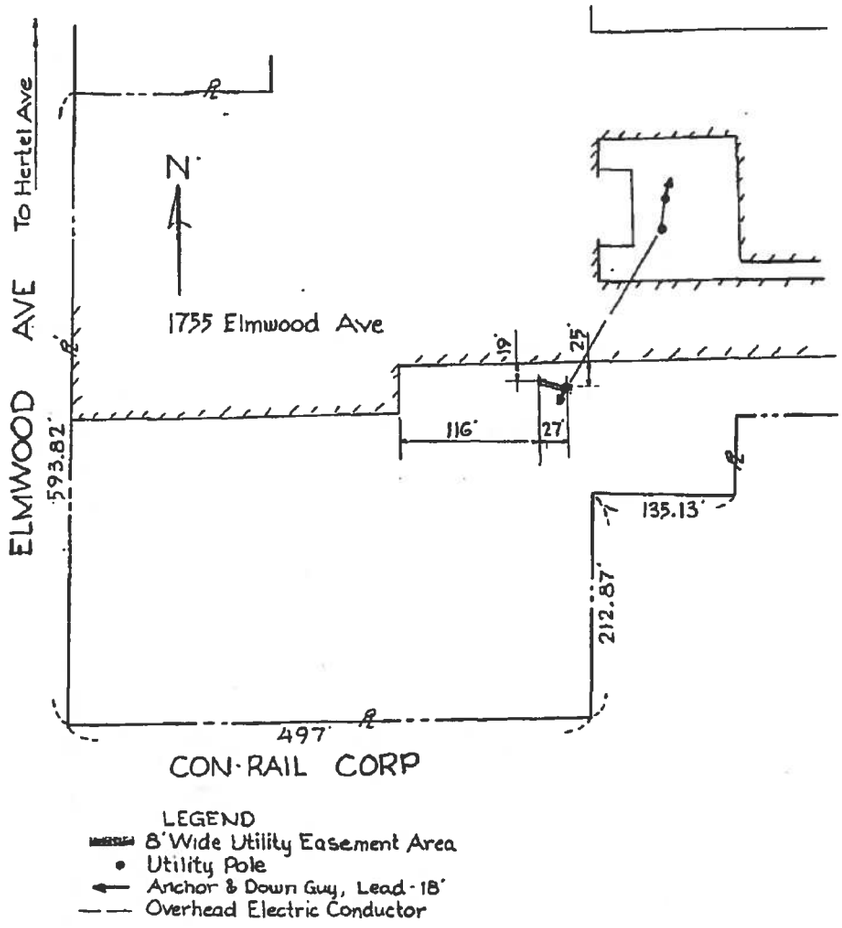
By Karen M. Flomsbee

NIAGARA MOHAWK POWER CORPORATION

By _____

Vice President
Electric Customer Service

LIBF 10382 PG 749



LEGEND
- 8' Wide Utility Easement Area
- Utility Pole
- Anchor & Down Guy, Lead - 18'
- Overhead Electric Conductor

LIBER 10382 PG 751

EXHIBIT A
City of Buffalo
January 7, 1992
No Scale

	Erie County Industrial Development Agency	Quit Claim Deed Dated September 28 2000
21	To	Recorded October 3 2000 in
	Mod-Pac Corp.	Liber 10972 of Deeds at page 1524 Conveys same premises as described in deed recorded in Liber 8943 of Deeds at page 422.
	In the Matter	Certificate of Incorporation
22	Of	Filed February 17 1968
	Mod-Pac Corp. (File No. 46809)	
	Helen Schmincke	Bargain and Sale Deed
23	To	Dated June 14 1984
	Erie County Industrial Development Agency (No search against the grantee) (THIS DEED SET OUT FOR REFERENCE ONLY)	Recorded June 15 1984 in Liber 9340 of Deeds at page 441 Conveys All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8 of the Holland

Land Company's Survey, more particularly bounded and described as follows:

Beginning at a point on the easterly line of Elmwood Avenue (99 feet wide) distant 593.82 feet north of the south line of said Lot 84; running thence easterly along a line forming an angle with the last mentioned course in the southeast quadrant of 90° 07' 54" along the south edge of a stone water table and the westerly extension thereof, a distance of 108.12 feet to a corner of the said stone water table; running thence northerly along the east edge of the said stone water table at right angles to the last mentioned course, a distance of 3.67 feet to the south edge of a concrete water table; running thence easterly along a line forming an angle with the last mentioned course in the southeast quadrant of 89° 57' 05", and along the south edge of the said concrete water table and the easterly extension thereof, a distance of 77.0 feet to a point;

running thence northerly along a line forming an angle with the last mentioned course in the northwest quadrant of 90° 01' 00", a distance of 42.75 feet to a point; running thence northeasterly on a line deflecting to the right of 49° 02' 38" from a continuation of the last described line, a distance of 71.17 feet to a point; running thence northerly along a line deflecting to the left of 49° 02' 38" with a continuation of the last described line, a distance of 35.0 feet to the principal point or place of beginning; running thence easterly along a line forming an angle with the last mentioned course in the southeast quadrant of 91° 55' 53", a distance of 187.0 feet to the west face of an existing concrete block building; running thence southerly along the west face of the said concrete block building and along a line forming an angle with the last mentioned course in the southwest quadrant of 90° 03' 44", a distance of 37.0 feet to a corner of the said concrete block building; running thence easterly along the south face of the said concrete block building and on a line forming an exterior angle with the last mentioned course of 269° 54' 20", a distance of 93.70 feet to a corner of the said concrete block building; running thence southerly along the west face of the said building and on a line forming an angle with the last mentioned course in the southwest quadrant of 90° 41' 00", a distance of 21.43 feet to a corner of the said building; running thence easterly along the south face of the said building and on a line forming an exterior angle with the last mentioned course of 269° 19' 00", a distance of 0.34 feet to a corner of the said building; running thence southerly along the west face of the said building and on a line forming an angle with the last mentioned course in the southwest quadrant of 90° 31' 38", a distance of 14.66 feet to a point; running thence easterly on a line forming an exterior angle with the last mentioned course of 269° 47' 06", a distance of 133.84 feet to a point; running thence easterly along a line forming an exterior angle with the last mentioned course of 179° 46' 53", a distance of 100.46 feet to a point; running thence easterly on a line forming an exterior angle with the last mentioned course of 179° 59' 26", a distance of 62.66 feet to a point; running thence southerly along a line forming an angle with the last mentioned course in the southwest quadrant of 89° 59' 38", a distance of 98.83 feet to a point; running thence easterly along the north face of an existing brick wall and on a line forming an exterior angle with the last mentioned course of 270° 01'

00", a distance of 130.49 feet to a point; running thence southerly along the extension north of the east face of a brick wall and on a line forming an angle with the last mentioned course in the southwest quadrant of 90° 01' 44", a distance of 1.02 feet to a point; running thence easterly along the south face of an existing brick wall, and on a line forming an angle with the last mentioned course in the northeast quadrant of 90° 34' 13", a distance of 17.79 feet to a point; running thence northerly along the west face of an existing brick wall, and on a line forming an angle with the last mentioned course in the northwest quadrant of 89° 18' 26", a distance of 190.69 feet to a point; running thence easterly and along the north face of an existing wall on a line forming an interior angle with the last mentioned course of 269° 55' 17", a distance of 72.23 feet to a point; running thence southerly along the east face of a concrete block building and on a line forming an interior angle with the last mentioned course of 270° 08' 35", a distance of 42.40 feet to a point; running thence easterly at right angles along the north face of a projection of the said concrete block building, a distance of 5.38 feet to a point; running thence southerly at right angles and along the east face of a projection of the said concrete block building, a distance of 34.97 feet to a point; running thence westerly at right angles and along the south face of a projection of the said concrete brick building, a distance of 5.38 feet to a corner of the said concrete block building; running thence southerly at right angles along the east face of the said concrete block building, a distance of 135.63 feet to the southeast corner of the said concrete block building; running thence easterly along a line forming an angle with the last mentioned course in the northeast quadrant of 90° 55' 40", a distance of 53.72 feet to a point; running thence northerly along a line forming an angle with the last mentioned course in the northwest quadrant of 85° 06' 40", a distance of 198.54 feet to a point; running thence easterly at right angles, a distance of 17.0 feet to the west face of an existing brick building; running thence northerly at right angles along the said west face of the existing brick building and the northerly extension thereof, a distance of 106.66 feet to a point which is the point of intersection of the northerly extension of the west face of the said existing brick building with the easterly extension of the south line of Sublot 157, as shown on a map filed in the Erie County Clerk's Office under Cover 337;

running thence westerly along a line forming an angle with the last mentioned course in the southwest quadrant of 89° 56' 30" and along the south line of Sublots 188 and 157, Cover 337, and the easterly extension thereof, a distance of 307.04 feet to the southwest corner of Sublot 188, Cover 337; running thence westerly on a line forming an interior angle with the last mentioned course of 184° 29' 30", a distance of 50.13 feet to the southeast corner of Sublot 243, Cover 337; running thence westerly along the south line of Sublot 243, Cover 337, and on a line forming an interior angle with the last mentioned course of 175° 09' 30", a distance of 97.76 feet to the east face of an existing concrete block wall; running thence southerly along the said east face of the existing concrete block wall and on a line forming an angle with the last mentioned course in the southeast quadrant of 94° 18' 00", a distance of 1032 feet to the north face of an existing concrete and brick block building; running thence westerly along the north face of the said brick and concrete block building and on a line forming an interior angle with the last mentioned course of 270° 09' 21", a distance of 204.14 feet to the northwest corner of the said building; running thence northerly along the exterior face of a canopy which projects from the north face of the said concrete block building and at right angles thereto, a distance of 11.0 feet to a point; running thence westerly on a line forming an angle with the last mentioned course in the southwest quadrant of 91° 59' 40", a distance of 183.86 feet to a point; running thence southerly at right angles, a distance of 87.74 feet to the principal point or place of beginning.

	Erie County Industrial Development Agency	Quit Claim Deed Dated November 24 2004
24	To	Recorded November 30 2004 in
	Mod-Pac Corp.	Liber 11086 of Deeds at page 9265 Conveys same premises as described in deed recorded in Liber 9340 of Deeds at page 441.

	Helen Schmincke	Quit Claim Deed
25	To	Dated April 12 1985
	Martin C. Barell and	Recorded May 28 1986 in

Donald D. Shack

Liber 9573 of Deeds at page 468

Conveys same premises as described in deed recorded in Liber 6865 of Deeds at page 443.

EXCEPTING THEREFROM that portion of premises as described in deeds recorded in the Erie County Clerk's Office in Liber 8943 of Deeds at page 422 and Liber 9340 of Deeds at page 441.

Affidavit

26 Of

Martin C. Barell and

Donald D. Shack

Affidavit

Dated November 13 1986

Recorded December 9 1986 in

Liber 9653 of Deeds at page 287

Depose and say that they are the owners of certain vacant land and rail spur located at the corner of Elmwood Avenue and Hertel Avenue in Buffalo, New York; that they hold such property as nominees for Newbuff Associates, a New York general partnership and as successors in interest to Helen Schmincke, as nominee for Newbuff Associates; that this sworn statement is being furnished pursuant to Article 31-B of the Tax Law and is being submitted to Ticor Title Guaranty Company in order to induce it to insure the title in Mod-Pac Corp. under title number T-50-86-08236 and in connection with the transfer of the property from the undersigned to the Mod-Pac Corp. as of November 25 1986; that deponents hereby state that the transfer of the property is not being made pursuant to any plan or agreement to effectuate by partial or successor transfers, a transfer which would otherwise be included in the coverage of Article 31-B.

Martin C. Barell and

Donald D. Shack

27 To

Mod-Pac Corp.

Bargain and Sale Deed

Dated November 13 1986

Recorded December 9 1986 in

Liber 9653 of Deeds at page 289

Conveys All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8, more particularly bounded and described as follows:

Beginning at a point on the northerly boundary of the Consolidated Rail Corporation Belt Line (formerly New York Central and Hudson River Railroad Company) at the southwest corner of land conveyed to Linden Corners Inc. by deed recorded in Liber 9424 of Deeds at page 461, such point being a distance of 1655.99 feet easterly from the east boundary line of Elmwood Avenue, a 99 foot wide street, measured along said northerly railroad boundary to the principal point or place of beginning; thence northerly on a line forming an interior angle with the last mentioned course at 85° 10' 20", a distance of 22.57 feet to a point; running thence northwesterly on a line forming an interior angle with the last mentioned course of 103° 46' 18", a distance of 167.86 feet to a point; running thence northwesterly on a line forming an interior angle with the last mentioned course at 188° 49' 37", a distance of 100.0 feet to a point; running thence northwesterly on a line forming an interior angle with the last mentioned course of 195° 00' 00", a distance of 100.0 feet to a point; running thence northwesterly along a line forming an interior angle with the last mentioned course of 195° 00' 00", a distance of 100.00 feet to a point; running thence northwesterly on a line forming an interior angle with the last mentioned course of 203° 36' 22", a distance of 159.93 feet to a point; running thence westerly along a line forming an interior angle with the last mentioned course of 108° 37' 23", a distance of 83.95 feet to a point; running thence northwesterly along a line forming an exterior angle with the last mentioned course of 145° 31' 40", a distance of 120.01 feet to the southeast corner of an existing brick building situate on premises conveyed to the Erie County Industrial Development Agency by deed recorded in the Erie County Clerk's Office in Liber 8943 of Deeds at page 425; running thence southerly along the southerly extension of the east face of the existing brick building referred to in the last mentioned course, a distance of 143.97 feet to a point; running thence westerly on a line forming an interior angle with the last mentioned course of 270° 16' 16", a distance of 368.0 feet to a point; running thence southerly along a line forming an interior angle with the last mentioned course of 91° 40' 35", a distance of 74.0 feet to a point; running thence westerly along a line at right angles, a distance of 135.13 feet to a point; running thence southerly at right angles along a line parallel with Elmwood Avenue, a distance of 212.87 feet to the northerly boundary of the Consolidated Rail Corporation Belt

Line, which is also the south line of Lot 84, at a point located 497.0 feet east of the east line of Elmwood Avenue; running thence easterly along the said northerly boundary of the railroad line, 1158.99 feet to the principal point or place of beginning.

EXCEPTING AND RESERVING THEREFROM those premises conveyed to New York Central and Hudson River Railroad Company, now known as Consolidated Railroad Corporation, by deed recorded in Liber 1137 of Deeds at page 26.

	In the Matter	Amendment to Declaration
28	Of	Dated June 14 1984
	Amendment	Recorded June 19 1984 in
		Liber 9341 of Deeds at page 651
		Amends Declaration recorded in
		Liber 8943 of Deeds at page 446.

	In the Matter	Second Amendment to Declaration
29	Of	Dated November 28 1986
	Amendment	Recorded December 9 1986 in
		Liber 9653 of Deeds at page 303
		Amends Declaration recorded in
		Liber 8943 of Deeds at page 446.

	Martin C. Barell and	Quit Claim Deed
	Donald D. Shack	Dated June 23 1987
30	To	Recorded July 2 1987 in
	Mod-Pac Corp.	Liber 9733 of Deeds at page 284
		Conveys All That Tract or Parcel
		of Land, situate in the City of
		Buffalo, County of Erie and State of

New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey, bounded and described as follows:

Beginning at the intersection of the south line of Lot 84 (being also the north line of Consolidated Rail Corporation Belt Line (formerly New York Central and Hudson River Railroad Company) with the center line of Ledger Street discontinued and closed; running thence northerly along the center line of Ledger Street as discontinued and closed, 293.42 feet to a point distant southwesterly 15 feet at right angles from the center

line of spur tract leading to the Pierce Plant of American Radiator Company; running thence southeasterly parallel with and 15 feet at right angles from the center line of said spur tract to a point distant 54.5 feet northerly at right angles from the monumental center line of the Consolidated Rail Corporation Belt Line (formerly New York Central and Hudson River Railroad); running thence westerly and parallel with the said monumental center line 238.91 feet to a point in the east line of Ledger Street; running thence southerly along the east line of Ledge Street 5.02 feet to the south line of Lot 84; running thence westerly along the south line of Lot 84, 25 feet to the center line of Ledger Street at the point of beginning.

In the Matter Of Amendment

Third Amendment to Declaration
Dated June 24 1987
Recorded July 2 1987 in
Liber 9733 of Deeds at page 277
Amends Declaration recorded in
Liber 8943 of Deeds at page 446.

31

Mod-Pac Corp. To Norampac Industries, Inc.

Bargain and Sale Deed
Dated September 30 2000
Recorded October 3 2000 in
Liber 10972 of Deeds at page 1535
Conveys All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8, more particularly bounded and described as follows:

32

Beginning at the intersection of the northerly boundary of the Consolidated Rail Corporation Belt Line (formerly New York Central and Hudson River Railroad Company), which is the south line of Lot 84, with the east line of Elmwood Avenue (99 feet wide); thence easterly along the said northerly boundary of the railroad line 1,655.99 feet to the southwest corner of land conveyed to Linden Corners Inc. by deed recorded in Liber 9424 of Deeds at page 461; thence northerly on a line forming an interior angle with the last mentioned course at 85° 10' 20", a distance of 22.57 feet to a point; running thence northwesterly on a line

forming an interior angle with the last mentioned course of 103° 46' 18", a distance of 167.86 feet to a point; running thence northwesterly on a line forming an interior angle with the last mentioned course at 188° 49' 37", a distance of 100.0 feet to a point; running thence northwesterly on a line forming an interior angle with the last mentioned course of 195° 00' 00", a distance of 100.0 feet to a point; running thence northwesterly along a line forming an interior angle with the last mentioned course of 195° 00' 00", a distance of 100.00 feet to a point; running thence northwesterly on a line forming an interior angle with the last mentioned course of 203° 36' 22", a distance of 159.93 feet to a point; running thence westerly along a line forming an interior angle with the last mentioned course of 108° 37' 23", a distance of 83.95 feet to a point; running thence northwesterly along a line forming an exterior angle with the last mentioned course of 145° 31' 40", a distance of 120.01 feet to the southeast corner of an existing brick building situate on premises conveyed to the Erie County Industrial Development Agency by deed recorded in the Erie County Clerk's Office in Liber 8943 of Deeds at page 425; thence S 87° 52' 30" W 498.17 feet to the east wall of a building; thence N 02° 03' 30" W, 17.99 feet to the south face of the interior wall of said building; thence S 87° 54' 40" W and along said interior wall 79.86 feet to the west face of an interior wall of said building; thence N 02° 05' 20" W and along said interior wall 1.36 feet to the south face of an interior wall of said building; thence S 87° 30' 50" W and along said interior wall 142.19 feet to the west face of an interior wall of said building; thence N 02° 16' 30" W and along said interior wall 0.35 of a foot to the south face of an interior wall of said building; thence S 87° 15' 30" W, 64.16 feet to the west face of an interior wall of said building; thence N 02° 45' 30" W, and along said interior wall 3.43 feet to the south face of an interior wall of said building; thence S 87° 51' 30" W and along said interior wall 32.99 feet to the southwest corner of said interior wall of said building; thence S 87° 50' 20" W, 39.94 feet to the southeast corner of an interior wall of said building; thence S 87° 41' 00" W along the south face of said interior wall 20.75 feet to the west face of ar interior wall of said building; thence N 02° 05' 20" W and along said interior wall 17.84 feet to the south face of an interior wall of said building; thence S 87° 51' 20" W and along said interior wall 40.40 feet to the west face of an

interior wall of said building; thence N 02° 14' 50" W and along said interior wall 18.10 feet to the south face of an interior wall of said building; thence S 87° 41' 50" W and along said interior wall 19.47 feet to the west face of an interior wall of said building; thence S 02° 11' 40" E and along said interior wall 17.98 feet to the south face of an interior wall of said building; thence S 89° 11' 00" E along said interior wall 1.97 feet to the west face of an interior wall of said building; thence S 89° 11' 00" E along a continuation of the last course approximately 55.21 feet to the east line of Elmwood Avenue; thence southerly along the east line of Elmwood Avenue approximately 494.42 feet to the point of beginning.

EXCEPTING THEREFROM all that tract or parcel of land conveyed by deed recorded in Liber 1137 of Deeds at page 26.

Subject to all easements, covenants and restrictions of record affecting the above described premises.

NOTE: We find no Certificate of Incorporation on record in the Erie County Clerk's Office for Norampac Industries, Inc.

	Norampac Industries, Inc.	Bargain and Sale Deed
33	To	Dated December 26 2005
	Mod-Pac Corp.	Recorded December 29 2005 in
		Liber 11107 of Deeds at page 3575
		Conveys same premises as described in deed recorded in Liber 10972 of Deeds at page 1535.

	City of Buffalo	Quit Claim Deed
34	To	Dated July 30 1962
	Peter Cmiech and	Recorded August 1 1962 in
	Genevieve Cmiech	Liber 6798 of Deeds at page 419
	(No search against	Conveys All That Tract or Parcel
	the grantor)	of Land, situate in the City of Buffalo, County of Erie and State of

New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey, and further distinguished as the south 20 feet of Subdivision Lot No. 187 and all of Subdivision Lot No. 188 as shown on

a map filed in the Erie County Clerk's Office under Cover No. 337, being 50 feet front and rear by 119.70 feet in depth, Mandan Street, east side, 434.25 feet south of Hertel Avenue.

Peter Cmiech and
Genevieve Cmiech,
his wife
35 To
Senvick Corporation

Warranty Deed
Dated December 22 1964
Recorded December 22 1964 in
Liber 7070 of Deeds at page 455
Conveys same premises as described in deed recorded in Liber 6798 of Deeds at page 419.

In the Matter
36 Of
Senvick Corporation
(File No. 41065)

Certificate of Incorporation
Filed June 16 1964

In the Matter
37 Of
The Foreclosure of
Tax Liens by Proceeding
In Rem, pursuant
to Article Eleven of the
Real Property Tax Law
by the City of Buffalo
Affecting Districts
Nos. 1 - 14, inclusive
(Index No. H-82821)

County Court: Erie County
In Rem No. 21
Serial No. 1114
Filed March 18 1987
Lists Property:13 Mandan, east side, 434.25' south of Hertel, 50' X 119'

City of Buffalo,
by Anne E. Klenk,
Referee
38 To
Mod-Pac Corp.

Referee's Deed
Dated January 15 1988
Recorded January 19 1988 in
Liber 9817 of Deeds at page 361
Consideration $300.00
Conveys same premises as described in last above action and pursuant to said action.

	Florence Ebling,	Warranty Deed
	Leo Tiedeman,	Dated October 17 1947
	Helen Young,	Recorded November 5 1947 in
	Adelaide Kreitner and	Liber 4221 of Deeds at page 575
	Woodrow Tiedeman	Conveys Subdivision Lot No. 160
39	To	under Map Cover No. 337.
	Carrel W. Smith	
	(No search against	
	the grantors)	
	Anna Allen	Warranty Deed
40	To	Dated September 26 1947
	Carrel W. Smith	Recorded November 5 1947 in
	(No search against	Liber 4221 of Deeds at page 590
	the grantor)	Conveys Subdivision Lot No. 160
		under Map Cover No. 337.
	Archie L. Taylor	Warranty Deed
41	To	Dated June 15 1942
	Helen Stando	Recorded July 23 1942 in
	(No search against	Liber 3276 of Deeds at page 26
	the grantor)	Conveys Subdivision Lot No. 161
		under Map Cover No. 337.
	Helen Stando	Quit Claim Deed
42	To	Dated October 29 1947
	Helen Young	Recorded November 5 1947 in
		Liber 4221 of Deeds at page 582
		Conveys Subdivision Lot No. 161
		under Map Cover No. 337.
	Helen Young	Quit Claim Deed
43	To	Dated October 20 1947
	Carrel W. Smith	Recorded November 5 1947 in
		Liber 4221 of Deeds at page 571

Conveys Subdivision Lot No. 161 under Map Cover No. 337.

Carrel W. Smith
To
Wiley C. Clark and
Pearl Clark,
his wife

Warranty Deed
Dated December 1 1948
Recorded December 31 1948 in
Liber 4456 of Deeds at page 430
Conveys Subdivision Lots Nos. 160 and 161.

Wiley C. Clark and
Pearl Clark,
his wife
To
Carrel W. Smith

Warranty Deed
Dated November 3 1950
Recorded November 8 1950 in
Liber 4821 of Deeds at page 4
Conveys Subdivision Lot No. 160 and the following described premises:

All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey and further distinguished as part of Lot No. 161 as shown on a map filed in the Erie County Clerk's Office under Cover No. 337 at page 30, and more particularly described as follows:

Beginning at a point in the west line of Ledge Street, distant 346.95 feet southerly from the southerly line of Hertel Avenue; thence northerly along said west line of Ledger Street .70 foot; thence westerly on a line parallel with the south line of said Lot No. 161, 119.70 feet; thence southerly and along the westerly line of said Lot No. 161, .70 foot to the southerly line of said Lot No. 161; thence easterly along said southerly line of said Lot No. 161 to the place of beginning.

Carrel W. Smith
To
Arthur Langridge and
Louise Langridge,
his wife

Warranty Deed
Dated June 8 1951
Recorded June 12 1951 in
Liber 4935 of Deeds at page 406
Conveys same premises as described in deed recorded in Liber 4821 of Deeds at page 4, subject to a mortgage

recorded in Liber 4478 of Mortgages at page 355, since discharged.

Will
47 Of
Louise Jane Langridge
(Case No. 1984-3589)

Will
Dated May 5 1981
Probated August 27 1984

Directs payment of all just debts and funeral expenses. All the rest, residue and remainder of her estate, real and personal, she gives, devises and bequeaths to her daughter, Louise Mae Bachert.

Appoints her daughter, Louise May Bachert as Executrix.

Petition for Probate of Will filed on August 27 1984 recites date of death on or about April 19 1984 leaving her surviving no husband, predeceased on December 29 1980, but Louise M. Bachert, daughter, full age.

Letters Testamentary issued to Louise M. Bachert on August 27 1984.

NOTE: We find no Surrogate's Proceedings on record in the Surrogate's Court of Erie County for Arthur Langridge.

Louise M. Bachert, as
Executor of the Estate
of Louise Jane Langridge
48 To
Barbara Hoesel

Executor's Deed
Dated October 5 1986
Recorded October 6 1986 in
Liber 9627 of Deeds at page 226
Consideration $14,000.00

Conveys same premises as described in deed recorded in Liber 4821 of Deeds at page 4.

Barbara Hoesel
49 To
Sibley Corporation

Mortgage
Dated October 6 1986
Recorded October 6 1986 in
Liber 9468 of Mortgages at page 505

Given to secure $14,650.00 on same premises as described in deed

		recorded in Liber 4821 of Deeds at page 4.
	Sibley Mortgage Corporation To Secretary of Housing and Urban Development	Assignment of Mortgage Dated February 27 1990 Recorded March 5 1990 in Liber 10632 of Mortgages at page 354 Assigns mortgage recorded in Liber 9468 of Mortgages at page 505.
50		
	U.S. Department of Housing and Urban Development To Berkeley Federal Bank & Trust FSB	Assignment of Mortgage Dated May 1 1996 Recorded September 27 1996 in Liber 12721 of Mortgages at page 7245 Assigns mortgage recorded in Liber 9468 of Mortgages at page 505.
51		
	Berkeley Federal Bank & Trust FSB To UMLIC-Eight Corp.	Assignment of Mortgage Dated May 1 1996 Recorded September 27 1996 in Liber 12721 of Mortgages at page 7372 Assigns mortgage recorded in Liber 9468 of Mortgages at page 505.
52		
	In the Matter Of Barbara B. Hoesel, bankrupt	United States Bankruptcy Court for the Western District of New York Proceeding No. 97-14559 Filed July 23 1997 Chapter 7
53		
	UMLIC-Eight Corp. To Wilshire Funding Corporation	Assignment of Mortgage Dated March 8 1997 Recorded August 20 1997 in Liber 12754 of Mortgages at page 3514 Assigns mortgage recorded in Liber 9468 of Mortgages at page 505.
54		

	In the Matter	County Court: Erie County
55	Of	In Rem No. 33
	The Foreclosure of	Serial No. 3144
	Tax Liens by Proceeding	Filed February 11 1999
	In Rem, pursuant	Lists Property: 94 Ledger, 346.95 S.
	to Article Eleven of the	of Hertel
	Real Property Tax Law	Lists Owner: Barbara Hoesel
	by the City of Buffalo	Michael Seaman,
	Affecting Districts	Director of the Treasury
	Nos. 1 - 14, inclusive	
	(Index No. I1999-1059)	
	In the Matter	United States Bankruptcy Court for
56	Of	the Western District of New York
	James A. Naples,	Proceeding No. 99-13530
	bankrupt	Filed June 21 1999
		Chapter 7
	Michael A. Seaman,	Referee's Deed
	Deputy Commissioner	Dated December 3 1999
	of Administration and	Recorded May 26 2000 in
	Finance, and Director	Liber 10966 of Deeds at page 9717
	of the Treasury,	Consideration $500.00
	as Referee	Conveys same premises as described
57	To	in last above action and pursuant to
	James Naples	said action.
	Joseph F. Worczak and	Warranty Deed
	Jennie Worczak,	Dated April 27 1946
	his wife	Recorded April 27 1946 in
58	To	Liber 3879 of Deeds at page 388
	Rose Szeglowski	Conveys Subdivision Lots Nos.
	(No search against	157, 158 and 159 under Map Cover No.
	the grantors)	337.

	In the Matter of the Estate	Petition for Administration Filed March 2 1949
59	Of Rose Szeglowski (Case No. 167532)	Recites date of death on February 9 1949 leaving her surviving Joseph Szeglowski, husband, full age, Leonard Szeglowski, son, age 15, and Alfred Szeglowski, son, age 13.

Letters of Administration issued to Joseph Szeglowski on March 2 1949 and recorded in Liber 118 of Letters at page 98.

	In the Matter of the Estate	Petition for Administration Filed July 26 1951
60	Of Joseph A. Szeglowski (Case No. 178866)	Recites date of death on July 14 1951 leaving him surviving Leonard J. Szeglowski, son, age 17, and Alfred Szeglowski, son, age 15.

Letters of Administration issued on July 26 1951 and recorded in Liber 123 of Letters at page 164. Letters of Administration de bonis non issued to Thaddeus Zdziarski and Leo Zdziarski on February 25 1953 in Liber 126 of Letters at page 346.

	Thaddeus Zdziarski and Leo Zdziarski, as Administrators de bonis non of the Goods, Chattels and Credits of Joseph A. Szeglowski, deceased, Leonard J. Szeglowski and Alfred Szeglowski, infants under the age of 21 years, by Thaddeus Zdziarski and Leo Zdziarski, their General Guardians	Deed Dated April 20 1954 Recorded April 20 1954 in Liber 5514 of Deeds at page 478
61	To	Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337, pursuant to an Order of Erie County Surrogate's Court entered on March 18 1954.

Joseph Koskoszka and
Viola Koskoszka,
his wife

	Viola Koskoszka	Quit Claim Deed
62	To	Dated March 6 1957
	Joseph Koskoszka	Recorded March 11 1957 in Liber 6138 of Deeds at page 153 Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337.

	Joseph Koskoszka	Warranty Deed
63	To	Dated January 30 1976
	James H. Naples	Recorded January 30 1976 in Liber 8360 of Deeds at page 391 Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337.

	James H. Naples	Warranty Deed
64	To	Dated September 13 1976
	Manufacturers and Traders Trust Company	Recorded September 14 1976 in Liber 7781 of Mortgages at page 11 Given to secure $30,000.00 on Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337.

	James H. Naples	Warranty Deed
65	To	Dated June 30 1978
	William Cummer	Recorded June 30 1978 in Liber 8663 of Deeds at page 495 Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337, subject to a mortgage recorded in Liber 7781 of Mortgages at page 11, which second party assumes and agrees to pay.

	William E. Cummer	Mortgage
66	To	Dated June 1 1978
	Liberty National Bank	Recorded August 25 1978 in
	and Trust Company	Liber 8062 of Mortgages at page 541
		Given to secure $8,000.00
		on Subdivision Lots Nos. 157, 158 and
		159 under Map Cover No. 337.
	Manufacturers and Traders	Assignment of Mortgage
	Trust Company	Dated July 13 1979
67	To	Recorded July 13 1979 in
	John D. Naples, Jr.	Liber 8197 of Mortgages at page 314
		Assigns mortgage recorded in Liber
		7781 of Mortgages at page 11.
	John D. Naples, Jr.	County Court: Erie County
68	Vs	Lis Pendens to foreclose mortgage
	William E. Cummer,	recorded in Liber 7781 of Mortgages
	Liberty National Bank	at page 11
	& Trust Co.,	Filed August 8 1980
	Bison Liquor Co., Inc.,	Recorded in Liber 332 of Lis Pendens
	Eber Brothers, Inc.,	at page 461
	Gohr Distributing Co., Inc.,	Terrence Naples,
	Manufacturers and	Attorney
	Traders Trust Company,	
	Industrial Commissioner of	
	the State of New York,	
	David Gallagher d/b/a	
	Gallagher Printing and	
	John Doe	
	(Index No. E-83869)	
	Michael McMorrow,	Referee's Deed
	Referee	Dated December 5 1980
69	To	Recorded February 17 1982 in
	John D. Naples, Jr.	Liber 9102 of Deeds at page 294

		Consideration $38,697.21 Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337 on the foreclosure of mortgage recorded in Liber 7781 of Mortgages at page 11.
	John D. Naples, Jr. To James H. Naples, Jr.	Warranty Deed Dated December 7 1980 Recorded February 17 1982 in Liber 9102 of Deeds at page 292 Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337.
70		
	James H. Naples, Jr. To Joseph S. Augello	Warranty Deed Dated February 16 1982 Recorded February 17 1982 in Liber 9102 of Deeds at page 298 Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337.
71		
	Joseph S. Augello To James H. Naples, Jr.	Purchase Money Mortgage Dated February 16 1982 Recorded February 17 1982 in Liber 8502 of Mortgages at page 151 Given to secure $24,000.00 on Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337.
72		
	James H. Naples, Jr. Vs Joseph S. Augello; Adam, Meldrum & Anderson Co., Inc.; Marine Midland Bank, N.A.; Manufacturers and Traders Trust Co.; Marine Midland Bank,	County Court: Erie County Lis Pendens to foreclose mortgage recorded in Liber 8502 of Mortgages at page 151 Filed July 12 1983 Recorded in Liber 343 of Lis Pendens at page 588 Prescott, Howitt, Attorneys
73		

Western;
ITT Industrial Credit Co.;
Banner Enterprises; and
City of Buffalo
(Index No. 30951)

	Bryan G. Brockway, Referee	Referee's Deed Dated November 28 1983
74	To	Recorded December 2 1983 in
	James H. Naples, Jr.	Liber 9287 of Deeds at page 81 Consideration $24,433.57 Conveys Subdivision Lots Nos. 157, 158 and 159 under Map Cover No. 337, pursuant to judgment in the last above action

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	Affidavit	Affidavit
75	Of	Dated March 21 2002
	James H. Naples, Jr. also known as James Naples	Recorded March 26 2002 in Liber 11003 of Deeds at page 1875 Deposes and says that he is the title owner of the real property located at 86 and 94 Ledger Street, Buffalo, New York; that there are no judgments, tax liens, warrants, attachments or other encumbrances or liens of any nature whatsoever against him, nor has he ever been adjudicated incompetent or bankrupt; that he has been known by the name of James H. Naples, Jr. and also known as James Naples and by no other names for the last ten years.

	James H. Naples, Jr. also known as James Naples	Warranty Deed Dated March 21 2002 Recorded March 26 2002 in
76	To	Liber 11003 of Deeds at page 1915
	Mod-Pac Corp.	Conveys the following: <u>Parcel A</u> All That Tract or Parcel of Land, situate in the City of Buffalo, County

of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey and further distinguished as Subdivision Lots Nos. 157, 158 and 159 as shown on map filed in the Erie County Clerk's Office under Cover No. 337, and being 90 feet front and rear by 119.70 feet in depth, Ledger Street, west side, 376.95 feet south of Hertel Avenue.

Parcel B

All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey and more particularly described on a subdivision map of Hertel Avenue Park made by Marsden Davey, Surveyor, and filed in the Erie County Clerk's Office on April 27 1889 under Cover No. 337 as Subdivision Lot No. 160.

Said parcel of land having a frontage of 30 feet on Ledger Street with a depth of 119.70 feet and being situated on the west side of Ledge Street, commencing about 346.95 feet southerly from the southerly line of Hertel Avenue.

Parcel C

All That Tract or Parcel of Land, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot No. 84, Township 11, Range 8 of the Holland Land Company's Survey and further distinguished as part of Lot No. 161 as shown on a map filed in the Erie County Clerk's Office under Cover No. 337 at page 30, and more particularly described as follows:

Beginning at a point in the west line of Ledger Street, distant 346.95 feet southerly from the southerly line of Hertel Avenue; thence northerly along said west line of Ledger Street .70 foot; thence westerly on a line parallel with the south line of said Lot No. 161, 119.70 feet; thence southerly and along the westerly line of said Lot No. 161, .70 foot to the southerly line of said Lot No. 161; thence easterly along said southerly line of said Lot No. 161 to the place of beginning.

	Mod-Pac Corp.	Easement
77	To	Dated September 5 2012
	Niagara Mohawk Power	Recorded November 1 2012 in
	Corporation	Liber 11232 of Deeds at page 5578

(No search against second party)

Grants: See Easement recorded in Liber 11232 of Deeds at page 5578 - copy attached hereto.

ERIE COUNTY CLERK'S OFFICE

County Clerk's Recording Page

Return to:
NATIONAL GRID
144 KENSINGTON AVE
BUFFALO, NY 14214-994

Party 1:
MOD-PAC CORP

Party 2:
NIAGARA MOHAWK POWER
CORPORATION

Recording Fees:

Fee 1	$40.00
Fee 2	$1.00
COE STATE $14.25 GEN	$14.25
COE STATE $4.75 RM	$4.75
MARKOFF FEE	$0.50

Book Type: D Book: 11232 Page: 5578
Page Count: 4
Doc Type: EASEMENT/RTWY
Rec Date: 11/01/2012
Rec Time: 09:51:56 AM
Control #: 2012246792
UserID: Loretta
Trans #: 12170174
Document Sequence Number
TT2012005773

Consideration Amount: 1.00

BASIC MT	$0.00
SONYMA MT	$0.00
ADDL MT/NFTA	$0.00
SP MT/M-RAIL	$0.00
NY STATE TT	$0.00
ROAD FUND TT	$0.00

Total: $60.50

STATE OF NEW YORK
ERIE COUNTY CLERK'S OFFICE

WARNING – THIS SHEET CONSTITUTES THE CLERK'S ENDORSEMENT REQUIRED BY SECTION 319&316-a (5) OF THE REAL PROPERTY LAW OF THE STATE OF NEW YORK. DO NOT DETACH. THIS IS NOT A BILL.

Christopher L. Jacobs
County Clerk

GRANT OF EASEMENT

51-E-4018*

MOD-PAC CORP. of 1801 Elmwood Avenue, Buffalo, New York 14207 (hereinafter referred to as "Grantor"), for consideration of One Dollar ($1.00), and other valuable considerations paid, the receipt and sufficiency of which are hereby acknowledged under seal, hereby grants to **NIAGARA MOHAWK POWER CORPORATION**, a New York corporation, having an address at 300 Erie Boulevard West, Syracuse, New York 13202 (hereinafter referred to as "Grantee"), for Grantee and its lessees, licensees, successors, and assigns, the perpetual right and easement as described in Section 1 below (the "Easement") in, under, through, over, across, and upon the Grantor's land, as described in Section 2 below (the "Grantor's Land")

Section 1 – Description of the Easement. The "Easement" granted by the Grantor to the Grantee consists of a perpetual easement and right-of-way, with the right, privilege, and authority to:

a. Construct, reconstruct, relocate, extend, repair, maintain, operate, inspect, patrol, and, at its pleasure, abandon or remove underground electric facilities including a line or lines of wires or cables (either direct-buried or installed in underground conduits), handholes, manholes, conduit, vaults, junction boxes, pad-mount transformers, housings, connectors, switches and switching equipment, pipes, pedestals, closures, ducts and duct work, markers, cables, connections to overhead and underground wires, insulators, transformers, braces, fittings, foundations, anchors, lateral service lines, communications facilities, and other fixtures and appurtenances (collectively, the "Facilities"), which the Grantee shall require now and from time to time, for the transmission and distribution of high and low voltage electric current and for the transmission of intelligence and communication purposes, by any means, whether now existing or hereafter devised, for public or private use, in, upon, over, under, and across that portion of the Grantor's Land described in Section 3 below (the "Easement Area"), and the highways abutting or running through the Grantor's Land, and to renew, replace, add to, and otherwise change the Facilities and each and every part thereof and the location thereof within the Easement Area, and utilize the Facilities within the Easement Area for the purpose of providing service to the Grantor and others;

b. From time to time, without further payment therefor, clear and keep cleared, by physical, chemical, or other means, the Easement Area of any and all trees, vegetation, roots, aboveground or belowground structures, improvements, or other obstructions and trim and/or remove other trees, roots and vegetation adjacent to the Easement Area that, in the opinion of the Grantee, may interfere with the construction, operation, and maintenance of the Facilities. The first clearing may be for less than the full width and may be widened from time to time to the full width;

c. Excavate or change the grade of the Grantor's Land as is reasonable, necessary, and proper for any and all purposes described in this Section 1; provided, however, that the Grantee will, upon completion of its work, backfill and restore any excavated areas to reasonably the same condition as existed prior to such excavation; and

d. Pass and repass along the Easement Area to and from the adjoining lands and pass and repass over, across, and upon the Grantor's Land to and from the Easement Area, and construct, reconstruct, relocate, use, and maintain such footbridges, causeways, and ways of access, if any, thereon, as is reasonable and necessary in order to exercise to the fullest extent the Easement.

Section 2 – Description of Grantor's Land. The "Grantor's Land" is described in a certain Deed recorded in the **ERIE** County Clerk's Office on October 3, 2000, in Liber 10972 of Deeds at Page 1524 and consists of land described as being part of Tax Parcel No. 78.69-2-4.1 of the **City of Buffalo, County of Erie**, New York, and part of Lot No. 84, Township 11 and Range 8 of the Holland Land Company's Survey commonly known as **1805 ELMWOOD AVENUE.**

Section 3 – Location of the Easement Area. The "Easement Area" shall consist of a portion of the Grantor's Land (10') ten feet in width throughout its extent, the centerline of the Easement Area being the centerline of the Facilities. The general location of the Easement Area is shown on the sketch entitled **"EXHIBIT A"**, which sketch is attached hereto as Exhibit A and recorded herewith, copies of which are in the possession of the Grantor and the Grantees. The final and definitive location(s) of the Easement Area shall become established by and upon the final installation and erection of the Facilities by the Grantees in substantial compliance with Exhibit A hereto.

Section 4 – Facilities Ownership. It is agreed that the Facilities shall remain the property of the Grantee, its successors and assigns.

Section 5 – General Provisions. The Grantor, for itself, its heirs, legal representatives, successors, and assigns, hereby covenants and agrees with the Grantee that no act will be permitted within the Easement Area which is inconsistent with the Easement hereby granted; no buildings or structures, or replacements thereof or additions thereto, except as noted on **"Exhibit A"**, swimming pools, or obstructions will be erected or constructed above or below grade within the Easement Area; no trees shall be grown, cultivated, or harvested, and no excavating, mining, or blasting shall be undertaken within the

246792

51-E-4018

Easement Area without the prior written consent of the Grantee, it being the intent that the Easement herein conveyed is intended to prohibit the longitudinal or parallel use or occupancy of said Easement Area by surface or subsurface activities or structures which might damage or interfere with the Facilities; the Easement shall not be modified nor the Easement Area relocated by the Grantor without the Grantee's prior written consent; the present grade or ground level of the Easement Area will not be changed by excavation or filling; the Grantee shall quietly enjoy the Grantor's Land; and the Grantor will forever warrant title to the Grantor's Land.

The Grantee, its successors and assigns, are hereby expressly given and granted the right to assign this Easement, or any part thereof, or interest therein, and the same shall be divisible between or among two or more owners, as to any right or rights created hereunder, so that each assignee or owner shall have the full right, privilege, and authority herein granted, to be owned and enjoyed either in common or severally. This Grant of Easement shall at all times be deemed to be and shall be a continuing covenant running with the Grantor's Land and shall inure to and be binding upon the successors, heirs, legal representatives, and assigns of the parties named in this Grant of Easement.

IN WITNESS WHEREOF, GRANTORS have hereunto set their hand(s) and seal(s) this 5th day of September, 2012.

MOD-PAC CORP.

By: Daniel J. Geary

Title: Vice President of Finance

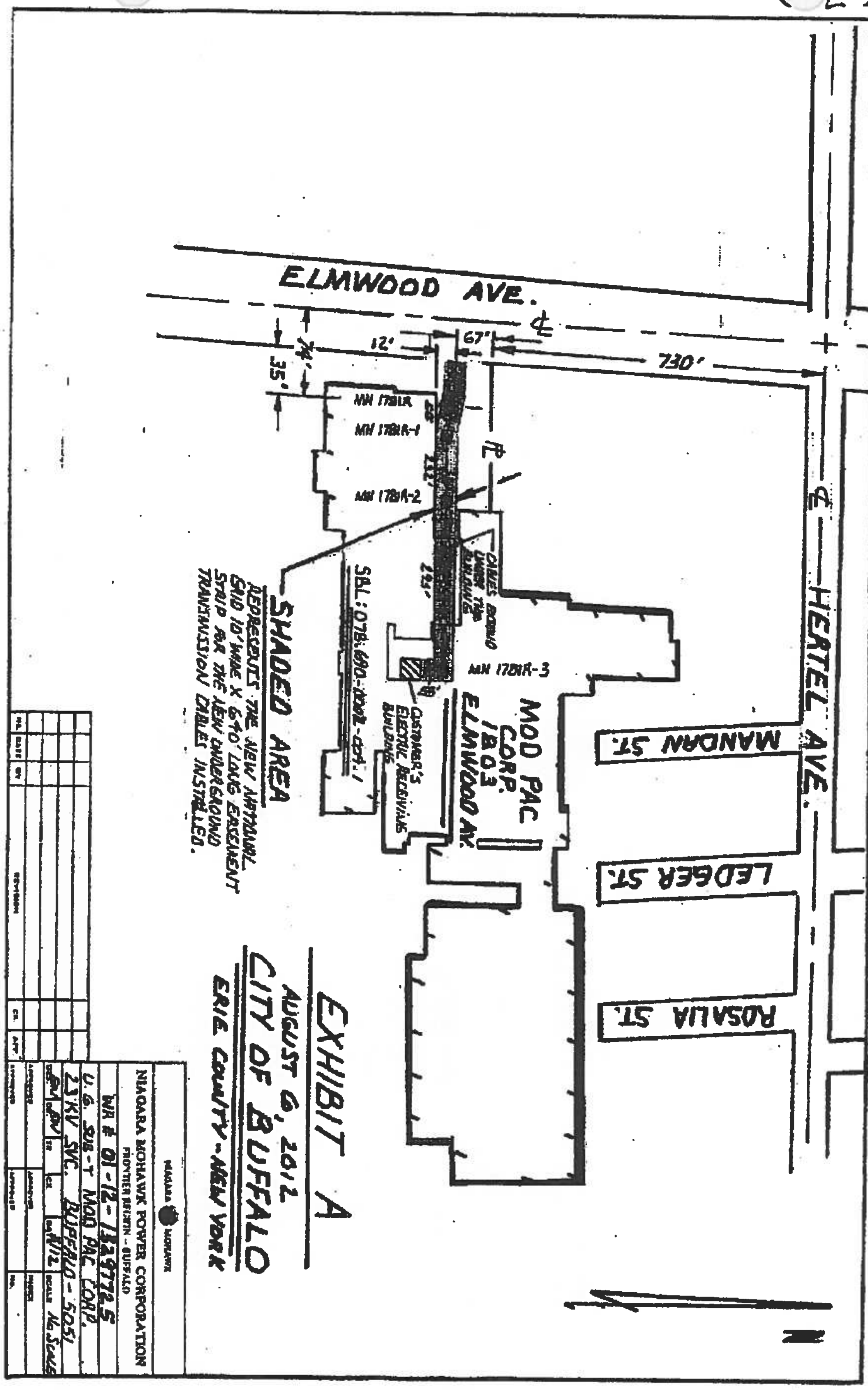
State of New York)
) ss:
County of Erie)

On the 5th day of September in the year 2012, before me, the undersigned, personally appeared Daniel J. Geary, personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Mary J. Young
Notary Public

MARY J. YOUNG
Notary Public, State of New York
Qualified in Erie County
My Commission Expires March 11, 2015

E-4018



ELMWOOD AVE.
HERTEL AVE.
MANDAN ST.
LEDGER ST.
ROSALIA ST.
730'
67'
12'
35'
MH 1781R-3
MOD PAC CORP. 1803 ELMWOOD AV.
CUSTOMER'S ELECTRIC RECEIVING BUILDING
SHADED AREA
REPRESENTS THE NEW NATIONAL GRID 10' WIDE X 640' LONG EASEMENT STRIP FOR THE NEW UNDERGROUND TRANSMISSION CABLES INSTALLED.
EXHIBIT A
AUGUST 6, 2012
CITY OF BUFFALO
ERIE COUNTY - NEW YORK
NIAGARA MOHAWK POWER CORPORATION

	Mod-Pac Corp.	Quit Claim Deed
78	To	Dated January 18 2017
	Mod-Pac Corp.	Recorded January 19 2017 in
		Liber 11308 of Deeds at page 2122

Conveys premises.

Recites that this conveyance is for the purposes of consolidating contiguous parcels owned by the party of the first part into a single parcel.

That this conveyance is not all or substantially all of the property of the party of the first part and is made in the regular course of business actually conducted by the party of the first part; that this conveyance is not intended to defraud creditors nor does it result in the insolvency of the parties of the first part; that the party of the first part is a validly subsisting corporation under the laws of the State of New York and the signature of the individual executing this deed is sufficient to transact the business of the party of the first part including the execution of this deed and the conveyance effected hereby.

Feb-8-2017 ----------
At '8:59' AM
DL/ch

TRINITY TITLE & ABSTRACT CORP.,
A corporation duly incorporated and existing
Under the laws of the State of New York,
Individually and as Agent for
WFG NATIONAL TITLE INSURANCE COMPANY,
A New York licensed Title Insurance Company

Privacy Policy Notice

PURPOSE OF THIS NOTICE

Title V of the Gramm-Leach-Bliley Act (GLBA) generally prohibits any financial institution, directly or through its affiliates, from sharing nonpublic personal information about you with a non-affiliated third party unless the institution provides you with a notice of its privacy policies and practices, such as the type of information that it collects about you and the categories of persons or entities to whom it may be disclosed. In compliance with the GLBA, we are providing you with this document, which notifies you of the privacy policies and practices of WFG National Title Insurance Company.

We may collect nonpublic personal information about you from the following sources:

Information we receive from you such as on applications or other forms.

Information about your transactions we secure from our files, or from (our affiliates or) others.

Information we receive from a consumer reporting agency.

Information that we receive from others involved in your transaction, such as the real estate agent or lender.

Unless it is specifically stated otherwise in an amended Privacy Policy Notice, no additional nonpublic personal information will be collected about you.

We may disclose any of the above information that we collect about our customers or former customers to our affiliates or to non-affiliated third parties as permitted by law.

We also may disclose this information about our customers or former customers to the following types of non-affiliated companies that perform marketing services on our behalf or with whom we have joint marketing agreements:

Financial services providers such as companies engaged in banking, consumer finance, securities and insurance.

Non-financial companies such as envelope stuffers and other fulfillment service providers.

WE DO NOT DISCLOSE ANY NONPUBLIC PERSONAL INFORMATION ABOUT YOU WITH ANYONE FOR ANY PURPOSE THAT IS NOT SPECIFICALLY PERMITTED BY LAW.

We restrict access to nonpublic personal information about you to those employees who need to know that information in order to provide products or services to you. We maintain physical, electronic, and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

S:\search\privacy

Box 53 (JAW)

76

1980 SEP 18 PM 3:09

FILED
ERIE COUNTY
CLERK'S OFFICE

ERIE COUNTY
INDUSTRIAL DEVELOPMENT AGENCY

AND

163

MOD-PAC CORP

LEASE AGREEMENT

Dated as of September 1, 1980

$2,175,000
Industrial Development Revenue Bonds
(1980 Mod-Pac Corp Project)

STATE OF NEW YORK - ERIE COUNTY CLERK'S OFFICE
Recorded in Liber 8943 page 482 of Deeds on the
18 day of September A. D., 1980 at 3:09 o'clock pm
and examines.

Genevieve M. Stanislaski
COUNTY CLERK

nb
7-229 ov 39 LIBER 8943 PAGE 482

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LEASE AGREEMENT

THIS LEASE AGREEMENT, made and entered into as of the first day of September, 1980, by and between ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY, a corporate governmental agency constituting a body corporate and politic and a public benefit corporation of the State of New York, duly organized and existing under the laws of the State of New York (the "Agency"), having its principal office at 170 Franklin Street, Buffalo, New York, party of the first part, and MOD-PAC CORP (the "Company"), a corporation organized and existing under and by virtue of the laws of the New York, having its principal office at 873 Hertel Avenue, Buffalo, New York 14216, party of the second part:

WITNESSETH:

WHEREAS, the New York State Industrial Development Agency Act, constituting Title 1 of Article 18-A of the General Municipal Law, Chapter 24 of the Consolidated Laws of New York, as amended (the "Enabling Act") authorizes and provides for the creation of industrial development agencies in the several counties, cities, villages and towns in the State of New York and empowers such agencies, among other things, to promote, develop, encourage and assist in the acquiring, constructing, reconstructing, improving, maintaining, equipping and furnishing of industrial, manufacturing, warehousing, commercial and research facilities including industrial pollution control facilities and thereby advance the job opportunities, health, general prosperity and economic welfare of the people of the State of New York and to improve their prosperity and standard of living; and

WHEREAS, pursuant to and in accordance with the provisions of the Enabling Act the Agency was established by Chapter 293 of the 1970 Laws of New York, as amended (together with the Enabling Act, the "Act") for the benefit of the County of Erie and the inhabitants thereof; and

WHEREAS, to accomplish the purposes of the Act the Agency has entered into negotiations with the Company to induce the Company to commence with the acquisition and installation of a manufacturing facility consisting of the acquisition of and renovations to an existing building in Buffalo, New York and the acquisition and installation of machinery and equipment in connection therewith, all for the manufacturing of customer and stock folding cartons (the "Project") and to locate such facility within the County of Erie, to be leased to the Company, and in furtherance of said purpose on March 26, 1980 the Agency has adopted a resolution authorizing the acquisition and installation of the Project, and undertaking to permit the issuance of its industrial development revenue bonds to finance such acquisition and installation and thereupon to lease the Project to the Company; and

WHEREAS, the Company pursuant to said resolution has proceeded with the acquisition and installation of the Project; and

WHEREAS, the acquisition and installation of the Project by the Agency is necessary to provide employment in the County of Erie and is beneficial for the economy of the County of Erie and is reasonably necessary to discourage the Project occupant from removing its operations at its existing plants or facilities to a location outside the State and will not result in the removal of an industrial, manufacturing, warehousing or commercial plant or facility of the Project occupant from one area of the State of New York to another area of the State or in the abandonment of one or more of such plants or facilities of the Project occupant within the State; and

WHEREAS, the Agency is empowered to enter into the transactions contemplated by this Lease Agreement and to carry out its obligations hereunder and by proper action of the members of the Agency, the Agency has duly authorized the execution and delivery of this Lease Agreement; and

WHEREAS, the Agency, in order to provide funds for the cost of the acquisition and installation of the Project, will issue and sell its Industrial Development Revenue Bonds (1980 Mod-Pac Corp Project), in the principal amount of $2,175,000 pursuant to the Act, a resolution of the Agency adopted on July 23, 1980 and an Indenture of Mortgage and Trust dated as of September 1, 1980 by and between the Agency and Manufacturers and Traders Trust Company, as Trustee, securing said Bonds;

WHEREAS, in order to further secure said Bonds, Astronics Corporation (the "Corporate Guarantor"), the parent corporation of the Company, will enter into a corporate guaranty agreement with the Trustee whereunder the Corporate Guarantor will guarantee the payments, obligations, covenants and agreements of the Company under the Lease Agreement and the payment of the principal of, redemption premium, if any, and interest on said Bonds; and

WHEREAS, the United States Department of Housing and Urban Development has approved an Urban Development Action Grant in the amount of $725,000 to be loaned by The Local Development Corporation for the City of Buffalo to the Company for the acquisition and installation of certain machinery and equipment to be located on the site of the Project; and

NOW, THEREFORE, in consideration of the premises and the respective representations and agreements hereinafter contained, the parties hereto agree as follows (provided that in the performance of the agreements of the Agency herein contained, any

obligation it may incur for the payment of money shall not create a debt of the State of New York or of the County of Erie, and neither the State of New York nor the County of Erie shall be liable on any obligation so incurred, but any such obligation shall be payable solely out of the lease rentals, revenues and receipts derived from or in connection with the Project, including moneys received under this Lease Agreement):

ARTICLE I
Definitions and Representations

Section 1.1. Definitions. Terms not otherwise defined herein shall have the same meanings as used in the Indenture. The following terms shall have the following meanings in this Agreement:

Act shall mean, collectively, the New York State Industrial Development Agency Act (constituting Title 1 of Article 18-A of the General Municipal Law, Chapter 24 of the Consolidated Laws of New York), as amended, and Chapter 293 of the 1970 Laws of New York, as amended.

Agency shall mean the Erie County Industrial Development Agency, a corporate governmental agency constituting a body corporate and politic and a public benefit corporation of the State of New York, duly organized and existing under the laws of the State of New York.

Agreement shall mean this Lease Agreement dated as of September 1, 1980 between the Agency and the Company and shall include any and all amendments thereto hereafter made.

Amortization Schedule(s) shall mean the amortization schedule(s), if any, attached to the Bonds.

Bond Fund shall mean the Erie County Industrial Development Agency (Mod-Pac Corp) Bond Fund established by Section 5.01 of the Indenture.

Bonds shall mean the Series 1980 Bond and any Additional Bonds.

Business Day shall mean any day which shall not be a Saturday, Sunday, legal holiday or a day on which banking institutions in the City of Buffalo are authorized by law or executive order to close.

City shall mean the City of Buffalo.

City Mortgage shall mean the mortgage dated as of September 1, 1980 from the Agency to LDC and shall include any amendments thereto hereafter made.

City Loan Agreement shall mean the Loan Agreement dated as of September 1, 1980 between LDC and the Company and shall include any amendments thereto hereafter made.

City Security Agreement shall mean the Security Agreement dated as of September 1, 1980 between LDC and the Company and shall include any amendments thereto hereafter made.

County shall mean the County of Erie.

Code shall mean the Internal Revenue Code of 1954, as amended, including the rules and regulations thereunder.

Company shall mean Mod-Pac Corp, a corporation organized and existing under the laws of the New York, and its successors and assigns.

Corporate Guarantor shall mean Astronics Corporation, a corporation organized and existing under the laws of the State of New York, and its successors and assigns.

Corporate Guaranty shall mean the Corporate Guaranty Agreement dated as of September 1, 1980 between the Corporate Guarantor and the Trustee, and shall include any and all amendments thereto hereafter made.

Determination of Taxability shall mean any determination, decision or decree made, in regard to Section 103 of the Code, by the Commissioner of any District Director of the Internal Revenue Service or by any court of competent jurisdiction that interest on the Series 1980 Bond is includable in the gross income of the Holder of the Series 1980 Bond (other than a Holder who is a substantial user or related person as defined in the Code); provided, however, the Determination of Taxability shall not be deemed to have occurred until the Company shall have notice thereof and provided, however, should the Agency, Company, Trustee or any Holder of the Series 1980 Bond or any other person or corporation, either jointly or severally, succeed in reversing or setting aside a Determination of Taxability, then an Event of Taxability will not be deemed to have occurred hereunder.

Event of Default shall have the meaning specified in Section 7.1 hereof.

Event of Taxability shall mean the occurrence of the circumstances described in Section 103(b) (6) (D) of the Code, resulting from any action or inaction on the part of the Company which circumstances a Determination of Taxability shall have found to have occurred, with the result that the interest payable on the Series 1980 Bond becomes includable in the gross income of any of the Holders thereof (other than a Holder of any Series 1980 Bond who is a substantial user or related person as defined in Section 103(b) (6) (C) of the Code).

HUD shall mean the United States Department of Housing and Urban Development.

Indenture shall mean the Indenture of Mortgage and Trust dated as of September 1, 1980, by and between the Agency and the Trustee, as from time to time amended or supplemented by Supplemental Indentures in accordance with Article IX of the Indenture.

Independent Engineer shall mean a person or firm (not an employee of either the Agency, the Corporate Guarantor, the Company or any subsequent lessee of the Project) registered and qualified to practice engineering or architecture under the laws of the State of New York, selected by the Company and approved, in writing, by the Agency and the Trustee (which approvals shall not be unreasonably withheld).

Outstanding, when used with reference to the Bonds, shall mean the Bonds which have been issued, executed, authenticated and delivered under the Indenture, except:

(i) Bonds cancelled by the Trustee because of payment or redemption prior to maturity or surrendered by the Company or subsequent lessee of the Project for cancellation;

(ii) Bonds for the payment or redemption of which funds equal to the principal amount, or Redemption Price thereof, as the case may be, with interest to the date of maturity or redemption date, shall be held in the Bond Fund (whether at or prior to the maturity or redemption date), provided that if such Bonds or portions thereof are to be redeemed, notice of such redemption shall have been given as provided in Article III of the Indenture or provision satisfactory to the Trustee shall have been made for the giving of such notice; and

(iii) Bonds in exchange for or in lieu of which other Bonds shall have been authenticated and delivered under Article II of the Indenture.

Paying Agent shall mean any paying agent for the Bonds (and may include the Trustee), and its successor or successors and any other corporation which may at any time be substituted in its place pursuant to the Indenture.

Project shall mean the real property and interests therein described in Exhibit A hereto and the buildings, structures, improvements, fixtures and related facilities located or to be located thereon, and the machinery, equipment and other property as described in Exhibit B hereto, and any replacements, structures, improvements, substitutions and additions thereto, acquired, constructed and installed as provided in this Agreement, provided that such term shall not include any machinery, equipment or other property installed by the Company

(and not constituting fixtures) and the title to which has been retained by the Company pursuant to Section 4.1 hereof.

Project Fund shall mean the Erie County Industrial Development Agency (Mod-Pac Corp) Project Fund established by Section 4.01 of the Indenture.

Project Supervisor shall mean the person or persons appointed in accordance with Section 2.1 hereof.

Redemption Price shall mean, with respect to any Bond, the principal amount thereof to be redeemed in whole or in part, plus the applicable premium, if any, payable upon redemption thereof pursuant to such Bond or the Indenture.

Secretary shall mean the Secretary of HUD.

Series 1980 Bond shall mean the $2,175,000 Industrial Development Revenue Bonds (1980 Mod-Pac Corp Project) of the Agency issued, executed, authenticated and delivered under the Indenture.

State shall mean the State of New York.

Trustee shall mean Manufacturers and Traders Trust Company or its successors or assigns hereafter appointed in the manner provided in the Indenture.

UDAG Funds shall mean the funds disbursed by HUD for use by the Company pursuant to the UDAG Grant Agreement.

UDAG Grant Agreement shall mean the grant agreement numbered B-80-AA-36-0043 between HUD and the City.

UDAG Note shall mean the note dated September 4, 1980 in the principal amount of $725,000 issued, executed and delivered by the Company to LDC.

Section 1.2. Construction. In this Agreement, unless the context otherwise requires:

(a) The terms "hereby", "hereof", "hereto", "herein", "hereunder" and any similar terms, as used in this Agreement, refer to this Agreement, and the term "hereafter" shall mean after, and the term "heretofore" shall mean before, the date of the execution and delivery of this Agreement.

(b) Words of the masculine gender shall mean and include correlative words of the feminine and neuter genders and words importing the singular number shall mean and include the plural number and vice versa.

(c) Words importing persons shall include firms, associations, partnerships (including limited partnerships), trusts, corporations and other legal entities, including public bodies, as well as natural persons.

(d) Any headings preceding the texts of the several Articles and Sections of this Agreement, and any table of contents appended to copies hereof, shall be solely for convenience of reference and shall not constitute a part of this Agreement, nor shall they affect its meaning, construction or effect.

Section 1.3. Representations and Warranties by Agency. The Agency makes the following representations and warranties:

(a) The Agency is a corporate governmental agency constituting a body corporate and politic and a public benefit corporation duly organized and existing under the laws of the State of New York, and is authorized and empowered to enter into the transactions contemplated by this Agreement and to carry out its obligations hereunder. By proper action of its members, the Agency has duly authorized the execution and delivery of this Agreement.

(b) In order to finance the cost of the acquisition and installation of the Project, the Agency proposes to issue the Series 1980 Bond in the principal amount of $2,175,000. The Series 1980 Bond will mature, bear interest, be redeemable and have the other terms and provisions set forth in the Indenture.

(c) Prior to the issuance of the Series 1980 Bond the Agency will duly make the election provided for under Section 103(b)(6)(D) of the Code.

Section 1.4. Findings By Agency. The Agency, based upon the representations and warranties of the Company contained in this Agreement and the information contained in the application of the Company and other materials heretofore submitted by the Company to the Agency, hereby finds and determines that the financing of the acquisition and installation of the Project by the Agency and the leasing thereof to the Company is reasonably necessary to discourage the Company from removing its operations at its existing plant and facilities to a location outside the State.

Section 1.5. Representations and Warranties by Company. The Company makes the following representations and warranties:

(a) The Company is a corporation duly organized, validly existing and in good standing under the laws of the New York, has the corporate power and authority to own its property and assets, to carry on its business as now being conducted by it

and to execute, deliver and perform this Agreement. The Company is duly qualified to do business in every jurisdiction in which such qualification is necessary.

(b) The execution, delivery and performance of this Agreement and the consummation of the transactions herein contemplated have been duly authorized by all requisite corporate action on the part of the Company and will not violate any provision of law, any order of any court or agency of government or the certificate of incorporation or by-laws of the Company, or any indenture, agreement or other instrument to which the Company is a party or by which it or any of its property is bound, or be in conflict with or result in a breach of or constitute (with due notice and/or lapse of time) a default under any such indenture, agreement or other instrument or result in the imposition of any lien, charge or encumbrance of any nature whatsoever except as provided in this Agreement and the Indenture.

(c) Expenses for supervision by the officers or employees of the Company and expenses for work done by such officers or employees in connection with the acquisition and installation of the Project will be included as a Project cost only to the extent that such officers or employees were specifically employed for such particular purpose, the expenses do not exceed the actual cost thereof and are to be treated on the books of the Company as a capital expenditure in conformity with generally accepted accounting principles applied on a consistent basis.

(d) The availability of the UDAG Funds and the acquisition and installation of the Project being financed by the Agency and the leasing thereof to the Company has induced the Company to locate the Project in the County.

(e) The Company shall operate the Project in accordance with this Agreement and as a qualified "project" in accordance with and as defined under the Act.

(f) The completion of the Project is reasonably necessary to discourage the Company from removing its operations at its existing plants and facilities to a location outside the County and State.

(g) The completion of the Project will not result in the removal of an industrial, manufacturing, warehousing or commercial plant or facility of the Company from one area of the State to another area of the State or in the abandonment of one or more of such plants or facilities of the Company within the State.

(h) The Company will pay or cause there to be paid all costs of the Project not paid from the proceeds of the sale of the Series 1980 Bond.

(i) The total cost of the Project being funded with the Series 1980 Bond is at least $2,175,000, which represents only a portion of the total cost to the Company.

(j) Any costs incurred with respect to that part of the Project paid from the proceeds of the sale of the Series 1980 Bond shall be treated on the books of the Company as capital expenditures in conformity with generally accepted accounting principles applied on a consistent basis.

(k) Neither the Company nor any other principal user of the facilities to be financed from the proceeds of the Series 1980 Bond, or a related person to any of the foregoing, as such terms "related person" and "principal user" are defined in the Code, is the principal user of (1) other facilities located or to be located wholly or partially in the County, or (2) facilities located or to be located in an incorporated municipality or other political jurisdiction adjacent to the County which are or will be contiguous or integrated with facilities located or to be located in the County and which facilities referred to in (1) and (2) above were financed in whole or in part from the proceeds of outstanding bonds, notes or any other obligations the interest on which is exempt from Federal income taxes by reason of Section 103(b)(6) of the Code.

(l) The property included in the Project is either land or property of the character subject to the allowance for depreciation under Section 167 of the Code.

(m) No part of the proceeds of the Series 1980 Bond will be used to finance inventory or will be used for working capital.

(n) This Agreement constitutes the legal, valid and binding obligation of the Company enforceable against the Company in accordance with its terms.

ARTICLE II
Acquisition and Installation of the Project

Section 2.1. Acquisition and Installation of the Project. (a) The Company shall cause to be conveyed to the Agency at the time of the delivery and payment of the Series 1980 Bond good and marketable title, free and clear of all liens, claims, encumbrances and servitudes, except current taxes not yet due (and except those matters affecting the title set forth in Exhibit A hereto) to the real property and interests therein described in Exhibit A hereto, including the buildings, structures, improvements and related facilities and any fixtures located thereon or therein, against payment therefor by the Agency of $968,319.73 and other good and valuable consideration (which amount does not include the cost of the construction of the additions, improvements and renovations to such existing buildings and related real property and interests therein) from the proceeds of the Series 1980 Bond deposited in the Project Fund, which moneys represent at least a portion of the actual cost and fair market value of said real property and interests therein and the Company so represents. The Company hereby further agrees to convey or cause to be conveyed to the Agency by bill(s) of sale good and marketable title, free and clear of all liens, claims and encumbrances to that machinery, equipment and other property purchased and to be purchased and described in Exhibit B hereto against payment therefor by the Agency of $24,978.90 and other good and valuable consideration from the proceeds of the Series 1980 Bond deposited in the Project Fund, which moneys represent at least a portion of the actual cost and fair market value thereof and the Company so represents.

(b) As promptly as practicable after receipt of the proceeds of sale of the Series 1980 Bond and out of said proceeds of sale, the Agency will, subject to the provisions of Section 2.2 hereof, cause to be constructed on said real property and interests therein described in Exhibit A hereto, the additions, improvements and renovations to the existing buildings thereon, all of which shall be substantially in accordance with plans and specifications therefor prepared by or on behalf of the Company, which plans and specifications shall be maintained by the Company and made available by the Company for inspection by the Agency and the Trustee, with such changes and substitutions as may be reasonably requested by the Company, and to be acquired and installed therein the machinery, equipment and other property described in Exhibit B hereto. The cost of such acquisition and installation shall be paid from the Project Fund established under the Indenture or as otherwise provided in Section 2.2. All contractors, materialmen, vendors, suppliers and other companies, firms or persons furnishing labor, services or materials for or in connection with the Project shall be designated by the Company. The construction of the additions, renovations and other improvements to said existing buildings, and the

acquisition and installation of said machinery, equipment and other property shall be supervised by John Yessa, hereby appointed the Project Supervisor and, in the event said John Yessa resigns or becomes incapable of undertaking or carrying out his duties hereunder, the Agency upon recommendation of the Company shall appoint a successor.

(c) In order to accomplish the purposes of the Agency, and to assure the acquisition and installation of the Project in conformity with the requirements of the Company, the Company has undertaken to proceed with the design of the Project, the preparation of the site and the acquisition and installation of the Project under the supervision of the Project Supervisor. The Company agrees to complete the acquisition and installation of the Project on behalf of the Agency under the supervision of the Project Supervisor.

(d) The Company affirms that it shall bear all of the costs and expenses in connection with the preparation of the deed, the delivery of any instruments and documents and their filing and recording, if required, and all taxes and charges payable in connection with the conveyance and transfer of the Project, and all such costs and expenses and taxes and charges shall be costs to the Company. The Company further affirms that it shall pay all shipping and delivery charges and other expenses incurred in connection with the Project and pay all lawful claims, whether for labor, materials, supplies, rents or services, which might or could if unpaid become a lien or charge on the Project.

(e) It is agreed that all taxes, assessments and other charges and impositions in connection with the Project, which shall be attributable to periods prior to the conveyance of the Project as provided in this Section, shall be paid by the Company.

(f) The Company covenants that it will obtain or cause to be obtained all necessary approvals from any and all governmental agencies requisite to the acquisition and installation of the Project, and the operation thereof, and the acquisition and installation of the Project, and the operation thereof, will be done in compliance with all Federal, State and local laws, ordinances and regulations applicable thereto including all manufacturers' instructions and warranty requirements, and with the conditions and requirements of all policies of insurance with respect to the Project and this Agreement. Upon completion of the Project, the Company will promptly obtain or cause to be obtained all required occupancy permits, authorizations and licenses from appropriate authorities, if any be required, authorizing the occupancy and uses of the Project for the purposes contemplated by this

Agreement and shall furnish copies of same to the Agency and the Trustee immediately upon receipt thereof.

(g) The Company will extend to the Agency all vendors' warranties received by the Company in connection with the acquisition and installation of the Project, including any warranties given by contractors, manufacturers or service organizations who perform construction work on the leased premises. If requested, the Company shall execute and deliver appropriate instruments to the Agency to accomplish the foregoing.

(h) The Company shall with the consent of the Agency, which consent shall not be unreasonably withheld, take such action and institute such proceedings as shall be necessary to cause and require all contractors and material suppliers to complete their contracts diligently in accordance with the terms of said contracts, including, without limitation, the correcting of any defective work, with all expenses incurred by the Company or the Agency in connection with the performance of their obligations under this Section to be considered part of the cost of the Project, and the Agency agrees that the Company may, from time to time, in its own name, or in the name of the Agency but only with the consent of the Agency, take such action as may be necessary or advisable, as determined by the Company, to insure the acquisition and installation of the Project in accordance with the terms of such applicable contracts, with all costs and expenses incurred by the Company in connection therewith to be considered as part of the cost of the Project.

(i) The Company shall promptly convey to the Agency, by bill(s) of sale with full warranties of title, any such machinery, equipment or other property to be part of the Project and purchased or to be purchased and paid for by the Company.

Section 2.2. Completion by Company. The Company unconditionally covenants and agrees that it will complete, or cause to be completed, the acquisition and installation of the Project by February 1, 1982. In the event that moneys in the Project Fund are not sufficient to pay the costs of the acquisition and installation of the Project in full, the Company shall pay that portion of such costs of the Project as may be in excess of the moneys therefor in said Project Fund and shall not be entitled to any reimbursement therefor from the Agency or from the Trustee or from the Holders of any of the Bonds, nor shall it be entitled to any diminution of the rents payable or other payments to be made under this Agreement.

Section 2.3. Issuance of Series 1980 Bond. The Agency not later than September 30, 1980 will sell and deliver the Series 1980 Bond in the principal amount of $2,175,000 under and

pursuant to a resolution adopted by the Agency on July 23, 1980 authorizing the issuance of the Series 1980 Bond and under and pursuant to the Indenture. The proceeds of sale of the Series 1980 Bond shall be deposited in the Project Fund and applied to the cost of the acquisition and installation of the Project in accordance with the provisions of the Indenture. Pending such application, amounts in the Project Fund and the Bond Fund may be invested as provided in the Indenture.

Section 2.4. Labeling of Machinery and Equipment. The Company will cause each major item of machinery, equipment and other property constituting a part of the Project to be labeled "Property of Erie County Industrial Development Agency" by affixing a plate, stenciling, tagging, or other method; provided, however, that no such item need be so labeled where impractical because of its size or its nature or the nature of its operation. The Company will also keep on file an index of all such machinery, equipment and other property constituting a part of the Project.

Section 2.5. Title Insurance. Prior to the delivery of the Series 1980 Bond to the original purchaser thereof, the Company will obtain (a) fee title insurance in an amount not less than $2,175,000 insuring the Agency's title to the real property and interests therein described in Exhibit A hereto, including the buildings, structures, improvements and any fixtures thereon, against loss as a result of defects in the title of the Agency, (b) mortgagee title insurance in an amount not less than $2,175,000 insuring the Trustee's interest under the Indenture as holder of a mortgage lien on the Project, in each case subject to only such liens, claims, encumbrances and servitudes (other than current taxes not yet due) as set forth in Exhibit A hereto, and (c) a current survey of the Project site, certified to the Agency and the Trustee. Any proceeds of such fee title insurance shall be paid to the Trustee for deposit in a special fund to be held by the Trustee and, if so requested by the Agency within thirty days from the date such proceeds shall have been deposited with the Trustee, such proceeds shall be applied to remedy the defect in title. If, within thirty days from the date such proceeds of fee title insurance shall have been deposited in such special fund with the Trustee, the Agency shall have made no such request to have same applied to remedy the defect in title or shall have made such request and proceeds shall remain in such special fund after application of an amount sufficient to remedy such defect in title, or if upon such earlier date the Agency shall have furnished written notice to the Trustee that no such request by the Agency shall be made, the moneys in such special fund shall be deposited by the Trustee in the Bond Fund. Any proceeds of such mortgagee title insurance insuring against loss as a result of defects affecting the Trustee's interest as holder of a mortgage lien on the Project shall be paid to the Trustee and deposited by the Trustee in the Bond Fund. The premium for any

such insurance described in this Section 2.5 may be paid from the Project Fund.

ARTICLE III
Lease of Project and Rental Provisions

Section 3.1. Lease of the Project. The Agency hereby leases to the Company and the Company hereby leases from the Agency the Project for and during the term herein provided and upon and subject to the terms and conditions herein set forth. The Company shall at all times during the term of this Agreement use and occupy the Project as a manufacturing facility in accordance with the provisions of the Act, except that upon the occurrence of an event specified in Section 5.1 or 5.2 hereof the Company need not occupy the Project for a period not to exceed one year. The failure of the Company to use and occupy the Project as aforesaid shall in no way abate or reduce the rent or other amounts payable by the Company to the Agency under the provisions of this Agreement. The Company shall not use or allow the Project or any part thereof to be used or occupied for an unlawful purpose or in violation of any certificate of occupancy affecting the Project or which may constitute a nuisance, public or private, or make void or voidable any insurance then in force with respect thereto. The Company represents and agrees that the Agency and the Trustee shall have such rights to enter upon the Project, including rights of ingress and egress, as shall be necessary to enable the Agency and the Trustee to exercise their respective powers, rights, duties and obligations as are set forth in this Agreement and the Indenture.

Section 3.2. Duration of Term. The term of this Agreement shall commence as of September 1, 1980 and shall expire on October 1, 2000, or such earlier or later date as this Agreement may be terminated as hereinafter provided. The Agency shall deliver to the Company and the Company shall accept sole and exclusive possession of the Project upon completion thereof (as stated in a certificate of the Project Supervisor filed with the Agency and the Trustee pursuant to Section 4.03 of the Indenture) provided that the Company shall be permitted such possession of the Project prior to such date of delivery of sole and exclusive possession as shall not interfere with the acquisition and installation thereof.

Section 3.3. Rental Provisions; Pledge of Agreement and Rent. The Company covenants to make monthly rental payments which the Agency agrees shall be paid by the Company directly to the Trustee. Such monthly rental shall be paid during the term of this Agreement not later than seven Business Days prior to each monthly installment payment date for the Bonds as set forth in the Indenture (except for the first such monthly rental payment which shall be paid in immediately available funds not later than one Business Day prior to the first monthly installment payment date for the Bonds); provided, however, that if at any time the Trustee shall not be the sole Paying Agent, such monthly rental shall be paid to the Trustee not later than

nine Business Days prior to each monthly installment payment date for the Bonds. The amount of each such rental payment shall equal each monthly installment payment of principal and/or interest as provided in the Indenture, provided that such rental payments shall be reduced by the following amounts (to the extent, if any, which such amounts shall not previously have been the basis for such reduction):

(a) the amount of net income or gain received and collected from the investment of moneys in the Bond Fund; and

(b) the amount of moneys from any advance rental payment hereinafter referred to remaining in the Principal and Interest Account in the Bond Fund five days prior to a monthly installment payment date and not applied to the full or partial redemption of the Bonds as provided in Section 5.03 of the Indenture;

provided that the amounts described in paragraphs (a) and (b) above shall be credited against monthly rental payments in chronological order as due and, provided further, that each such rental payment shall be sufficient to pay when due the total amount of each such installment payment of principal and/or interest payable on the next succeeding installment payment date, and the Redemption Price on the date of redemption therefor, and the amount of any administrative charge for overdue principal, interest or Redemption Price which shall be due and payable immediately upon demand therefor by the Agency or the Trustee, and if on any installment payment date the balance in the Bond Fund is not sufficient to pay such total installment payment or such Redemption Price due on such date, the Company agrees to pay the amount of such deficiency to the Trustee at least one Business Day prior to such monthly installment payment date or redemption date, as the case may be, in immediately available funds and such payment shall constitute rentals under this Agreement. The Company further agrees to immediately pay, upon demand therefor by the Agency or the Trustee, any additional interest on the Bonds arising as a result of the occurrence of an Event of Taxability.

The Agency hereby notifies the Company and the Company acknowledges that all the Agency's right, title and interest in this Agreement including the above monthly rental payments, except for the Agency's right to exercise in its own behalf the rights provided for in Article VII hereof and except for those amounts paid by or payable to the Agency for its own account or to or directly to the appropriate taxing authorities under Sections 4.3, 4.4, 4.5, 4.6, 6.2 and 6.3 and such other amounts likewise paid by or payable to the Agency for its own account, shall be pledged by the Agency as security for the Bonds as provided in the Indenture, and in furtherance of said pledge the Agency will unconditionally assign such rental payments to the

Trustee for deposit in the Bond Fund in accordance with the Indenture. In addition to the rental payments under this Agreement, the Bond Fund shall also receive for deposit therein in accordance with the Indenture such other amounts as are required by the provisions of this Agreement or of the Indenture to be paid into the Bond Fund.

Payments designated as and representing advance rental payments under this Agreement may be made as and to the extent provided in this Agreement by the Company to the Trustee for deposit in the Bond Fund in accordance with the Indenture. Such payments shall not in any way alter or suspend any obligations of the Company under the terms of this Agreement except to the extent that such payments result in a credit against monthly rental payments as provided with respect to paragraph (b) above or the full or partial redemption of the Bonds pursuant to the provisions of the Indenture, and the Company shall continue to perform and be responsible for the performance of all the terms and provisions of this Agreement, including, but not by way of limitation, obligations to maintain and insure the premises at its own expense.

No further rental payments need be made to the Agency during the term of this Agreement when and so long as the amount of cash and obligations of or guaranteed by the United States of America on deposit in the Bond Fund is sufficient to satisfy and discharge the obligations of the Agency under the Indenture and pay the Bonds as provided in Section 10.01 of the Indenture.

After all the Bonds have been retired and all interest and applicable premiums, if any, due thereon have been paid or provision for such retirement and payment has been made in accordance with the Indenture, and the Company shall have paid all other amounts and performed all its other obligations hereunder and under the Indenture, and the obligations of the Company under the UDAG Note and the City Loan Agreement, and any fees and miscellaneous expenses of the Trustee, Paying Agents, Bond Registrar (as referred to in Section 2.08 of the Indenture) and the Agency have been paid or provided for, any excess moneys in the Bond Fund from whatever source derived will be paid to the Company as an adjustment of rentals. Notwithstanding the immediately preceding sentence, the requirement that the obligations of the Company under the UDAG Note and the City Loan Agreement be paid or provided for need not be satisfied if the Company completely assumes the City Mortgage, to the end that the Agency will no longer be deemed a mortgagor under the City Mortgage. This paragraph shall survive the termination or expiration of this Agreement for any reason.

Section 3.4. Obligation of Company Unconditional. The obligation of the Company to pay the rent as provided in this Agreement and to make all other payments provided for in this

Agreement and to maintain the Project in accordance with Section 4.1 of this Agreement shall be absolute and unconditional, irrespective of any defense or any rights of set-off, recoupment or counterclaim or deduction and without any rights of suspension, deferment, diminution or reduction it might otherwise have against the Agency or the Trustee or the Holder of any Bond and the obligation of the Company shall arise whether or not the Project has been completed as provided in this Agreement. The Company will not suspend or discontinue any such payment or terminate this Agreement (other than such termination as is provided for hereunder) for any cause including, without limiting the generality of the foregoing, any acts or circumstances that may constitute an eviction or constructive eviction, failure of consideration, failure of title, or commercial frustration of purpose, or any deprivation or limitation of the use of the Project, or any defect in the quality, condition, design, operation or fitness of the Project, or any damage to or loss of use of or destruction or theft of all or any part of the Project, or the taking by eminent domain of title to or the right of temporary use of all or any part of the Project, or any change in the tax or other laws of the United States, the State or any political subdivision of either thereof, or any failure, omission, delay or inability on the part of the Agency to perform and observe any agreement or covenant, whether express or implied, or any duty, liability or obligation arising out of or connected with this Agreement and the Company waives all rights now or hereafter conferred by statute or otherwise to quit, terminate, cancel or surrender this Agreement or any obligation of the Company under this Agreement or the Project or any part thereof except as provided in this Agreement or to any abatement, suspension, deferment, diminution or reduction in the rentals hereunder. Notwithstanding the foregoing the Company may, at its own cost and expense, and in its own name, or in the name of the Agency but only with the consent of the Agency, such consent not to be unreasonably withheld, prosecute or defend any action or proceeding or take any other action involving third persons which the Company deems reasonably necessary in order to secure or protect its right of use and occupancy and other rights hereunder. The provisions of the first and second sentences of this Section shall apply only if and so long as there shall be Outstanding and unpaid any payment required to be paid by the Company under this Agreement or any principal of, Redemption Price, if any, of or interest on the Bonds adequate provision for the payment of which pursuant to the terms of the Indenture, including the payment of the compensation and expenses of the Trustee, Bond Registrar, Paying Agents and the Agency as provided in Section 6.3 hereof, shall not have been made. Furthermore, except to the extent provided in the first and second sentences of this Section, nothing contained herein shall be construed to prevent or restrict the Company from asserting any rights which the Company may have against the Agency under this Agreement or under any provision of law, by damages at law in a separate

action or proceeding but not by abatement, attachment, recoupment, counterclaim, set-off or defense against the payments to be made by the Company under this Agreement.

Section 3.5. Grant of Security Interest. In order to secure the payment of rentals and all the obligations of the Company hereunder, the Company hereby grants a security interest to the Agency in all of the Company's right, title, if any, and interest in and to the machinery, equipment and other property as described in Exhibit B hereto (or otherwise included in the Project) and the proceeds thereof and in the event that the Company breaches its covenants contained in Section 4.2 hereof by failing to pay all such proceeds in accordance with said Section 4.2, then the Agency's security interest in the removed machinery, equipment and other property shall continue until all such proceeds have been paid, anything to the contrary contained herein notwithstanding.

ARTICLE IV
Maintenance, Taxes, Payments in Lieu of Taxes and Insurance

Section 4.1. Maintenance, Alterations and Improvements. During the term of this Agreement the Company will keep the Project in good and safe operating order and condition, ordinary wear and tear excepted, will use the Project in the manner for which it was designed and intended and contemplated by this Agreement, and will make all replacements and repairs thereto (whether ordinary or extraordinary, structural or nonstructural, foreseen or unforeseen) necessary to insure that the security for the Bonds shall not be impaired. All repairs and replacements shall be equal in quality, class and value to the original work. and be made and installed in compliance with the requirements of all governmental bodies. Upon the expiration or termination of this Agreement (unless it shall purchase the Project) the Company will surrender the Project to the Agency in as good condition as prevailed at the time it was put in full possession thereof, ordinary wear and tear excepted. The foregoing agreements in this paragraph are subject to all of the other provisions in this Agreement, particularly Sections 4.2, 5.1, 5.2 and 6.4. The Agency shall be under no obligation to replace, maintain or effect repairs of the Project or to furnish any utilities or services for the Project and the Company hereby agrees to assume full responsibility therefor.

The Company shall have the privilege of making such alterations of or additions to the Project or any part thereof from time to time as it in its discretion may determine to be desirable for its uses and purposes, provided that (a) the fair market value of the Project is not reduced below its value immediately before such alteration or addition and the usefulness, structural integrity or operating efficiency of the Project is not impaired, (b) such additions or alterations are effected with due diligence, in a good and workmanlike manner and in compliance with all applicable legal requirements, (c) such additions or alterations are promptly and fully paid for by the Company in accordance with the terms of the applicable contract(s) therefor, and in order that the Project shall at all times be free of any mortgage, lien, encumbrance, security interest or claim except as provided in this Agreement and the Indenture and the City Mortgage, (d) such additions or alterations are made, in case the estimated cost of such alteration or addition exceeds $200,000, under the supervision of an Independent Engineer and in accordance with plans, specifications and cost estimates approved by the Agency (which approval shall not be unreasonably withheld) and only after the Company shall have furnished to the Agency, if requested, a labor and materials payment bond, or other security, satisfactory to the Agency, and (e) such additions or alterations do not change the nature of the Project so that it would not constitute a manufacturing facility and a qualified "project" as defined in

and as contemplated by the Act, and (f) such additions or alterations do not cause the interest on any of the Bonds to be includable in the gross income of the Holders of the Bonds for Federal income tax purposes. All alterations of and additions to the Project shall constitute a part of the Project, subject to this Agreement, the Indenture and the City Mortgage, and the Company shall deliver to the Agency appropriate documents as may be necessary to convey title to such property to the Agency, free and clear of all liens and encumbrances other than the lien created by this Agreement, the Indenture and the City Mortgage.

All machinery, equipment and other property of whatever nature to the extent that such property may be used for the operation of the Project situate on and in the leased premises shall be conclusively deemed to be owned by the Agency rather than by the Company unless installed by the Company (and not constituting fixtures) and title to which is retained by the Company as in this Section provided.

Nothing herein shall be deemed to prevent the Company from installing machinery, equipment and other property (and not constituting fixtures) and retaining title thereto, and such machinery, equipment and other property (and not constituting fixtures) shall not be deemed a part of the Project provided that no such installation shall be made if the effect thereof would be to cause the interest on any of the Bonds to be includable in the gross income of the Holder of any of the Bonds for Federal income tax purposes and provided, further, that any of the Company's machinery, equipment and other property (and not constituting fixtures) not removed by the Company at its expense within 30 days (or such longer period not exceeding 180 days as the Company may have requested of the Agency and the Trustee in a specific instance and to which request the Agency and the Trustee shall have approved in writing, such approvals not to be unreasonably withheld) after any repossession of the Project (whether or not this Agreement has been terminated) shall be considered abandoned by the Company and may be appropriated, sold, destroyed or otherwise disposed of by the Agency without notice to the Company and without obligation to account therefor, and the Company will pay the Agency, upon demand, all costs and expenses incurred by the Agency in removing, storing or disposing of Company's machinery, equipment or other property (other than fixtures), provided that nothing contained herein shall be deemed to grant to the Company the right to remove any of Company's machinery, equipment or other property (and not constituting fixtures) if such removal of machinery, equipment or other property (other than fixtures) pursuant to the provisions of this paragraph shall materially reduce the overall operating efficiency of the business of the Company at the Project. The Company shall also promptly repair at its own expense any damage to the premises leased hereunder caused by any such removal. The Company shall at all times keep on file with the Trustee an annual report of

each item of such machinery, equipment and other property (and not constituting fixtures) installed on or about the leased premises to which the Company shall retain title, but such report need not include any item having a cost of less than $25,000, and also an annual report of each item of machinery, equipment and other property constituting a part of the Project and not theretofore described in Exhibit B hereto; each such annual report shall be furnished within 120 days after the end of the fiscal year of the Company.

The Agency shall be under no obligation to renew, repair or replace any inadequate, obsolete, worn-out or unsuitable machinery, equipment or other property of the Project.

The Agency shall not be responsible for any loss of or damage to the Company's machinery, equipment or other property. The Company shall have the right at any time and from time to time during the term of this Agreement to remove or permit to be removed machinery, equipment or other property (and not constituting fixtures) not constituting a part of the Project, subject to the limitations set forth above in this Section 4.1, from the Project and to create or permit to be created any mortgage, encumbrance, lien or charge on, or conditional sale or other title retention agreement with respect to machinery, equipment or other personal property (other than fixtures) not constituting a part of the Project, subject to the limitations set forth above in this Section 4.1.

In its use and occupancy of the Project the Company will at its sole cost and expense at all times comply with all laws including environmental, zoning, pollution, sanitary and safety laws, and with such rules and regulations thereunder, as under applicable law shall be binding upon it or applicable to the Project; provided, however, the Company may contest in good faith the validity, existence or applicability thereof.

The Company shall not create, permit or suffer to exist any mortgage, encumbrance, lien, security interest, claim or charge against the Project or any part thereof or the interest of the Company in the Project or this Agreement except as provided in this Agreement or the Indenture. The Company covenants that it shall take or cause to be taken all action, including all filing and recording, as may be necessary to ensure that the Indenture shall constitute a first mortgage lien and a first prior perfected security interest in the Project.

Section 4.2. Removal of Property of the Project. The Company shall have the privilege from time to time of removing from the Project any machinery, equipment or fixtures constituting a part of the Project and thereby acquiring such machinery, equipment or fixtures, provided that:

(a) such machinery, equipment or fixtures are substituted or replaced by machinery, equipment or fixtures having equal or greater fair market value and utility, free of all liens and encumbrances, which shall become a part of the Project and such substitution or replacement shall not change the nature of the Project as a qualified "project" as defined in and as contemplated by the Act and shall not impair the usefulness, structural integrity or operating efficiency of the Project; or

(b) such machinery, equipment or fixtures shall have been made or installed by the Company at its own expense and shall not have been made or installed at the Company's expense pursuant to Section 4.2 (a) above or Section 2.1 or 2.2 and the removal thereof shall not change the nature of the Project as a qualified "project" as defined in and as contemplated by the Act and shall not impair the usefulness, structural integrity or operating efficiency of the Project; or

(c) such removal shall not change the nature of the Project as a qualified "project" as defined in and as contemplated by the Act and shall not impair the usefulness, structural integrity or operating efficiency of the Project and (1) in the case of the sale of any such machinery, equipment or fixtures to anyone other than itself or in the case of the scrapping thereof, the Company shall pay to the Trustee for deposit in the Redemption Account of the Bond Fund the proceeds from such sale or the scrap value thereof, as the case may be, or (2) in the case of the trade-in of such machinery, equipment or fixtures for other machinery, equipment or fixtures not to be installed at the Project, the Company shall pay to the Trustee for deposit in the Redemption Account of the Bond Fund the amount of the credit received by it in such trade-in, or (3) in the case of the bona fide sale of any such machinery, equipment or fixtures to the Company or in the case of any other disposition thereof the Company shall pay to the Trustee for deposit in the Redemption Account of the Bond Fund an amount equal to the original cost thereof less depreciation at rates calculated in accordance with the accounting practice of the Company (which shall be in accordance with generally accepted accounting practices) or if less the amount received at such bona fide sale; or

(d) such removal shall not change the nature of the Project as a qualified "project" as defined in and as contemplated by the Act and shall not impair the usefulness, structural integrity or operating efficiency of the Project together with any repairs thereof and the aggregate fair resale value of (1) all machinery, equipment or fixtures of the Project which shall have been made or installed and paid for by the Company (other than pursuant to Section 4.2 (a) above or Sections 2.1 or 2.2) and which shall have become the property of the Agency, exceeds the aggregate fair resale value of (2) all

machinery, equipment or fixtures of the Project (exclusive of those to which title has been retained by the Company) which shall have been removed from the Project by the Company (including the property then being removed);

and, provided further that such removal shall not reduce the fair market value of the Project below its value immediately before such removal except by the amount deposited in the Redemption Account of the Bond Fund pursuant to clause (c) of this Section and no such action by the Company shall be taken if the effect would be to cause the interest on any of the Bonds to be includable in the gross income of the Holder of any of the Bonds for Federal income tax purposes. The Company may effect no removal of any of the machinery, equipment or fixtures of the Project if there shall exist and be continuing an Event of Default.

Within 120 days after the close of any fiscal year of the Company (i) during which year action was taken by the Company pursuant to this Section 4.2, the Company shall furnish to the Agency and the Trustee a written report of an Independent Engineer summarizing the action taken by the Company during such preceding fiscal year and stating that, in his opinion, such action complies with the provisions of this Section; or (ii) during which year no action was taken by the Company pursuant to this Section 4.2, the Company shall furnish to the Agency and the Trustee a certificate of an Authorized Officer of the Company certifying to the fact that no such action was taken by the Company pursuant to said Section 4.2 during such preceding fiscal year.

In the event such removal causes damage to existing buildings, structures, improvements or related facilities, or other machinery, equipment or fixtures not being removed, restoration and repair of such damage shall be at the sole expense of the Company.

The Company shall deliver to the Agency appropriate documents conveying to the Agency title to any property installed or placed upon the premises of the Project pursuant to this Section 4.2, and upon request of the Company, the Agency shall deliver to the Company appropriate documents conveying to the Company title to any property removed from the Project pursuant to this Section 4.2. The Company agrees to pay all costs and expenses (including reasonable counsel fees) incurred in subjecting to the lien and security interest of the Indenture any property installed or placed on the Project premises pursuant to this Section 4.2.

The removal from the Project of any machinery, equipment or fixtures of the Project pursuant to the provisions of this Section 4.2 shall not entitle the Company to any abatement or

reduction in the rentals and other amounts payable by the Company under this Agreement.

Section 4.3. Payment in Lieu of Real Estate Taxes. It is recognized that under the provisions of the Act the Agency is required to pay no real estate taxes upon any of the property acquired by it or under its jurisdiction or control or supervision or upon its activities.

Until the commencement of the tax fiscal year subsequent to the first tax status date on which the Agency owns the Project, the Company shall continue to pay all appropriate taxing authorities all taxes when due.

The Company and the Agency further agree that the Company, or any subsequent lessee under this Agreement, shall be required to make payments in lieu of City of Buffalo taxes to the City according to the following schedule:

(a) commencing with the first tax fiscal year subsequent to such first tax status date referred to above, the Company shall make no payments in lieu of taxes to the City of Buffalo until the tax fiscal year of 1986-1987; and

(b) no later than July 31 of each tax fiscal year commencing with the tax fiscal year of 1986-1987, for as long as this Agreement shall remain in full force and effect, the Company shall make payments in lieu of taxes to the City in an amount equal to $52,200.

It is agreed (subject to the provisions of this Agreement) that the Agency in cooperation with the Company (i) shall cause the Project to be valued as if privately owned as aforesaid for purposes of said taxes by the appropriate officer or officers of the political unit as may from time to time be charged with responsibility for making such valuations; (ii) shall cause to be appropriately applied to the valuation or valuations so determined the respective rate or rates of such taxes, that would be applicable to the Project if so privately owned; (iii) shall cause the respective appropriate officer or officers charged with the duty of levying and collecting such taxes to submit to the Company, when the respective levies are made for purposes of such taxes upon property privately owned as aforesaid, a statement specifying the amount and due date or dates of such taxes which the City would receive if such property were so privately owned; and (iv) shall file any accounts or tax returns required with the appropriate officer or officers. The Company shall pay to the aforesaid taxing authorities when due all such payments in lieu of land taxes with respect to the Project required by this Agreement to be paid to the aforesaid taxing authorities, subject in each case to the Company's right to obtain reductions in the valuation of the Project or the right to obtain exemptions (and discounts, if any) therefrom which would in either case be afforded to a private owner of the Project and to seek to obtain a refund of any such payments made. In the event the Company should fail to make any such payments in lieu of taxes, the amount or amounts so in default shall continue as an obligation of the Company until fully paid and the Company agrees to pay the same with interest thereon at the same rate per annum as if such amounts were delinquent taxes. Once having paid the amount required by this Section 4.3 to be paid by it in lieu of land taxes, the Company shall not be required to pay any such taxes for which a payment in lieu thereof has been made to the City. None of the provisions of this Section 4.3 shall be amended, modified or waived without the prior written consent of the City.

Section 4.4. Taxes, Assessments and Charges. The Company shall pay when the same shall become due all taxes and assessments, general and specific, if any, levied and assessed upon or against the Project, this Agreement, any estate or interest of the Agency in the Project, or the rentals hereunder during the term of this Agreement, and all water and sewer charges, assessments, and other governmental charges and impositions whatsoever, foreseen or unforeseen, ordinary or extraordinary, under any present or future law, and charges for public or private utilities, which if not paid when due, would impair the lien of the Indenture on the leased premises or the rentals hereunder or the security of the Bonds, or encumber the Agency's title, all of which are herein called "Impositions". The Agency shall promptly forward to the Company any notice, bill or other statement received by the Agency concerning any Imposition. The Company may pay any Imposition in installments if so payable by law, whether or not interest accrues on the unpaid balance.

Section 4.5. Insurance. The Company shall during the term of this Agreement keep the buildings, structures, fixtures, machinery, equipment and other property constituting a part of the Project continuously insured with an insurance company licensed to do business in the State against loss or damage by fire, with standard extended coverage endorsement covering perils of windstorm, hail, explosion, aircraft, vehicles and smoke (except as limited in the standard form of extended coverage endorsement at the time in use in the State) at all times in an amount such that the proceeds of such insurance shall be sufficient to prevent the Agency, the Trustee and the Company from becoming a co-insurer of any loss under the applicable policies, but in any event in amounts equal to not less than the greater of (a) 80% of the actual replacement value of the Project as determined by an insurance appraiser selected by the Company and approved by the Agency or (b) the principal amount of the Outstanding Bonds. To the extent not paid by a contractor during the acquisition and installation of any part of the Project, the Company shall pay the premiums on such insurance, subject to reimbursement during the period of construction of the Project as provided in Section 4.02 of the Indenture. All policies shall name the Agency, the Trustee and the Company as insureds as their respective interests may appear, and all insurance proceeds shall be endorsed and made payable to the Trustee by the named insureds for the purposes described in Section 5.1 hereof, provided, however, that the Trustee shall also be named as mortgagee under the terms of a standard mortgagee clause and as a loss payee under the standard loss payee clause, and all insurance proceeds shall be payable to the Trustee. Duplicate copies of such policies or certificates of such insurance shall be promptly furnished to the Trustee and to the Agency for their records. Any such policy may provide that the insurer is not liable to the extent of the first $10,000 with the result that the Company is its own insurer to the extent of $10,000 of such risks.

The Company shall during the term of this Agreement carry boiler insurance in respect of any steam and pressure boilers and similar apparatus located on the Project in amounts approved by the Agency and such other insurance with respect to the Project in such amounts and against such insurable hazards as the Agency or the Trustee from time to time may reasonably require. All such insurance policies shall name the Agency, the Trustee and the Company as insureds as their respective interests may appear and all such insurance proceeds shall be endorsed and made payable to the Trustee.

The Company agrees that it will carry public liability insurance in accordance with customary insurance practices for similar operations with respect to the Project in a minimum amount of $5,000,000. Such insurance will also provide coverage of the Company's obligations of indemnity under Section 6.2. Such insurance coverage may be effected under overall blanket policies of the Company but in any event such insurance policies shall name the Agency, the Trustee and the Company as insureds as their respective interests may appear.

The Company agrees that it will carry worker's compensation insurance, disability benefits insurance and such other form of insurance which the Agency or the Company is required by law to provide, covering loss resulting from injury, sickness, disability or death of the employees of the Company and all contractors and subcontractors employed upon or with respect to the Project at the time of original construction or of any additions, remodeling, alterations, repair, restoration or reconstruction thereafter. The Company shall require that all said contractors and subcontractors shall maintain all forms or types of insurance with respect to their employees required by law.

All policies and certificates evidencing such insurance as is required to be obtained under the terms of this Agreement shall provide for thirty (30) days' prior written notice of any cancellation, reduction in amount or material change in coverage to the Company, the Agency and the Trustee and shall further provide that any losses shall be payable notwithstanding any act or negligence of the Agency, the Company, the Trustee or any Bondholder.

THE AGENCY DOES NOT IN ANY WAY REPRESENT THAT THE INSURANCE SPECIFIED HEREIN, WHETHER IN SCOPE OR COVERAGE OR LIMITS OF COVERAGE, IS ADEQUATE OR SUFFICIENT TO PROTECT THE COMPANY'S BUSINESS OR INTEREST.

Within 120 days after the end of each fiscal year the Company shall file with the Agency and the Trustee a certificate of an Authorized Representative of the Company to the effect that the insurance it maintains with respect to the Project complies with the provisions of this Section and that duplicate copies of all policies or certificates thereof have been filed with the Agency and the Trustee and are in full force and effect.

Section 4.6. Advances by Agency or Trustee. In the event the Company fails to take out or maintain the full insurance coverage required by this Agreement, fails to pay the taxes and other charges referred to in Section 4.3 and 4.4 hereof at or prior to the time they are there required to be paid, or fails to complete the Project or to make necessary renewals and replacements to the Project or keep it in good order and repair and in as reasonably safe condition as its operations permit or to perform or observe any of its other obligations under this Agreement, the Agency or the Trustee, after first notifying the Company of any such failure on its part, may (but shall not be obligated to), and without waiver of any of the rights of the Agency or the Trustee under this Agreement or the Indenture, take out the required policies of insurance and pay the premiums on the same, pay such taxes or other charges or complete the Project or after a period of 30 days after such notification make such repairs, renewals and replacements as may be necessary to complete and maintain the Project in good order and repair and in as reasonably safe condition as the Company's operations permit or otherwise cure any failure by the Company to perform and observe its other obligations hereunder. All amounts so advanced therefor by the Agency or the Trustee shall become an additional obligation of the Company to the Agency or to the Trustee, as the case may be, which amounts, together with interest thereon at the rate of 12% per annum, from the date advanced, the Company will pay upon demand therefor by the Agency or the Trustee, as the case may be. Any remedy herein vested in the Agency or the Trustee for the collection of the rental payments hereunder shall also be available to the Agency and the Trustee for the collection of all such amounts so advanced.

ARTICLE V

Provisions Respecting Damage, Destruction and Condemnation

Section 5.1. Damage or Destruction. If the Project shall be damaged or either partially or totally destroyed at any time during the term of this Agreement, the Agency shall have no obligation to replace, repair, rebuild or restore the Project and there shall be no abatement or reduction in the rent or other amounts payable by the Company under this Agreement. In such case, the Company will promptly give written notice thereof to the Agency and the Trustee, generally describing the nature and extent of such damage or destruction.

Unless the Company shall exercise its option to purchase the Project pursuant to Section 8.1 hereof, the Company shall at its own cost and expense, promptly and diligently, repair, restore or reconstruct the Project to substantially its condition immediately prior to such damage or destruction or to a condition of at least equivalent value and function regardless of whether or not the proceeds of all policies of insurance covering such damage or destruction shall be sufficient to pay the cost thereof, and the Company shall not by reason of payment of any such excess costs be entitled to any reimbursement from the Agency or the Trustee or the Holder of any Bonds nor shall the rent or other payments due hereunder from the Company be abated or diminished. The total amount collected under any and all policies of insurance covering such damage or destruction shall be paid into a special fund held by the Trustee, and such total amount shall be paid to the Company, upon appropriate requisition therefor by the Company certifying with respect to the same matters and accompanied by the same supporting documents as are required and set forth in Section 4.02(b) of the Indenture, at the Company's election, either upon the completion of such repair, restoration or reconstruction or periodically as such repair, restoration or reconstruction progresses, and shall be applied by the Company to the payment of the cost thereof, or, if such cost has already been paid by the Company, to reimburse it for such cost, provided, however, that the aggregate sum or sums so paid by the Trustee shall in no event exceed the actual cost of such repair, restoration or reconstruction. The repair, restoration or reconstruction shall automatically be a part of the Project and subject to the lien and security interest of this Agreement, the Indenture and the City Mortgage. Such repair, restoration or reconstruction of the Project shall be in accordance with plans and specifications approved by the Agency and the Trustee (which approvals shall not be unreasonably withheld) and the Company shall furnish to the Agency and the Trustee a labor and materials payment bond, or other security, satisfactory to the Agency and the Trustee. The provisions of the second paragraph of Section 4.1 of this Agreement shall apply to such repair, restoration and reconstruction under this Section. All payments to the Company shall be made by the

Trustee only upon a certification by an Independent Engineer as to the progress and cost of the repair, restoration or reconstruction work. Pending the expenditure of such special fund or its transfer into the Bond Fund as hereinafter provided and at the request of the Company, which request shall be subject to approval by the Agency (such approval not to be unreasonably withheld), the Trustee shall invest the same as shall be provided in the Indenture for investment of moneys in the Project Fund.

Any surplus of such insurance proceeds remaining after the completion of all payments for such repair, restoration or reconstruction shall be deposited in the Redemption Account of the Bond Fund in accordance with Section 5.02 of the Indenture but any balance of such surplus over and above the amount thereof which, together with the cash and obligations in the Bond Fund, will be sufficient to discharge and satisfy the Indenture and pay the Bonds as provided in Section 10.01 of the Indenture and all other payments required to be paid by the Company under this Agreement shall be disbursed in accordance with the City Mortgage and City Loan Agreement and upon payment in full of the UDAG Note shall be paid over to the Company.

The Agency, the Trustee and the Company shall cooperate and consult with each other in all matters pertaining to the settlement, compromising or arbitration of any claim on account of any damage or destruction of the Project, and the settlement, compromising or arbitration of any such claim shall be subject to approval by the Company (such approval not to be unreasonably withheld).

In the event the Company shall fail to repair, restore or reconstruct or pay the cost of repairing, restoring or reconstructing any such damage or destruction after the lapse of a reasonable time and after due notice in writing is given by the Agency or the Trustee to the Company, the Agency or the Trustee may do so on behalf of the Company and recover the reasonable cost thereof from the Company, less whatever amount the Agency or the Trustee may collect from such special funds which shall be available to the Agency or the Trustee as a source of reimbursement of such cost with any surplus being dealt with as provided in the second above paragraph; the provisions of Section 4.6 hereof with respect to an interest charge shall likewise be applicable to the provisions of this paragraph.

If the Company shall exercise its option to purchase the Project under Section 8.1 hereof, the total amount collected under any and all policies of insurance covering the damage or destruction to the Project shall be paid to the Trustee and by it deposited in the Redemption Account of the Bond Fund.

Any insurance proceeds attributable to improvements, machinery, equipment and other property (and not constituting

fixtures) installed on or about the leased premises to which the Company shall have retained title shall be paid to the Company.

The Company hereby waives the provisions of Section 227 of the New York Real Property Law or any law of like import now or hereafter in effect.

Section 5.2. Condemnation. If the whole or any part of the Project shall be taken or condemned by a competent authority for any public use or purpose, or by agreement between the Agency and those authorized to exercise such right, or if the temporary use of the Project shall be so taken by condemnation or agreement, the Agency shall be under no obligation to replace, restore or rebuild the Project, and there shall be on account of such taking or condemnation no abatement or reduction in the rent or other amounts payable by the Company under this Agreement. In such case, the Company will promptly give written notice thereof to the Agency and the Trustee, generally describing the nature and extent of such taking or condemnation.

Unless the Company shall exercise its option to purchase the Project pursuant to Section 8.1 hereof, any award or compensation or damages recovered on account of any such taking or condemnation, less any expenses including fees of counsel (selected by the Agency with the consent of the Company and the Trustee, which consents shall not be unreasonably withheld) incurred in litigating, arbitrating, compromising or settling any claim arising out of such condemnation, shall be disposed of in the following manner:

(a) If such taking or condemnation shall involve the taking or condemnation of less than all or substantially all of the Project, but not such taking or condemnation as shall render the Project unsuitable for use by the Company as contemplated hereby, the entire amount (less the expenses above referred to) of the award or compensation or damages recovered on account of such taking or condemnation shall promptly, when received or collected, be deposited with the Trustee in a special fund to be used as hereinafter in this paragraph (a) provided. In such event the Company shall at its own cost and expense promptly and diligently, repair, restore or reconstruct the Project (including the construction of buildings, structures, improvements and related facilities for the Project on the remaining site thereof) to substantially its condition immediately prior to such taking or condemnation or to a condition of at least equivalent value, function and operating efficiency, provided that any such repair, restoration or reconstruction will not change the nature of the Project as a qualified "project" as defined in and as contemplated by the Act; such repair, restoration or reconstruction to be performed by the Company irrespective of whether the total amount (less the expenses above referred to) of such award or compensation or damages shall be sufficient to pay

the cost thereof and the Company shall not by reason of payment of any such excess costs be entitled to any reimbursement from the Agency or the Trustee or the Holder of any Bonds nor shall the rent or other payments due hereunder from the Company be abated or diminished. The total amount (less the expenses above referred to) of such award or compensation or damages shall in that event be paid over by the Trustee to the Company, upon appropriate requisition therefor by the Company certifying with respect to the same matters and accompanied by the same supporting documents as are required and set forth in Section 4.02(b) of the Indenture, at the Company's election, either upon the completion of such repair, restoration, or reconstruction, or periodically as such repair, restoration or reconstruction progresses, and shall be applied by the Company to the payment of the cost thereof or, if such cost has already been paid by the Company, to reimburse it for such cost, provided, however, that the aggregate sum or sums so paid by the Trustee shall in no event exceed the actual cost of such repair, restoration or reconstruction. All payments to the Company shall be made only upon a certification by an Independent Engineer as to the progress and cost of the repair, restoration or reconstruction of the work. The repair, restoration or reconstruction shall automatically be a part of the Project and subject to the lien and security interest of this Agreement, the Indenture and the City Mortgage. Such repair, restoration or reconstruction of the Project shall be in accordance with plans and specifications approved by the Agency and the Trustee (which approvals shall not be unreasonably withheld) and the Company shall furnish to the Agency and the Trustee a labor and materials payment bond, or other security, satisfactory to the Agency and the Trustee. The provisions of the second paragraph of Section 4.1 of this Agreement shall apply to such repair, restoration and reconstruction under this Section. Pending the expenditure of such special fund or its transfer into the Redemption Account of the Bond Fund as hereinafter provided and at the request of the Company, which request shall be subject to approval by the Agency (such approval not to be unreasonably withheld), the Trustee shall invest the same as shall be provided in the Indenture for investment of moneys in the Project Fund.

Any surplus of such award or compensation or damages remaining after the completion of all payments for such repair, restoration or reconstruction shall be deposited by the Trustee in the Redemption Account of the Bond Fund in accordance with Section 5.02 of the Indenture, but any balance of such surplus over and above the amount thereof which, together with the cash and obligations in the Bond Fund, will be sufficient to discharge and satisfy the Indenture and pay the Bonds as provided in Section 10.01 of the Indenture and all other payments required to be paid by the Company under this Agreement shall be disbursed in accordance with the City Mortgage and City Loan Agreement and

upon payment in full of the UDAG Note shall be paid over to the Company.

In the event the Company shall fail to repair, restore or reconstruct and pay the cost of repairing, restoring or reconstructing said buildings, structures, improvements and related facilities as it is obligated by this paragraph (a) to do, after the lapse of a reasonable time and after due notice in writing is given by the Agency or the Trustee to the Company, the Agency or the Trustee may (but shall not be obligated to) so repair, restore or reconstruct said buildings, structures, improvements and related facilities on behalf of the Company and recover the reasonable cost thereof from the Company, less whatever amount the Agency or the Trustee may collect from such special fund, if any, which shall be available to the Agency or the Trustee as a source of reimbursement of such cost with any surplus being dealt with as provided in the preceding paragraph of this subsection (a); the provisions of Section 4.6 hereof with respect to an interest charge shall likewise be applicable to the provisions of this paragraph.

(b) If all or substantially all of the Project shall be taken or condemned, or if the taking or condemnation renders the Project unsuitable for use by the Company as contemplated hereby, and the Company does not exercise its option to purchase the Project pursuant to Section 8.1 hereof, the amount of the award, compensation or damages so recovered shall be applied and treated as though the Company had exercised such option to purchase and shall be deposited in the Redemption Account of the Bond Fund, and the Company shall thereupon pay to the Trustee for deposit in the Bond Fund an amount which, when added to any amounts then in the Bond Fund available for that purpose, shall be sufficient to retire and redeem the Bonds at the earliest possible date (including, without limitation, principal and interest to the maturity or redemption date and redemption premium, if any), expenses of redemption, fees and expenses of the Agency, the Trustee and Paying Agents, together with all other amounts due under the Indenture and under this Agreement, plus one dollar, and such amount shall be applied, together with such other available moneys in the Bond Fund, if applicable, to such redemption or retirement of the Bonds on said redemption or maturity date. Thereupon this lease of the Project shall be terminated provided that the UDAG Note shall have been paid in full.

If the Company shall exercise its option to purchase the Project pursuant to Section 8.1 hereof, the amount of the award, compensation and/or damages recovered on account of the taking or condemnation of the Project, less any expenses including fees of counsel (selected as heretofore in this Section provided) incurred in litigating, arbitrating, compromising or settling any claim arising out of such condemnation or taking, shall be paid

to the Trustee and by it deposited in the Redemption Account of the Bond Fund pursuant to the Indenture.

The Agency, the Trustee and the Company shall cooperate and consult with each other in all matters pertaining to settlement or adjustment of any and all claims and demands for damages on account of any taking or condemnation of the Project and the settlement or adjustment of any such claim shall be subject (1) in the case of all such settlements of less than $25,000, to the approval of the Company (such approval not to be unreasonably withheld) and (2) in the case of all such settlements of $25,000 or more, to the approval of the Company and the Trustee (such approvals not to be unreasonably withheld).

Section 5.3. Taking of Company's Equipment. The Company shall be entitled to the proceeds of any taking or condemnation (as described in Section 5.2) relating to Company's machinery, equipment or other property (other than fixtures) to which it has retained title in accordance with the provisions of this Agreement; provided, however, that no rights granted the Company by the terms of this Section 5.3 shall diminish or alter the award, compensation or damages recovered by the Agency or the Trustee on account of the taking or condemnation of the Project.

ARTICLE VI
Particular Covenants

Section 6.1. Dissolution or Merger of Company; Restrictions on Company. The Bonds will be payable as to principal and interest and Redemption Price, if any, together with interest thereon accrued on the Bonds to the date of redemption out of the revenue derived from the leasing of the Project, including all revenues and rental income derived from or in connection with the Project and moneys received under this Agreement, required to be paid into the Bond Fund under the Indenture, and the parties hereto understand that the purchasers of the Bonds will make their purchase in reliance upon the credit and financial condition of the Company. Accordingly, the Company agrees to maintain its corporate existence and not to liquidate, wind-up or dissolve or otherwise dispose of all or substantially all of its property, business or assets remaining after the execution and delivery of this Agreement and not to consolidate with or merge into another corporation or permit one or more corporations to consolidate with or merge into it; provided, that the Company may, without violating the foregoing, consolidate with or merge into another corporation, or permit one or more corporations to consolidate with or merge into it, or sell or otherwise transfer all or substantially all of its property, business or assets to another such corporation (and thereafter liquidate, wind-up or dissolve or not, as the Company may elect) if the corporation surviving such merger or resulting from such consolidation, or the corporation to which all or substantially all of the property, business or assets of the Company are sold or otherwise transferred, as the case may be, assumes in writing all of the obligations of the Company contained in this Agreement and has a net worth (as determined in accordance with generally accepted accounting principles and certified by an independent public accountant) after the merger, consolidation, sale or transfer at least equal to that of the Company immediately prior to such merger, consolidation, sale or transfer and in the opinion of counsel who is acceptable to the Trustee, such corporation shall be bound by all of the terms of this Agreement applicable to the Company and such action does not impair the security for the Holders of the Bonds afforded by this Agreement and the Corporate Guaranty.

Section 6.2. Indemnity. (a) The Company shall at all times protect and hold the Agency and the Trustee harmless against all claims (whether in tort, contract or otherwise) for losses, damage, injury and liability however caused, other than, with respect to the Agency, losses arising from the gross negligence or willful misconduct of the Agency or, with respect to the Trustee, the gross negligence or willful misconduct of the Trustee, arising during the term of this Agreement upon or about the Project or resulting from, arising out of, or in any way connected with the acquisition, installation or operation of the

Project, the preparation of the site thereof or defects in the Project. The Agency and the Trustee shall not be liable for any damage or injury to the person or property of the Company or its directors, officers, employees, agents or servants or persons under the Company's control or supervision, or any other person who may be about the Project, due to any act or negligence of any person other than, with respect to the Agency, the gross negligence or willful misconduct of the Agency or, with respect to the Trustee, the gross negligence or willful misconduct of the Trustee.

(b) The Company releases the Agency and the Trustee from, and agrees that the Agency and the Trustee shall not be liable for and agrees to indemnify and hold the Agency and the Trustee harmless against any expense or damage incurred because of any lawsuit commenced as a result of action taken by the Agency or by the Trustee (i) with respect to the acquisition, installation or operation of the Project, the preparation of the site thereof or from any defect in the Project or (ii) at the direction of the Company and in good faith with respect to the Project. The Agency or the Trustee, as the case may be, shall promptly notify the Company in writing of any claim or action brought against the Agency and/or the Trustee in which indemnity may be sought against the Company pursuant to this Section 6.2; such notice shall be given in sufficient time to allow the Company to defend or participate in such claim or action, but the failure to give such notice in sufficient time shall not constitute a defense hereunder nor in any way impair the obligations of the Company under this Section 6.2.

(c) The indemnifications and protections set forth above in this Section 6.2 shall be extended, with respect to the Agency, to its members, directors, officers, employees, agents and servants and persons under the Agency's control or supervision, and with respect to the Trustee, to any of its directors, officers, employees, agents and servants and persons under the Trustee's control or supervision.

(d) To effectuate the purposes of this Section 6.2, the Company will provide for and insure, in the liability policies required in Section 4.5, not only its own liability in respect of the matters therein mentioned but also the liability pursuant to this Section 6.2. Anything to the contrary in this Agreement notwithstanding, the covenants of the Company contained in this Section 6.2 shall remain in full force and effect after the termination of this Agreement until the later of (i) the expiration of the period stated in the applicable statute of limitations during which a claim or cause of action may be brought and (ii) payment in full or the satisfaction of such claim or cause of action and of all expenses and charges incurred by the Agency or the Trustee relating to the enforcement of the provisions herein specified.

(e) For the purposes of this Section 6.2, the Company shall not be deemed an employee, agent or servant of the Agency or a person under the Agency's control or supervision.

Section 6.3. Compensation and Expenses of Trustee, Bond Registrar, Paying Agents and Agency. The Company shall, to the extent not paid out of the proceeds of the Bonds as financing expenses, pay reasonable compensation to the Trustee for its services under the Indenture and the Corporate Guaranty and all reasonable actual out-of-pocket expenses (including counsel fees) reasonably incurred by the Trustee in performing its duties thereunder, including but not limited to expenses incurred in purchasing the Bonds or redeeming the Bonds in whole or in part or making any investments in accordance with the Indenture. The Company shall also pay the reasonable compensation and reasonable out-of-pocket expenses of the Bond Registrar and the Paying Agents for the Bonds. The Company shall pay the fees and expenses of the Agency in accordance with its agreements heretofore entered into by it with the Agency. Upon the termination of this Agreement, whether due to exercise by the Company of its option to purchase the Project or otherwise, the Company will pay, or make provision for payment of, the reasonable compensation and all reasonable out-of-pocket expenses, then due and thereafter to become due, of the Trustee, the Bond Registrar, the Paying Agents for the Bonds and the Agency.

Section 6.4. Retention of Title to Project; Grant of Easements; Release of Certain Land. The Agency shall not sell, assign, encumber, convey or otherwise dispose of the Project or any part thereof during the term of this Agreement, except as set forth in Section 7.2 hereof, without the prior written consent of the Company and the Trustee and any purported disposition without such consent shall be void. The Agency will, however, at the request of the Company grant such rights of way or easements over, across, or under, the realty of the Project, or grant such permits or licenses in respect to the use thereof, free from the liens of the Indenture and the City Mortgage, as shall be necessary or convenient for the operation or use of the Project, including but not limited to leases, easements or rights of way for utility, roadway, railroad or similar purposes in connection with the Project, or for the utilization of the real property adjacent to or near the Project and owned by or leased to the Company, provided that such leases, rights of way, easements, permits or licenses shall not adversely affect the operation of the Project or impair the usefulness of the Project under the Act, and provided, further, that any consideration received by the Agency or the Company from the granting of said leases, rights of way, easements, permits or licenses shall be deposited in the Bond Fund. The Agency agrees to execute and deliver and to cause and direct the Trustee to execute and deliver any and all instruments necessary or appropriate to confirm and grant any

such right of way or easement or any such permit or license and to release the same from the liens of the Indenture and the City Mortgage.

Notwithstanding any other provision of this Agreement, so long as there exists no Event of Default hereunder, the Company may from time to time request in writing to the Agency the release of and removal from this Agreement and the leasehold estate created hereby and the release from the liens of the Indenture and the City Mortgage of any unimproved part of the Project (on which none of the improvements, including the buildings, structures, improvements, related facilities, machinery, equipment, major appurtenances, fixtures or other property comprising the Project are situated) provided that such release and removal will not impair the usefulness of the Project under the Act. The Company may also from time to time request in writing to the Agency the release of and removal from this Agreement and the leasehold estate created hereby and release from the liens of the Indenture and the City Mortgage any portions of the Project improved as parking and loading areas and access ways provided that the Company agrees, as a condition to such release, to substitute facilities substantially equivalent in function and location to the portions to be released and to cause such substitute facilities to be added to the Project subject to the terms of this Agreement. Upon any such request by the Company, the Agency shall execute and deliver and cause and direct the Trustee to execute and deliver any and all instruments necessary or appropriate to so release and remove such unimproved part of the Project and convey title thereto in fee simple to the Company or such person as the Company may designate subject to the following: (a) any liens, easements, encumbrances and reservations to which title to said property was subject at the time of recording of this Agreement; (b) any liens, easements and encumbrances created at the request of the Company or to the creation or suffering of which the Company consented; (c) any liens and encumbrances or reservations resulting from the failure of the Company to perform or observe any of the agreements on its part contained in this Agreement; and (d) any liens for taxes or assessments not then delinquent; provided, that if any of the Bonds are then Outstanding and unpaid, no such release shall be effected unless there shall be deposited with the Trustee the following:

(1) A certificate of an Independent Engineer, dated not more than sixty days prior to the date of the release, stating that, in the opinion of the person signing such certificate, the portion of the Project and the release so proposed to be made will not impair the usefulness of the Project and will not destroy the means of ingress thereto and egress therefrom; and

(2) An amount of cash for deposit in the Bond Fund equal to the greatest of (A) the original cost of such part of the Project so released, such cost to be determined by the appraisal of an independent real estate brokerage firm of recognized standing within the County, (B) the fair market value of such part, such value to be determined by the appraisal of an independent real estate brokerage firm of recognized standing within the County, and (C) if such part is released in connection with the sale of such part, the amount received by the Company upon such sale.

No conveyance or release effected under the provisions of this Section shall entitle the Company to any abatement or diminution of the rents payable under Section 3.3 hereof or the other payments required to be made by the Company under this Agreement.

Section 6.5. Company's Covenant as to Tax Exemption and Obligation to File Statements with Internal Revenue Service. The Company covenants with the Agency, with the Trustee and with each of the Holders of the Bonds, that (1) it will never permit the use of Bond proceeds, nor take nor omit to take any action, so as to cause the loss of tax exemption under the Code, and (2) it shall file with the Internal Revenue Service of the United States Treasury Department or any other authorized governmental agency any and all statements or other instruments, if any, required under Section 103 of the Code, including the regulations thereunder, in order that the interest on the Bonds continues to be excludable from the gross income of the Holders thereof for Federal income tax purposes. If the Company causes the loss of tax exemption of the Bonds, the Company shall promptly send notice thereof to the Trustee and each of the Holders of the Bonds.

Section 6.6. Identification of Certain Property. All improvements and other property which shall become the property of the Agency pursuant to this Agreement shall be identified in the manner referred to in Section 2.4 and pursuant to said Section the Company shall keep an index of the same, one copy of which shall be filed with the Trustee and one maintained by the Company on the leased premises.

Section 6.7. Financial Statements. (a) The Company agrees to furnish annually to the Agency, the Trustee and to each of the Holders of the Bonds who shall file its name and address with the Trustee, as soon as available and in any event within 120 days after the close of each fiscal year of the Company, a copy of the annual audited report (including financial position, earnings and retained earnings statements) of the Company and its subsidiaries for such fiscal year, all as prepared by independent certified public accountants.

(b) The Company shall deliver to the Agency and the Trustee with each delivery required by Section 6.7(a), a certificate of one of the Company's financial officers as to whether or not, as of the close of such preceding period and at all times during such preceding period, the Company was in compliance with all the provisions in this Agreement which relate to the Company, and if such financial officer shall have obtained knowledge of any default in such compliance or notice of such default, he shall disclose in such certificate such default or defaults or notice thereof and the nature thereof, whether or not the same shall constitute an Event of Default hereunder.

Section 6.8. Discharge of Liens. (a) If any lien, encumbrance or charge is filed or asserted, or any judgment, decree, order, levy or process of any court or governmental body is entered, made or issued or any claim (such liens, encumbrances, charges, judgments, decrees, orders, levies, processes and claims being herein collectively called "Liens"), whether or not valid, is made against the Project or any part thereof or the interest therein of the Agency, the Company or the Trustee or against any of the rentals or other amounts payable under this Agreement other than Liens for Impositions (as defined in Section 4.4) not yet payable, or payable without the addition of any fine, penalty, interest or cost for non-payment, or Liens being contested as permitted by Section 6.8(b), the Company forthwith upon receipt of notice of the filing, assertion, entry or issuance of such Lien (regardless of the source of such notice) at its expense shall give notice thereof to the Agency and the Trustee and take all action (including the payment of money and/or the securing of a bond) as may be necessary or appropriate to obtain the discharge in full thereof and to remove or nullify the basis therefor. Nothing contained in this Agreement shall be construed as constituting the express or implied consent to or permission of the Agency for the performance of any labor or services or the furnishing of any materials that would give rise to any Lien against the Agency's interest in the Project.

(b) The Company may at its sole expense contest (after prior written notice to the Agency and the Trustee), by appropriate action conducted in good faith and with due diligence, the amount or validity or application, in whole or in part, of any Lien, if (1) such proceeding shall suspend the execution or enforcement of such Lien against the Project or any part thereof or interest therein of the Agency, the Company or the Trustee or against any of the rentals or other amounts payable under this Agreement, (2) neither the Project nor any part thereof or interest therein would be in any danger of being sold, forfeited or lost, (3) neither the Company, the Agency nor the Trustee would be in any danger of any civil or any criminal liability, other than normal accrual of interest, for failure to comply therewith, and (4) the Company shall have furnished such

security, if any, as may be required in such proceedings or as may be reasonably requested by the Trustee to protect the security intended to be offered by the Indenture.

Section 6.9. Agency's Authority; Covenant of Quiet Enjoyment. The Agency covenants and agrees that it has full right and lawful authority to enter into this Agreement for the full term hereof, including the right to grant the options to purchase herein contained, and that, so long as the Company shall pay the rent and all other sums payable by it under this Agreement and shall duly observe all the covenants, stipulations and agreements herein contained obligatory upon it, the Company shall have, hold and enjoy, during the term hereof, peaceful, quiet and undisputed possession of the Project, and the Agency shall from time to time take all necessary action to that end, subject to matters of record at the date of the acquisition of the Project site by the Agency.

Section 6.10. Covenant by Company as to Compliance with Indenture. The Company covenants and agrees that it will comply with the provisions of the Indenture with respect to the Company and that the Trustee shall have the power, authority, rights and protections provided in the Indenture. The Company further covenants to use its best efforts to cause there to be obtained for the Agency any documents or opinions required of the Agency under the Indenture.

Section 6.11. No Warranty of Condition or Suitability. THE AGENCY HAS MADE AND MAKES NO REPRESENTATION OR WARRANTY WHATSOEVER, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE MERCHANTABILITY, CONDITION, FITNESS, DESIGN, OPERATION OR WORKMANSHIP OF ANY PART OF THE PROJECT, ITS FITNESS FOR ANY PARTICULAR PURPOSE, THE QUALITY OR CAPACITY OF THE MATERIALS IN THE PROJECT, OR THE SUITABILITY OF THE PROJECT FOR THE COMPANY'S PURPOSES OR NEEDS OR THE EXTENT TO WHICH PROCEEDS DERIVED FROM THE SALE OF THE BONDS WILL BE SUFFICIENT TO PAY THE COST OF THE ACQUISITION AND INSTALLATION OF THE PROJECT. THE COMPANY IS SATISFIED THAT THE PROJECT IS SUITABLE AND FIT FOR ITS PURPOSES. THE AGENCY SHALL NOT BE LIABLE IN ANY MANNER WHATSOEVER TO THE COMPANY FOR ANY LOSS, DAMAGE OR EXPENSE OF ANY KIND OR NATURE CAUSED, DIRECTLY OR INDIRECTLY, BY THE PROJECT PROPERTY OR THE USE OR MAINTENANCE THEREOF OR THE FAILURE OF OPERATION THEREOF, OR THE REPAIR, SERVICE, OR ADJUSTMENT THEREOF, OR BY ANY DELAY OR FAILURE TO PROVIDE ANY SUCH MAINTENANCE, REPAIRS, SERVICE OR ADJUSTMENT, OR BY ANY INTERRUPTION OF SERVICE OR LOSS OF USE THEREOF OR FOR ANY LOSS OF BUSINESS HOWSOEVER CAUSED.

Section 6.12. Amounts Remaining in the Bond Fund. It is agreed by the parties hereto that any amounts remaining in the Bond Fund upon the expiration or sooner or later termination of the term of this Agreement as provided in this Agreement, after payment in full of the Bonds (in accordance with Section 10.01 of

the Indenture), the fees, charges and expenses of the Trustee and Paying Agents in accordance with the Indenture and after all rents and all other amounts payable hereunder, including those set forth in the ultimate paragraph of Section 3.3 hereof, shall have been paid in full, shall belong to and be paid to the Company by the Trustee as overpayment of rents.

Section 6.13. No Recourse under this Agreement or on Bonds. All covenants, stipulations, promises, agreements and obligations of the Agency contained in this Agreement shall be deemed to be the covenants, stipulations, promises, agreements and obligations of the Agency, and not of any member, director, officer, employee or agent of the Agency in his individual capacity, and no recourse shall be had for the payment of the principal or Redemption Price, if any, of or interest on the Bonds or for any claim based thereon or hereunder against any member, director, officer, employee or agent of the Agency or any natural person executing the Bonds.

Section 6.14. Issuance of Additional Bonds. The Agency and the Company recognize that under the provisions of the Indenture, the Agency is authorized, with the consent of the Holders of at least 100% of the principal amount of the Bonds then Outstanding and, until payment in full of the UDAG Note, with the consent of LDC, to enter into a Supplemental Indenture and issue one or more series of Additional Bonds on a parity with the Series 1980 Bond for the purpose of providing extensions, additions or improvements to the Project. If the Company is not in default hereunder, the Agency will consider the issuance of Additional Bonds in a principal amount as is specified in a written request in accordance with the applicable provisions set forth in the Indenture. If Additional Bonds are to be issued pursuant to the Indenture, the Agency and the Company shall enter into an amendment to this Agreement providing, among other things, for the payment by the Company of such additional rentals as are necessary in order to amortize in full the principal of and interest on such Additional Bonds and any other costs in connection therewith.

Any such completion, additions, extensions or improvements shall become a part of the Project and shall be included under this Agreement to the same extent as if originally included hereunder.

Section 6.15. Employment Information. The Company agrees that, upon request of the Agency, it shall furnish to the Agency such information as the Agency shall request with respect to past, present and future employment by the Company with respect to the Project.

Section 6.16. Capital Expenditures. (a) If at any time before the third anniversary of the date of issuance of the

Series 1980 Bond the Company or any related person or principal user of the Project proposes to make (other than from the proceeds of the Series 1980 Bond held in the Project Fund) any "capital expenditure" within the meaning of the regulations then in effect under Section 103(b) of the Code, in an amount exceeding $25,000 with respect to the Project or any other property located in the County, the Company hereby covenants with the Agency, with the Trustee and with each of the Holders of the Bonds that it shall, prior to the payment or incurrence of such capital expenditure, file with the Trustee and the Agency an opinion of counsel who is satisfactory to the Trustee to the effect that such capital expenditure will not have the effect of causing the interest on any of the Bonds (unless held by the Company or any related person or substantial user of the Project) to be included in the gross income of the Holder of any of the Bonds for Federal income tax purposes. If at any time before the third anniversary of the date of issuance of the Series 1980 Bond the Company or any related person or principal user of the Project proposes to merge or consolidate with any corporation, acquire substantially all the properties of another corporation, gain control of any person, firm or corporation, or acquire greater than 50% of the outstanding stock of another corporation, the Company shall first file with the Trustee and the Agency an opinion of counsel who is satisfactory to the Trustee to the effect that such action would not cause the interest on any of the Bonds (unless held by the Company or any related person or substantial user of the Project) to be included in the gross income of the Holder of any of the Bonds for Federal income tax purposes.

(b) The Company shall, until the end of the third full fiscal year after the date of issuance of the Series 1980 Bond, keep books and records with respect to the Project and any other property or facilities located in the County of which the Company or any related person or any principal user of the Project is the principal user, which books and records shall be sufficient to indicate the nature of all expenditures with respect to the Project or such property or facilities. The Company shall cause a yearly audit for the fiscal years ending December 31, 1980 through December 31, 1984 to be made of such books and records by an independent certified public accountant who is satisfactory to the Trustee. Such independent certified public accountant shall within 90 days after the end of such fiscal year file with the Trustee and the Agency a certificate, which shall state that during the preceding fiscal year neither the Company nor any related person nor any principal user of the Project has made any capital expenditure within the meaning of the regulations then in effect under Section 103(b) of the Code or, in the event the Company or any related person or principal user of the Project has paid or incurred any such capital expenditure, such certificate shall specify the details, including the date and amount thereof.

(c) As used in this Section, the term "related person" shall mean any person, firm or corporation constituting a related person to the Company or any subsequent lessee of the Project within the meaning of Section 103(b)(6)(C) of the Code and the terms "principal user" and "substantial user" shall have the meanings set forth in Section 103 of the Code.

Section 6.17. Redemption Under Certain Circumstances. Upon the occurrence of an Event of Taxability the Company agrees to pay to the Agency an amount sufficient for the Agency to redeem the Series 1980 Bond as hereinafter set forth, and the Agency agrees that the Series 1980 Bond shall be subject to mandatory redemption by the Agency, not later than sixty days following the date of the Determination of Taxability, from such funds provided by the Company, in whole and not in part, at a redemption price equal to 100% of the aggregate principal amount of the Series 1980 Bond Outstanding on the date of such Determination of Taxability plus interest accrued to the redemption date, with such amount to be held and disbursed by the Trustee pursuant to the Indenture.

The obligation of the Company to make the payments provided for in this Section 6.17 shall be absolute and unconditional. The failure of the Agency to execute and deliver or cause to be delivered any documents or to take any action required under this Agreement or otherwise shall not relieve the Company of its obligations under this Section 6.17.

ARTICLE VII
Events of Default; Remedies

Section 7.1. Events of Default. Any one or more of the following events shall constitute an "Event of Default" hereunder:

(a) Failure of the Company to pay any rental that has become due and payable by the terms hereof and the continuation of such default for seven Business Days;

(b) Failure of the Company to observe and perform any covenant, condition or agreement hereunder on its part to be performed (except the obligation to pay rent) and (1) continuance of such failure for a period of 30 days after receipt by the Company of written notice specifying the nature of such default, or (2) if by reason of the nature of such default the same cannot be remedied within the said 30 days, the Company fails to proceed with reasonable diligence after receipt of said notice to cure the same or fails to continue with reasonable diligence its efforts to cure the same;

(c) The dissolution or liquidation of the Company or the filing by the Company of a voluntary petition in bankruptcy or the failure by the Company within 60 days to lift or stay any execution, garnishment or attachment of such consequence as will impair its ability to carry on its operation at the Project, or adjudication of the Company as a bankrupt or assignment by the Company for the benefit of its creditors, or the entry by the Company into an agreement of composition with its creditors, or the approval by a court of competent jurisdiction of a petition applicable to the Company in any proceeding for its reorganization instituted under the provisions of any state or federal bankruptcy or similar laws, or appointment by final order, judgment or decree of a court of competent jurisdiction of a receiver of the whole or any substantial part of the properties of the Company (provided such receiver shall not have been removed or discharged within 60 days of the date of his qualification). The term "dissolution or liquidation of the Company" as used in this subsection shall not be construed to include any action permitted by Section 6.1 hereof;

(d) Final judgment for the payment of money in excess of an aggregate of $25,000 shall be rendered against the Company and the same shall remain undischarged for a period of 60 consecutive days during which execution shall not be effectively stayed;

(e) There shall be a default in respect of any evidence of indebtedness for money borrowed by the Company (or with respect to the performance of any obligations of the Company incurred in connection with any indebtedness for money borrowed)

where the effect of such default is to accelerate the maturity of such indebtedness or to permit the holders thereof (or a trustee on behalf of such holders) to cause such indebtedness to become due prior to its stated maturity, or any such indebtedness shall not be paid as and when due and payable;

(f) Any representation or warranty made by the Company herein or in the Letter of Representation dated as of September , 1980 executed by the Company and the Corporate Guarantor or in any report, certificate, financial statement or other instrument furnished by the Company or the Corporate Guarantor pursuant hereto or thereto shall prove to be false, misleading or incorrect in any material respect as of the date made; or

(g) An "Event of Default" under the Indenture, the Corporate Guaranty, the City Mortgage, the City Loan Agreement or the City Security Agreement shall occur and be continuing.

Section 7.2. Remedies on Default. Whenever any Event of Default referred to in Section 7.1 hereof shall have occurred and be continuing, the Agency, or the Trustee where so provided, may take any one or more of the following remedial steps:

(a) The Trustee, as and to the extent provided in Article VII of the Indenture, may cause all principal installments of rent payable under Section 3.3 hereof for the remainder of the term of this Agreement to be immediately due and payable, whereupon the same shall become immediately due and payable;

(b) The Agency, with the prior written consent of the Trustee, or the Trustee, may re-enter and take possession of the Project without terminating this Agreement, and sublease the Project for the account of the Company, holding the Company liable for the difference in the rent and other amounts payable by the sublessee in such subletting, and the rents and other amounts payable by the Company hereunder;

(c) The Agency, with the prior written consent of the Trustee, or the Trustee, may terminate this Agreement, and exclude the Company from possession of the Project, in which case this Agreement and all of the estate, right, title and interest herein granted or vested in the Company shall cease and terminate unless prior to such time all accrued unpaid rentals (exclusive of any such rentals accrued solely by virtue of the acceleration of the due date of the Bonds as provided in Section 7.01 of the Indenture), shall have been paid and all such defaults shall have been fully cured except in the event that the curing of any such default in the case of the Event of Default specified in Section 7.1(b) takes more than 30 days and the Company is proceeding diligently to cure the default. No such termination of this Agreement shall relieve the Company of its liability and

obligations hereunder and such liability and obligations shall survive any such termination;

(d) The Agency or the Trustee may take whatever action at law or in equity as may appear necessary or desirable to collect the rent then due and thereafter to become due, or to enforce performance or observance of any obligations, agreements or covenants of the Company under this Agreement;

(e) The Agency or the Trustee may take any action permitted under the Indenture with respect to an Event of Default thereunder; and

(f) The Agency, without the consent of the Trustee or any Bondholder, or the Trustee, may proceed to enforce the obligations of the Company with respect to those amounts paid by or payable to the Agency for its own account or to or for the benefit of the appropriate taxing authorities or to the Trustee under Sections 4.3, 4.4, 4.5, 4.6, 6.2 and 6.3 of this Agreement and such other amounts likewise paid by or payable to the Agency for its own account.

In the event that the Company fails to make any monthly rental payment required in Section 3.3 hereof, the installment so in default shall continue as an obligation of the Company until the amount in default shall have been fully paid.

Notwithstanding the foregoing, prior to the exercise by the Agency of any remedy that would prevent the application of this paragraph, unless and until the Agency, pursuant to Section 7.3 hereof, shall have executed a firm bilateral agreement for the reletting of the Project

(1) the Company may, at any time, pay all accrued unpaid rentals (exclusive of any such rentals accrued solely by virtue of acceleration of the due date of the Bonds as provided in Section 7.01 of the Indenture) and fully cure all defaults; and

(2) in such event, this lease shall be fully reinstated, as if it had never been terminated, and the Company shall be accordingly restored to the use, occupancy and possession of the Project.

No action taken pursuant to this Section 7.2 (including repossession of the Project or termination of this Agreement pursuant to this Section 7.2 or by operation of law or otherwise) shall, except as expressly provided herein, relieve the Company from the Company's obligations hereunder, all of which shall survive any such action.

Section 7.3. Reletting of Project. If the right of the Company to the use, occupancy and possession of the Project shall be terminated in any way, the Agency may relet the same or any part thereof for the account and benefit of the Company for such rental terms to such persons, firms or corporations and for such period or periods as may be fixed and determined by the Agency after notice to and approval by the Trustee, but the Agency shall not unreasonably refuse to accept or receive any suitable occupant or tenant offered by the Company. The Agency and the Trustee shall not otherwise be required to do any act whatsoever or exercise any diligence whatsoever to mitigate the damages to the Company, and if a sufficient sum shall not be received from any reletting to satisfy the rental payments hereby agreed to be made by the Company, after paying the expenses of reletting and collection, then the Company hereby agrees to pay and satisfy any such deficiency if, as and when the same exists; provided, however, any excess rentals from any such reletting shall be credited to any rental due or to become due by the Company.

Section 7.4. Remedies Cumulative. The rights and remedies of the Agency under this Agreement shall be cumulative and shall not exclude any other rights and remedies of the Agency allowed by law with respect to any default under this Agreement. Failure by the Agency to insist upon the strict performance of any of the covenants and agreements herein set forth or to exercise any rights or remedies upon default by the Company hereunder shall not be considered or taken as a waiver or relinquishment for the future of the right to insist upon and to enforce by mandamus or other appropriate legal remedy a strict compliance by the Company with all of the covenants and conditions hereof, or of the rights to exercise any such rights or remedies, if such default by the Company be continued or repeated, or of the right to recover possession of the Project by reason thereof. Nothing in this Section 7.4 shall be deemed to restrict the right of the Company to reinstate this Agreement as provided in Section 7.2.

Section 7.5. No Additional Waiver Implied by One Waiver. In the event any covenant or agreement contained in this Agreement should be breached by either party and thereafter waived by the other party, such waiver shall be limited to the particular breach so waived and shall not be deemed to waive any other breach hereunder. No waiver shall be binding unless it is in writing and signed by the party making such waiver. No course of dealing between the Agency and/or the Trustee and the Company or any delay or omission on the part of the Agency and/or the Trustee in exercising any rights hereunder or under the Indenture shall operate as a waiver. To the extent permitted by applicable law, the Company hereby waives the benefit and advantage of, and covenants not to assert against the Agency or the Trustee, any valuation, inquisition, stay, appraisement, extension or redemption laws now existing or which may hereafter exist which,

but for this provision, might be applicable to any sale or reletting made under the judgment, order or decree of any court or under the powers of sale and re-letting conferred by this Agreement or otherwise.

Section 7.6. Effect on Discontinuance of Proceedings. In case any proceeding taken by the Trustee under the Indenture or this Agreement on account of any Event of Default hereunder or under the Indenture shall have been discontinued or abandoned for any reason or shall have been determined adversely to the Trustee, then and in every such case (without any cost to the Company) the Agency, the Trustee, and the Holders of the Bonds shall be restored, respectively, to their former positions and rights hereunder and thereunder, and all rights, remedies, powers and duties of the Trustee shall continue as in effect prior to the commencement of such proceedings.

Section 7.7. Agreement to Pay Attorneys' Fees and Expenses. In the event the Company should default under any of the provisions of this Agreement and the Agency or the Trustee should employ attorneys or incur other expenses for the collection of rentals or other amounts payable hereunder or the enforcement of performance or observance of any obligation or agreement on the part of the Company herein contained, the Company agrees that it will on demand therefor pay to the Agency or the Trustee the reasonable fees and disbursements of such attorneys and such other expenses so incurred.

Section 7.8. Further Assurances. The Company will cooperate with the Agency and the Trustee for the purpose of protecting the Agency's and Trustee's interest in the Project, this Agreement and the sums due under this Agreement, including without limitation, the execution of all Uniform Commercial Code financing statements requested by the Agency or the Trustee. The Agency and the Trustee are authorized if permitted by applicable law to file one or more Uniform Commercial Code financing statements disclosing any security interest in the Project, this Agreement and the sums due under this Agreement without the signature of the Company or signed by the Agency or the Trustee as attorney-in-fact for the Company. The Company will pay all costs of filing any financing, continuation or termination statements with respect to the Project and this Agreement. The Company shall execute and deliver to the Agency or the Trustee upon written request such other instruments and assurances as the Agency or the Trustee deems necessary or advisable for the implementaion, effectuation, confirmation or perfection of this Agreement and any rights of the Agency or the Trustee hereunder or under the Indenture.

Section 7.9. Estoppel Certificates. The Company will, from time to time, upon 20 days' prior request by the Agency or the Trustee, execute, acknowledge and deliver to the Agency and

the Trustee, a certificate of the Company stating that this Agreement is unmodified and in full force and effect (or, if there have been modifications or amendments, that this Agreement is in full force and effect as modified, and setting forth such modifications or amendments) and the dates to which rentals and other sums payable hereunder have been paid, and either stating that to the knowledge of the signer of such certificate no default or breach exists hereunder or specifying each such default or breach of which the signer has knowledge. Any such certificate may also be relied upon by any Holder of the Bonds.

ARTICLE VIII
Options

Section 8.1. Options. (a) The Company has the right to make advance rental payments for deposit in the Bond Fund all in accordance with the terms of the Indenture.

(b) The Company, so long as there exists no Event of Default hereunder, shall have the option to purchase the Project on November 1, 1980 or on any date thereafter during the term of this Agreement if:

(1) The Project shall have been damaged or destroyed to such extent that as evidenced by a certificate of an Independent Engineer filed with the Agency and the Trustee (A) the Project cannot be reasonably restored within a period of one year to the condition thereof immediately preceding such damage or destruction, (B) the Company, or any subsequent lessee of the Project is thereby prevented or likely to be prevented from carrying on its normal operation of the Project for a period of one year, or (C) the restoration cost of the Project would exceed the total amount of all insurance proceeds, including any deductible amount, in respect of such damage or destruction; or

(2) Title to, or the temporary use of, all or substantially all of the Project shall have been taken or condemned by a competent authority which taking or condemnation results, or is likely to result, in the Company or any subsequent lessee of the Project being thereby prevented or likely to be prevented from carrying on its normal operation of the Project for a period of one year as evidenced by a certificate of an Independent Engineer filed with the Agency and the Trustee; or

(3) As a result of changes in the Constitution of the United States of America or of the State of New York or of legislative or executive action of said State or any political subdivision thereof or of the United States of America and by final decree or judgment of any court after the contest thereof by the Company or subsequent lessee of the Project, this Agreement or other lease of the Project becomes void or unenforceable or impossible of performance in accordance with the intent and purpose of the parties as expressed herein or unreasonable burdens or excessive liabilities are imposed upon the Company or subsequent lessee of the Project.

(c) The Company, if there exists no Event of Default hereunder, shall have the additional option to purchase the Project on November 1, 1980, and on any installment payment date

on the Bonds thereafter during the term of this Agreement in accordance with the terms of the Indenture.

(d) The Company in purchasing the Project pursuant to subsection (b) shall also pay in full the UDAG Note and satisfy the City Mortgage. The Company in purchasing the Project pursuant to any other provision of this Agreement shall also either assume the City Mortgage or pay in full the UDAG Note and satisfy the City Mortgage. The Agency hereby agrees to take any action necessary to permit the Company to assume the City Mortgage. The Company in purchasing the Project pursuant to subparagraph (1) or (2) of subsection (b) shall file with the Agency and the Trustee the certificate prescribed by said subparagraph (1) or (2) and in purchasing pursuant to subsection (b) or (c) the Company shall pay to the Trustee as the purchase price, in legal tender, advance rental payments, for deposit in the Bond Fund, equal (if payment in full of the principal of or the Redemption Price, if any, as the case may be, of, and interest on, all the Outstanding Bonds, and the interest thereon at maturity or upon earlier redemption has not yet been made) to the sum of the following:

(1) an amount which, when added to the amount on deposit in the Bond Fund, will be sufficient to pay, retire and redeem the Outstanding Bonds in accordance with the provisions of the Indenture, including, without limitation, the principal of or the Redemption Price (as the case may be) of, together with interest to maturity or redemption date (as the case may be) on, the Outstanding Bonds;

(2) expenses of redemption, the fees and expenses of the Agency, Trustee and Paying Agents and all other amounts due and payable under this Agreement and the Indenture; and

(3) one dollar.

(e) At any time for a period of ninety (90) days after payment in full of the Redemption Price of the Outstanding Bonds, and the interest accrued thereon, upon earlier redemption (unless such ninety-day period shall extend beyond the date which, in the absence of such earlier redemption, would have been the final maturity installment payment date of principal and/or interest on the Outstanding Bonds, in which case such ninety-day period shall be abbreviated to such period as will terminate on such final installment payment date), the Company, if there exists no Event of Default hereunder, shall have the option to purchase the Project and shall exercise such option by (1) delivering at least thirty (30) days' prior written notice to the Agency and to the Trustee of the exercise of such option to purchase in a certificate specifying the subsection pursuant to which the Company is purchasing the Project, setting forth a date for the closing of the purchase of the Project which shall be a date

mutually agreeable to the Agency and the Company but in no event later than sixty (60) days subsequent to the date of receipt of such notice by the Agency (provided, however, that in the event the ninety (90) day period set forth above in this Section 8.1(e) shall be abbreviated as provided herein, the date of closing shall be on a date no later than such final installment payment date), and accompanied by assurances in form satisfactory to the Agency and the Trustee that such purchase will be made, and (2) paying a purchase price equal to the sum of one dollar, the fees and expenses of the Agency, the Trustee and Paying Agents and all other amounts due and payable under this Agreement and the Indenture.

(f) At maturity, upon the payment in full of the principal of and interest on the Outstanding Bonds, the Company, if there exists no Event of Default hereunder, shall have the option to purchase the Project and shall exercise such option by (1) delivering to the Agency and the Trustee prior written notice, no more than ninety (90) and no less than thirty (30) days prior to the final maturity installment payment date of principal and/or interest on the Outstanding Bonds, of the exercise of such option to purchase in a certificate specifying the subsection pursuant to which the Company is purchasing the Project, setting forth such final maturity installment payment date as the closing date for the purchase of the Project, and accompanied by assurances in form satisfactory to the Agency and the Trustee that such purchase will be made, and (2) paying a purchase price equal to the sum of one dollar, the fees and expenses of the Agency, the Trustee and Paying Agents and all other amounts due and payable under this Agreement and the Indenture.

(g) Upon the written request of the Company, the Agency may approve the extension or waiver of any of the time periods set forth in subsections (e) and (f) of this Section 8.1.

(h) The Company shall not, at any time, assign or transfer its option to purchase the Project as contained in this Section 8.1 separate and apart from a permitted assignment of this Agreement or sublease of the Project pursuant to Section 9.3 hereof without the prior written consent of the Agency and the Trustee and, unless the Company shall have satisfied or assumed the City Mortgage, the City.

Section 8.2. Conveyance on Exercise of Option to Purchase. At the closing of any purchase of the Project pursuant to Section 8.1 hereof, the Agency will, upon payment of the purchase price, deliver or cause to be delivered to the Company (a) a release or satisfaction of the mortgage lien of the Indenture on the Project and (b) other documents conveying to the Company good and marketable title in fee simple to the property being purchased, as such property then exists, and all rights,

alleys, ways, waters, privileges, appurtenances and advantages to the same belonging or anywise appertaining subject to the following: (1) any liens, easements and encumbrances to which title to said property was subject when conveyed to the Agency; (2) any liens, easements and encumbrances created at the request of the Company or to the creation or suffering of which the Company consented; (3) any liens and encumbrances resulting from the failure of the Company to perform or observe any of the agreements on its part contained in this Agreement; (4) any liens for taxes or assessments not then delinquent; and (5) the rights, if any, of any condemning authority, and (c) documents releasing and conveying to the Company all of the Agency's rights and interest in and to any rights of action, or any insurance proceeds or condemnation award, with respect to the Project. Concurrently with the delivery of such title documents, there shall be delivered by the Agency to the Trustee any instructions or other instruments required by Section 10.01 of the Indenture to defease and pay the Bonds.

Upon conveyance of the Project pursuant to this Section, this Agreement and all obligations of the Company hereunder except as referred to in Sections 4.3 (until such time as the Company shall again pay taxes as the record owner of the Project), 6.2, 6.3 and 9.20 shall be terminated.

Section 8.3. Option to Purchase or Invite Tenders of Bonds. The Company shall have the option, at any time during the term of this Agreement, to purchase Bonds for its own account, whether by direct negotiation, through a broker or dealer, or by making a tender offer to the Holders thereof. The Bonds so purchased shall be delivered to the Trustee for cancellation within 15 days of the date of purchase by the Company. The Agency shall at all times make available or cause to be made available to the Company its registration books (maintained at the principal office of the Trustee) containing the names and addresses of the Bondholders if known.

Section 8.4. Termination of Agreement. The Company shall have, if there exists no Event of Default hereunder, the following options to cancel or terminate, subject to the survival of the obligations of the Company under Sections 4.3 (until such time as the Company shall again pay taxes as the record owner of the Project), 6.2, 6.3 and 9.20, the term of this Agreement:

(a) At any time prior to full payment of the Bonds, the Company may terminate this Agreement by either paying in full the UDAG Note or assuming the City Mortgage paying to the Trustee, as advance rentals, in legal tender, an amount which, when added to the amount on deposit in the Bond Fund, will be sufficient to pay, retire and redeem all the Outstanding Bonds in accordance with the provisions of the Indenture, including the principal or the Redemption Price, as the case may be, of and interest to

maturity or redemption date (as the case may be) on the Outstanding Bonds, to pay the expenses of redemption, the fees of the Agency, Trustee and Paying Agents, and to pay all other amounts due and payable under this Agreement and under the Indenture;

(b) After either paying in full the UDAG Note or assuming the City Mortgage and after full payment of the Bonds, the Company may terminate this Agreement by paying the fees and expenses of the Agency, the Trustee and Paying Agents and all other amounts due and payable under this Agreement and the Indenture and by giving the Agency notice in writing of such termination and thereupon such termination shall forthwith become effective.

ARTICLE IX
Miscellaneous

Section 9.1. Indenture; Amendment. Moneys received from the sale of the Bonds and all rentals paid by the Company and all other moneys received by the Agency or the Trustee in connection with the Project shall be applied solely and exclusively in the manner and for the purposes expressed and specified in the Indenture and in the Bonds and as provided in this Agreement. The Company shall have and may exercise all the rights, powers and authority stated to be in the Company in the Indenture and in the Bonds, and the Indenture and the Bonds shall not be modified, altered or amended in any manner which adversely affects such rights, powers and authority so stated to be in the Company or otherwise adversely affects the Company without the written consent of the Company.

Section 9.2. Force Majeure. In case by reason of force majeure either party hereto shall be rendered unable wholly or in part to carry out its obligations under this Agreement, then except as otherwise expressly provided in this Agreement, if such party shall give notice and full particulars of such force majeure in writing to the other party within a reasonable time after occurrence of the event or cause relied on, the obligations of the party giving such notice, other than the obligation of the Company to make the rental payments or other payments required under the terms hereof or to insure the Project, so far as they are affected by such force majeure, shall be suspended during the continuance of the inability then claimed which shall include a reasonable time for the removal of the effect thereof, but for no longer period, and such party shall endeavor to remove or overcome such inability with all reasonable dispatch. The term "force majeure", as employed herein, shall mean acts of God, strikes, lockouts or other industrial disturbances, acts of the public enemy, orders of any kind of the Government of the United States or of the State or any civil or military authority, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, hurricanes, storms, floods, washouts, droughts, arrest, restraining of government and people, civil disturbances, explosions, partial or entire failure of utilities, shortages of labor, material, supplies or transportation, or any other similar or different cause not reasonably within the control of the party claiming such inability. It is understood and agreed that the settlement of existing or impending strikes, lockouts or other industrial disturbances shall be entirely within the discretion of the party having the difficulty and that the above requirements that any force majeure shall be reasonably beyond the control of the party and shall be remedied with all reasonable dispatch shall be deemed to be fulfilled even though such existing or impending strikes, lockouts and other industrial disturbances may not be settled but could have been settled by acceding to the demands of the opposing person or persons.

Section 9.3. Assignment or Sublease. (a) The Company may not at any time assign or transfer this Agreement, or sublet the whole of the Project without the prior written consent of the Agency and the Trustee (which consents shall not be unreasonably withheld); provided further, that in the event of such permitted assignment, transfer or sublease, (1) the Company shall nevertheless remain liable to the Agency for the payment of all rent and for the full performance of all of the terms, covenants and conditions of this Agreement, (2) any assignee, transferee or sublessee of the Company shall be qualified to do business in the State and shall have assumed in writing and have agreed to keep and perform all of the terms of this Agreement on the part of the Company to be kept and performed and shall be jointly and severally liable with the Company for the performance thereof, (3) in the opinion of counsel who is acceptable to the Trustee such assignment, transfer or sublease shall not impair in any respect the obligations of the Company for the payment of all rents nor for the full performance of all of the terms, covenants and conditions of this Agreement nor impair or limit in any respect the obligations of the Corporate Guarantor under the Corporate Guaranty, and (4) any assignee, transferee or sublessee shall utilize the premises as a qualified "project" within the meaning of the Act. The Company shall furnish or cause to be furnished to the Agency and the Trustee a copy of any such assignment, transfer or sublease in substantially final form at least thirty (30) days prior to the date of execution thereof.

(b) The Company may not at any time sublet any portion of the available square footage contained in the Project without the prior written consent of the Agency and the Trustee (which consents shall not be unreasonably withheld); provided, further, that in the event of such permitted subletting in part: (1) the proposed subtenant's business would constitute a qualified "project" in accordance with the Act and the proposed sublease shall so limit the subtenant's business; (2) such sublease shall not violate any provision of this Agreement, the Corporate Guaranty or the Indenture; (3) in the opinion or counsel who is acceptable to the Agency and the Trustee such sublease shall not impair or limit in any respect the obligations of the Company for the payment of all rents nor for the full performance of all of the terms, covenants and conditions of this Agreement nor impair or limit in any respect the obligations of the Corporate Guarantor under the Corporate Guaranty; (4) at any given date, no more than an aggregate of forty percent (40%) of such space would be subleased by the Company; (5) the term of each such sublease does not exceed six (6) years; (6) such sublease shall in no way diminish or impair the Company's obligation to carry the public liability insurance required under Section 4.5 of this Agreement and the Company shall furnish written evidence satisfactory to the Agency and the Trustee that such public liability insurance coverage shall in no manner be limited by reason of such sublease; and (7) such sublease contains such other provisions as

the Agency may reasonably require. The Company shall furnish or cause to be furnished to the Agency and the Trustee a copy of any such proposed sublease in substantially final form at least thirty (30) days prior to the date of execution thereof.

Any consent by the Agency or the Trustee to any act of assignment, transfer or sublease shall be held to apply only to the specific transaction thereby authorized. Such consent shall not be construed as a waiver of the duty of the Company, or the successors or assigns of the Company, to obtain from the Agency and the Trustee consent to any other or subsequent assignment, transfer or sublease, or as modifying or limiting the rights of the Agency or the Trustee under the foregoing covenant by the Company.

Pursuant to a lease agreement dated July 11, 1980, as amended September 17, 1980, between the Company and Armor Box Corporation, the Company has subleased a portion of the Project. The Agency hereby acknowledges and consents to said sublease and said sublease shall be deemed to comply with this Section 9.3 without any further action of the Company, the Agency or the Trustee.

If this Agreement be assigned, the Agency may and is hereby empowered to collect rent from the assignee. If the Project or any part thereof be sublet or occupied by any person or corporation other than the Company, the Agency, in the event of the Company's default in the payment of rent may, and is hereby empowered to, collect rent from the under-tenant or occupant during the continuance of any such default. In either of such events, the Agency may apply the net amount received by it to the rent herein provided, and no such collection shall be deemed a waiver of the covenant herein against assignment, transfer or sublease of this Agreement, or constitute the acceptance of the under-tenant or occupant as tenant, or a release of the Company from the further performance of the covenants herein contained on the part of the Company.

Section 9.4. Priority of Indenture. Pursuant to the Indenture, the Agency will mortgage the Project and pledge and assign the rentals and certain other moneys receivable under this Agreement to the Trustee as security for payment of the principal and Redemption Price, if any, of and interest on the Bonds, and the Indenture and such mortgage, pledge and assignment thereunder shall be superior and prior to this Agreement. In addition, the Agency will mortgage the Project to LDC pursuant to the City Mortgage. The City Mortgage shall be subject and subordinate to the Indenture and superior and prior to this Agreement.

Section 9.5. Benefit of and Enforcement by Bondholders. The Agency and the Company agree that this Agreement is executed in part to induce the purchase by others of the Bonds and for the further securing of the Bonds, and accordingly all covenants and agreements on the part of the Agency and the Company as set forth in this Agreement are hereby declared to be for the benefit of the Holders from time to time of the Bonds and may be enforced as provided in Article VII of the Indenture on behalf of the Bondholders by the Trustee.

Section 9.6. Amendments. Except as provided in Section 6.4 hereof with respect to the release of an unimproved part of the Project, this Agreement may be amended only with the concurring written consent of the Trustee and LDC given in accordance with the provisions of the Indenture and only if the Company and its successors and assigns shall assume in writing the obligations of such amended Agreement and, if the UDAG Grant Agreement so requires, such proposed amendment is consented to by the Secretary.

Section 9.7. Notices. All notices hereunder shall be sufficient if sent by registered or certified United States mail, postage prepaid, addressed, if to the Agency, to the Chairman, Erie County Industrial Development Agency, 170 Franklin Street, Buffalo, New York with a copy to the Executive Director of the Agency at the same address, if to the Company, to the President, Mod-Pac Corp, 873 Hertel Avenue, Buffalo, New York 14216, if to the Trustee, to Manufacturers and Traders Trust Company, Corporate Trust Department, One M&T Plaza, Buffalo, New York and, if to LDC, to 920 City Hall, Buffalo, New York. The Agency, the Company, the Trustee and the City may, by like notice, designate any further or different addresses to which subsequent notices shall be sent.

Section 9.8. Prior Agreements Superseded. This Agreement shall completely and fully supersede all other prior understandings or agreements, both written and oral, between the Agency and the Company relating to the Project.

Section 9.9. Severability. If any clause, provision or section of this Agreement be ruled invalid by any court of competent jurisdiction, the invalidity of such clause, provision or section shall not affect any of the remaining provisions hereof.

Section 9.10. Recording. (a) This Agreement as originally executed or a memorandum thereof shall be recorded by the Company subsequent to the recordation of the Indenture and the City Mortgage (the Indenture to be recorded prior to the recordation of the City Mortgage), in the appropirate office of the County Clerk of the County of Erie, or in such other office as may at the time be provided by law as the proper place for the recordation thereof. The security interest of the Agency created herein and the assignment of such security interest to the Trustee shall be perfected by the filing of financing statements by the Company which fully comply with the New York State Uniform Commercial Code - Secured Transactions in the office of the Secretary of State of the State, in the City of Albany, New York and in the appropriate office of the County Clerk of the County of Erie. The Company shall file or cause to be filed all necessary continuation statements (and additional financing statements) within the time prescribed by the New York State

Uniform Commercial Code - Secured Transactions in order to continue (or attach and perfect) the security interest created by this Agreement, to the end that the rights of the Agency, the Holders of the Bonds and the Trustee in the Project shall be fully preserved as against creditors or purchasers for value from the Agency or the Company. The Company agrees to furnish the Agency the opinion of counsel addressed to the Trustee referred to in Section 6.08 of the Indenture and shall perform all other acts (including the payment of all costs) necessary in order to enable the Agency to comply with Section 6.08 of the Indenture.

(b) Upon completion of the acquisition and installation of the Project, and in the case of any of the machinery, equipment and other personal property or fixtures constituting a part of the Project within seven days of the delivery of such property to the site of the Project, the Company shall prepare a schedule listing all of the items owned by the Agency and installed in the Project and not previously described in this Agreement in order to describe fully the property owned by the Agency and installed as a part of the Project not theretofore previously described. Such schedule and any supplement thereto shall be duly recorded and filed in the manner prescribed by subdivision (a) of this Section 9.10. The Company shall thereafter furnish to the Agency within 60 days after the end of each calendar year, a schedule listing all of the Agency's property then installed in the Project and not theretofore previously described herein or in such a supplement; and the Company and the Agency agree to enter into, record and file as aforesaid all such supplements to this Agreement in order to fully describe the Agency's property installed as part of the Project and not theretofore previously described. The Agency or the Company shall, or the Agency, pursuant to the Indenture, shall cause the Trustee to, execute and deliver all instruments and shall furnish all information necessary or required in order to effect the due execution and delivery of the aforesaid supplement.

Section 9.11. Inspection of Project. The Company will permit the Trustee and the Agency, or their duly authorized agents, at all reasonable times to enter upon, examine and inspect the Project.

Section 9.12. Definitions. Any terms not otherwise defined herein, unless a different meaning clearly appears from the context, shall have the same meanings in this Agreement as those terms are given in the Indenture.

Section 9.13. Effective Date; Counterparts. This Agreement shall become effective upon its delivery. It may be simultaneously executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

Section 9.14. Binding Effect. This Agreement shall inure to the benefit of, and shall be binding upon, the Agency, the Company and their respective successors and assigns.

Section 9.15. Net Lease. It is the intention of the parties hereto that this Agreement be a "net lease" and that all of the rent be available for debt service on the Bonds, and this Agreement shall be construed to effect such intent.

Section 9.16. Law Governing. This Agreement shall be governed by, and construed in accordance with, the laws of the State.

Section 9.17. Qualification in State. The Company warrants that it is and throughout the term of this Agreement will continue to be duly qualified to do business in the State. Any corporation succeeding to the rights of the Company under this Agreement shall be and continue to be duly qualified to do business in the State.

Section 9.18. Investment of Funds. Any moneys held as part of the Project Fund or Bond Fund or in any special fund provided for in this Agreement or in the Indenture to be invested in the same manner as in said Project Fund or Bond Fund shall, at the written request of an Authorized Representative of the Company, be invested and reinvested by the Trustee as provided in the Indenture.

Interest and profit derived from such investments shall be credited as provided in the Indenture, and any loss resulting from such investments shall be similarly charged.

No part of the proceeds of the Bonds or any other funds of the Agency shall at any time be used directly or indirectly to acquire any securities or obligations the acquisition of which would cause any such Bonds to be an "arbitrage bond" as defined in subsection (c) of Section 103 of the Code as then in effect or subject to treatment under subsection (c)(1) of said Section as an obligation the interest on which is not excludable from gross income under subsection (a) of said Section.

Section 9.19. Investment Tax Credit. It is the intention of the parties that any investment tax credit or comparable credit which may ever be available accrue to the benefit of the Company and the Company shall, and the Agency upon advice of counsel may, make any election and take other action in accordance with the Code and the regulations promulgated thereunder as may be necessary to entitle the Company to have such benefit.

Section 9.20. Waiver of Trial by Jury. The parties do hereby expressly waive all rights to trial by jury on any cause

of action directly or indirectly involving the terms, covenants or conditions of this Agreement or the demised premises or any matters whatsoever arising out of or in any way connected with this Agreement.

The provision of this Agreement relating to waiver of a jury trial and the right of re-entry upon revocation shall survive the termination or expiration of this Agreement.

IN WITNESS WHEREOF, the Agency has caused its corporate name to be hereunto subscribed by its duly authorized Chairman or Treasurer and attested under the seal of the Agency by its Secretary and the Company has caused its corporate name to be subscribed hereto by its President and attested under its corporate seal by its Secretary or Assistant Secretary pursuant to a resolution duly adopted by its Board of Directors, all being done as of the year and day first above written.

(SEAL)

Attest:

George Rich,
Secretary

ERIE COUNTY
INDUSTRIAL DEVELOPMENT AGENCY

By Nelson D. Civello
Nelson D. Civello,
Treasurer

(SEAL)

Attest:

John B. Drenning,
Secretary

MOD-PAC CORP
as lessee

By Donald J. Skroch
Donald J. Skroch,
Vice President

STATE OF NEW YORK)
: ss.:
COUNTY OF ERIE)

On the 18th day of September, in the year one thousand nine hundred eighty, before me personally came Nelson D. Civello and George Rich, to me known, who being by me duly sworn, did depose and say that they reside at 65 Kenderhook Court, East Amherst, New York and 405 Potomac Avenue, Buffalo, New York, respectively; that they are Treasurer and Secretary, respectively, of Erie County Industrial Development Agency, the Agency described in and which executed the above instrument; that they know the seal of said Agency; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the board of directors of said Agency, and that they signed their names thereto by like authority.

Nathan S. Neill
Notary Public

NATHAN S. NEILL
Notary Public, State of New York
Qualified in Erie County
Commission Expires March 30, 1982

STATE OF NEW YORK)
: ss.:
COUNTY OF ERIE)

On the 19th day of September, in the year one thousand nine hundred eighty, before me personally came Donald J. Skroch, and John B. Drenning, to me known, who being by me duly sworn, did depose and say that they reside at 6121 Taylor Road, Orchard Park, New York and 345 Woodbridge Avenue, Buffalo, New York respectively; that they are Vice President and Secretary, respectively of Mod-Pac Corp, the Company described in and which executed the above instrument; that they know the seal of said Company; that the seal affixed to said instrument is such corporate seal; that it was so affixed by authority of the Board of Directors of said Company, and that they signed their names thereto by like authority.

Nathan S. Neill
Notary Public

NATHAN S. NEILL
Notary Public, State of New York
Qualified in Erie County
My Commission Expires March 30, 19 84

EXHIBIT A

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot 84, Township 11, Range 8, more particularly bounded and described as follows:-

BEGINNING at the point of intersection of the west line of Elmwood Avenue (99 feet wide) with the south line of Lot 84, which line is also the northerly right of way line of Con-Rail Corp. (formerly N.Y.C.R.R.); running thence northerly, along the said east line of Elmwood Avenue, a distance of 593.82 feet to its intersection with the south edge of a stone water table, extended westerly; running thence easterly, along the westerly extension of the south edge of a stone water table and the south edge thereof, at an interior angle with the last mentioned course of 90° 07' 54" a distance of 108.12 feet to a point which is in the east edge of the said stone water table; running thence northerly, along the east edge of the said stone water table at an interior angle with the last mentioned course of 270° 00', a distance of 3.67 feet to the south edge of a concrete water table; running thence easterly, along the south edge of the said concrete water table, and the easterly extension thereof, at an interior angle with the last mentioned course of 89° 57' 05", a distance of 77.0 feet to a point; running thence northerly, along a line making an interior angle with the last mentioned course of 269° 59', a distance of 42.75 feet to a point; running thence northeasterly along a line making an interior angle with the last mentioned course of 130° 57' 22", a distance of 71.17 feet to a point; running thence northerly along a line making an interior angle with the last mentioned course of 229° 02' 38", a distance of 35.0 feet to a point; running thence easterly, along a line making an interior angle with the last mentioned course of 91° 55' 53", a distance of 187.0 feet to the west face of a concrete block building; running thence southerly, along the west face of the said concrete block building, and along a line making an interior angle with the last mentioned course of 90° 03' 44", a distance of 37.0 feet to the southwest corner of said concrete block building; running thence easterly, along the south face of said concrete block building and along a line making an interior angle with the last mentioned course of 269° 54' 20", a distance of 93.70 feet to the west face of said concrete block building; running thence southerly, along the west face of said concrete block building, and along a line making an interior angle with the last mentioned course of 90° 41', a distance of 21.43 feet to a point; thence running easterly, along an easterly jog of the west face of said concrete building and along a line making an interior angle with the last mentioned course of 269° 19' 00", a distance of 0.34 feet to a point; running thence southerly, along the west face of said concrete block building, and along a line making an interior angle with the last mentioned course of 90° 31' 38", a distance of 14.66 feet to a point; running thence easterly, along the north face of a brick wall, and along a line making an interior angle with the last mentioned course of 269° 47' 06", a distance of 133.84 feet to a point; running thence easterly along a line making an interior angle with the last mentioned course of 179° 46' 53", a distance of 100.46 feet to a point; running thence easterly, along a line making an interior angle

EXHIBIT A

with the last mentioned course of 179° 59' 26", a distance of 62.66 feet to the east face of pilasters of a brick wall; running thence southerly, along the east face of a series of building pilasters, and the southerly extension thereof, along a line making an interior angle with the last mentioned course of 89° 59' 38", a distance of 98.83 feet to a point on the north face of a brick wall; running thence easterly, along the north face of said brick wall, and along a line making an interior angle with the last mentioned course of 270° 01' 00", a distance of 130.49 feet to the east face of a brick wall; running thence southerly along the east face of a brick wall, and along a line making an interior angle with the last mentioned course of 90° 01' 44", a distance of 23.07 feet to a point; running thence westerly, along the south face of a brick wall, and along a line making an interior angle with the last mentioned course of 89° 55' 20", a distance of 11.14 feet to a point; running thence southerly, along the east face of a brick wall, and along a line making an interior angle with the last mentioned course of 270° 06', a distance of 40.34 feet to a point; running thence easterly, along the north face of a brick wall and the westerly extension thereof, along a line making an interior angle with the last mentioned course of 269° 53' 30", a distance of 48.51 feet to a point; running thence southerly along the east face of a brick building and the southerly extension thereof, along a line making an interior angle with the last mentioned course of 89° 56' 40", a distance of 202.0 feet to a point; running thence westerly, along a line making an interior angle with the last mentioned course of 89° 43' 44", which line is parallel with the northerly right of way line of Con-Rail Corp., a distance of 368.0 feet to a point; running thence southerly, parallel with Elmwood Avenue, along a line making an interior angle with the last mentioned course of 268° 19' 25", a distance of 74.0 feet to a point; running thence westerly, at right angles, a distance of 135.13 feet to a point; running thence southerly, at right angles, and parallel with Elmwood Avenue, a distance of 212.87 feet to the northerly right of way line of Con-Rail Corp., which is also the south line of Lot 84; running thence westerly, along the south line of Lot 84, a distance of 497.0 feet to the point or place of beginning.

TOGETHER with an easement for ingress and egress in and over the followin described lands:-

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot 84, Township 11, Range 8, more particularly bounded and described as follows:-

BEGINNING at the point of intersection of the west line of Elmwood Avenue (99 feet wide) with the south line of Lot 84, which line is also the northerly right of way line of Con-Rail Corp., (formerly, N.Y.C.R.R.); running thence northerly, along the said east line of Elmwood Avenue, a distance of 593.82

EXHIBIT A

feet to the principal point or place of beginning: running thence northerly, along said east line of Elmwood Avenue, a distance of 692.29 feet, more or less, to the intersection of said east line of Elmwood Avenue with the south line of Hertel Avenue (66 feet wide); running thence easterly, along the said south line of Hertel Avenue, a distance of 553.86 feet, more or less, to a monument on the northeasterly corner of land conveyed by John B. Pierce and Adelaide Leonard Pierce, his wife, to American Radiator Company by Deed dated April 29, 1939 and recorded in the Erie County Clerk's Office on May 5, 1913 in Liber 1271 of Deeds at page 198; running thence southerly along the said land conveyed by John B. Pierce and wife as aforesaid, a distance of 223.48 feet, more or less to the northwesterly corner of Subdivision Lot No. 251 as shown on a revised Subdivision Map of Hertel Avenue Park made by M. Davey, surveyor, and filed in the Erie County Clerk's Office on September 4, 1896 under Cover No. 337; running thence easterly, along the northerly line of said Subdivision Lot No. 251, a distance of 2.32 feet to a point distant 117.88 feet westerly of the intersection of said northerly line of said Subdivision Lot No. 251 with the westerly line of Mandan Street as said street is shown on said map, which point on the westerly side of Mandan Street is the northeasterly corner of said Subdivision Lot No. 251 and is distant 213.95 feet southerly of a point of intersection of said westerly side of Mandan Street with the southerly side of Hertel Avenue; running thence southerly, in a straight line, a distance of 30 feet to a point in the southerly line of Subdivision Lot No. 251 distant 2.26 feet from the southwesterly corner of said Subdivision Lot No. 251; running thence still southerly, in a straight line, a distance of 30 feet to the southerly line of Subdivision Lot No. 250 at a point in the southerly line of said Subdivision Lot No. 250, distant 2.19 feet from the southwesterly corner of said Lot; running thence westerly, a distance of 2.19 feet to the southwesterly corner of said Lot; running thence southerly, still along said land conveyed by John B. Pierce and wife as aforesaid, to the northwesterly corner of Subdivision Lot No. 242 on said map; running thence easterly, along the northerly line of said Subdivision Lot No. 242 to the westerly side of Mandan Street; running thence still easterly, in a straight line, across Mandan Street to the northwesterly corner of Subdivision lot No 189; running thence still easterly along the northerly lines of Subdivision Lots Nos. 189 and 156 to the westerly side of Ledger Street as said street is shown on said map; running thence still easterly across Ledger Street in a straight line and continuation of the northerly line of said Subdivision Lot No. 156 to the easterly side of Ledger Street; running thence northerly along the easterly side of Ledger Street a distance of 67.34 feet to the northwesterly corner of Subdivision Lot No. 100; running thence easterly along the northerly line of said Subdivision Lot No. 100 to the northwesterly corner of Subdivision Lot No. 73; running thence northerly along the westerly line of Subdivision Lots Nos. 74 and 75 to the northwesterly corner of Subdivision Lot No. 75; running thence southerly along the northerly line of Subdivision Lot No. 75 to Rosalia Street as said street is shown on said map; running thence southerly along

EXHIBIT A

the westerly side of Rosalia Street to its point of intersection with the southerly line of Subdivision Lot No. 72; thence easterly in a straight line across Rosalia Street to the easterly side thereof at its intersection with the southerly line of Subdivision Lot No. 14; running thence northerly along the easterly side of Rosalia Street to the northwesterly corner of Subdivision Lot No. 13; running thence easterly along the northerly line of Subdivision Lot No. 13 to its northeasterly corner, which point is also the westerly line of land conveyed by the Fidelity Trust Company of Buffalo and Harry D. Kirkover, as Executors of and Trustees under the Last Will and Testament of Henry D. Kirkover, deceased, to American Radiator Company by Deed dated August 9, 1917 and recorded in the Erie County Clerk's Office on August 10, 1917 in Liber 1396 of Deeds at page 50; continuing thence easterly, along the easterly extension of the northerly line of Subdivision Lot No. 13, a distance of 275 feet to a point; running thence southerly, on a line which intersects at right angles with the said north line of the northerly right of way line of Con-Rail Corp. a distance of 260 feet more or less, to said northerly right of way line; running thence westerly, along the said northerly right of way line of Con-Rail Corp. to a point which is 497 feet east of the intersection of said northerly right of way line of Con-Rail Corp. with the east line of Elmwood Avenue; running thence northerly, at an exterior angle of the last mentioned course of 91° 40' 35", a distance of 212.87 feet to a point; running thence easterly, along the line making an exterior angle with the last mentioned course of 270° 00', a distance of 135.13 feet feet to a point; running thence northerly, at right angles, a distance of 74.0 feet to a point; running thence easterly, on a line making an exterior angle with the last mentioned course of 268° 19' 25", a distance of 368.0 feet to a point; running thence northerly, on a line making an exterior angle with the last mentioned course of 89° 43' 44", which line is also the east face of a brick building and the southerly extension thereof, a distance of 202.0 feet to the north face of a brick wall; running thence westerly, along the said north face of a brick wall, on a line making an exterior angle with the last mentioned course of 89' 56' 40", a distance of 48.51 feet to the east face of a brick wall; running thence northerly, along the said east face of a brick wall, on a line making an exterior angle with the last mentioned course of 269° 53' 30", a distance of 40.34 feet to the south face of a brick wall; running thence easterly, on the said south face of a brick wall, on a line making an exterior angle with the last mentioned course of 270° 06', a distance of 11.14 feet to the east face of a brick wall; running thence northerly, along the said east face of a brick wall, on a line making an exterior angle with the last mentioned course of 89° 55' 20", a distance of 23.07 feet to the north face of a brick wall; running thence westerly, along the said north face of a brick wall, on a line making an exterior angle with the last mentioned course of 90° 01' 44", a distance of 130.49 feet to the east face of building pilasters, extended southerly; running thence northerly, along the east face of said pilasters, as extended southerly, and on a line making an exterior angle with the last mentioned course of 270° 01' 00", a distance of

EXHIBIT A

98.83 feet to the northeast corner of a wall; running thence westerly, on a line making an exterior angle with the last mentioned course of 89° 59' 38", a distance of 62.66 feet to a point; running thence westerly, on a line making an exterior angle with the last mentioned course of 179° 59' 26", a distance of 100.46 feet to a point; running thence westerly, along the north face of a brick wall, on a line making an exterior angle with the last mentioned course of 179° 46' 53", a distance of 133.84 feet to the west face of a concrete block building; running thence northerly, along the said west face of a concrete block building, and on a line making an exterior angle with the last mentioned course of 269° 47' 06", a distance of 14.66 feet to a westerly jog in said wall; running thence westerly, along a jog to the west making an exterior angle with the last mentioned course of 90° 31' 38", a distance of 0.34 feet to a point on the west face of said concrete block building; running thence northerly, along the said west face of the concrete block building, and on a line making an exterior angle with the last mentioned course of 269° 19' 00", a distance of 21.43 feet to the south face of a concrete block building; running thence westerly, along the said south face of a concrete block building, and on a line making an exterior angle with the last mentioned course of 90° 41', a distance of 93.70 feet to the west face of a concrete block building; running thence northerly, along the said west face of a concrete block building, and on a line making an exterior angle with the last mentioned course of 269° 54' 20", a distance of 37.0 feet to a point; running thence westerly, on a line making an exterior angle with the last mentioned course of 90° 03' 44", a distance of 187.0 feet to a point; running thence southerly, on a line making an exterior angle with the last mentioned course of 91° 55' 53", a distance of 35.0 feet to a point; running thence southwesterly, on a line making an exterior angle with the last mentioned course of 229° 02' 38", a distance of 71.17 feet to a point; running thence southerly, on a line making an exterior angle with the last mentioned course of 130° 57' 22", a distance of 42.75 feet to a point; running thence westerly, on a line making an exterior angle with the last mentioned course of 269° 59', which is also the south edge of a concrete water table, and the easterly extension thereof, a distance of 77.0 feet to the east edge of a stone water table; running thence southerly, along the said east edge of the said stone water table, and on a line making an exterior angle with the last mentioned course of 89° 57' 05", a distance of 3.67 feet to the south edge of a stone water table; running thence westerly, along the south edge of the said stone water table, and on a line making an exterior angle with the last mentioned course of 270° 00', a distance of 108.12 feet to the east line of Elmwood Avenue, which point is also the point or place of beginning.

EXCEPTING therefrom lands conveyed to New York Central & Hudson River Railroad by deed recorded in Liber 1137 of Deeds at page 26.

EXHIBIT B

(1) Economy Baler Company
Model 72A42 R.H. Baler
220/230-3-60 Z/N 61215

BARGAIN AND SALE DEED
WITH COVENANT

THIS INDENTURE, made as of the 18th day of September, 1980, between Helen Schmincke, 360 East 65th Street, New York, New York ("Grantor"), and ERIE COUNTY INDUSTRIAL DEVELOPMENT AGENCY, a corporate governmental agency constituting a body corporate and politic and a public benefit corporation of the State of New York, duly organized and existing under the laws of the State of New York, 500 The Crosby Building, 170 Franklin Street, Buffalo, New York ("Grantee"),

WITNESSETH, that Grantor, in consideration of Ten ($10.00) Dollars and other good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, does hereby grant and release unto Grantee and the heirs, legal representatives, successors and assigns of Grantee forever,

ALL that certain plot, piece or parcel of land, with the buildings and improvements thereon erected, situate, lying and being in the City of Buffalo, County of Erie, State of New York, being more particularly described as is shown on Exhibit "A" hereto annexed and made a part hereof (the "Property"), subject, nevertheless, to:

A. Any and all present and future zoning restrictions, regulations, requirements, laws, ordinances, resolutions and orders of any City, Town or Village in which the Property lies and of all boards, bureaus, commissions, departments and bodies of any Municipal, County, State or Federal sovereign or other governmental authority now or hereafter having or acquiring jurisdiction of the Property or the use and improvement thereof.

B. Any state of facts which would be shown by a current accurate survey of the Property, or any part thereof, provided such state of facts does not render title unmarketable.

C. Leases and tenancies between Grantor and (i) Grantee, (ii) Armor Box Corporation and (iii) Larry's Collision, Inc. and rights and claims of parties not shown of record, and/or any further subleases and tenancies emanating therefrom and any non-disturbance or recognition agreements relating thereto.

RECEIVED
$ EXEMPT
REAL ESTATE
SEP 18 1980
TRANSFER TAX
ERIE
COUNTY

3139

LIBER 8943 PAGE 422

Util. Easement - 1052-746 - Randy - KK

D. Covenants, restrictions, easements, leases, mortgages, and contracts and agreements of record.

E. Any state of facts a physical inspection of the Property would show.

F. Real estate taxes and assessments for the fiscal year 1980/81.

TOGETHER with all right, title and interest, if any, of Grantor in and to any streets and roads abutting the above described Property to the center lines thereof,

TOGETHER with the appurtenances and all the estate and rights of Grantor in and to said Property,

TO HAVE AND TO HOLD the Property herein granted unto Grantee and the heirs, legal representatives, successors and assigns of Grantee forever.

AND Grantor covenants that Grantor has not done or suffered anything whereby the said Property has been encumbered in any way whatever, except as aforesaid in items A through F inclusive.

AND Grantor in compliance with Section 13 of the Lien Law, covenants that Grantor will receive the consideration for this conveyance and will hold the right to receive such consideration as a trust fund to be applied first for the purpose of paying the cost of the improvements and will apply the same first to the payment of the cost of the improvement before using any part of the total of the same for any other purpose.

IN WITNESS WHEREOF, Grantor has duly executed this deed as of the day and year first above written.

Helen Schmincke

HELEN SCHMINCKE

STATE OF NEW YORK)
ss.:
COUNTY OF NEW YORK)

On the 16 day of September, 1980, before me personally came HELEN SCHMINCKE to me known to be the individual described in and who executed the foregoing instrument, and acknowledged that she executed the same.

Marjorie F. Epstein
Notary Public

MARJORIE F. EPSTEIN
Notary Public, State of New York
No. 31-4702 [illegible]
Qualified in New York County
Commission Expires March 30, 19[illegible]

NOTARY PUBLIC STATE OF NEW YORK

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EXHIBIT A

ALL THAT TRACT OR PARCEL OF LAND, situate in the City of Buffalo, County of Erie and State of New York, being part of Lot 84, Township 11 Range 8, more particularly bounded and described as follows:-

BEGINNING at the point of intersection of the west line of Elmwood Avenue (99 feet wide) with the south line of Lot 84, which line is also the northerly right of way line of Con-Rail Corp. (formerly N.Y.C.R.R.); running thence northerly, along the said east line of Elmwood Avenue, a distance of 593.82 feet to its intersection with the south edge of a stone water table, extended westerly; running thence easterly, along the westerly extension of the south edge of a stone water table and the south edge thereof, at an interior angle with the last mentioned course of 90° 07' 54" a distance of 108.12 feet to a point which is in the east edge of the said stone water table; running thence northerly, along the east edge of the said stone water table at an interior angle with the last mentioned course of 270° 00', a distance of 3.67 feet to the south edge of a concrete water table; running thence easterly, along the south edge of the said concrete water table, and the easterly extension thereof, at an interior angle with the last mentioned course of 89° 57' 05", a distance of 77.0 feet to a point; running thence northerly, along a line making an interior angle with the last mentioned course of 269° 59', a distance of 42.75 feet to a point; running thence northeasterly along a line making an interior angle with the last mentioned course of 130° 57' 22", a distance of 71.17 feet to a point; running thence northerly along a line making an interior angle with the last mentioned course of 229° 02' 38", a distance of 35.0 feet to a point; running thence easterly, along a line making an interior angle with the last mentioned course of 91° 55' 53", a distance of 187.0 feet to the west face of a concrete block building; running thence southerly, along the west face of the said concrete block building, and along a line making an interior angle with the last mentioned course of 90° 03' 44", a distance of 37.0 feet to the southwest corner of said concrete block building; running thence easterly, along the south face of said concrete block building and along a line making an interior angle with the last mentioned course of 269° 54' 20", a distance of 93.70 feet to the west face of said concrete block building; running thence southerly, along the west face of said concrete block building, and along a line making an interior angle with the last mentioned course of 90° 41', a distance of 21.43 feet to a point; thence running easterly, along an easterly jog of the west face of said concrete building and along a line making an interior angle with the last mentioned course of 269° 19' 00", a distance of 0.34 feet to a point; running thence southerly, along the west face of said concrete block building, and along a line making an interior angle with the last mentioned course of 90° 31' 38", a distance of 14.66 feet to a point; running thence easterly, along the north face of a brick wall, and along a line making an interior angle with the last mentioned course of 269° 47' 06", a distance of 133.84 feet to a point; running thence easterly along a line making an interior angle with the last mentioned course of 179° 46' 53", a distance of 100.46 feet to a point; running thence easterly, along a line making an interior angle

with the last mentioned course of 179° 59' 26", a distance of 62.66 feet to the east face of pilasters of a brick wall; running thence southerly, along the east face of a series of building pilasters, and the southerly extension thereof, along a line making an interior angle with the last mentioned course of 89° 59' 38", a distance of 98.83 feet to a point on the north face of a brick wall; running thence easterly, along the north face of said brick wall, and along a line making an interior angle with the last mentioned course of 270' 01' 00", a distance of 130.49 feet to the east face of a brick wall; running thence southerly along the east face of a brick wall, and along a line making an interior angle with the last mentioned course of 90° 01' 44", a distance of 23.07 feet to a point; running thence westerly, along the south face of a brick wall, and along a line making an interior angle with the last mentioned course of 89° 55' 20", a distance of 11.14 feet to a point; running thence southerly, along the east face of a brick wall, and along a line making an interior angle with the last mentioned course of 270° 06', a distance of 40.34 feet to a point; running thence easterly, along the north face of a brick wall and the westerly extension thereof, along a line making an interior angle with the last mentioned course of 269° 53' 30", a distance of 48.51 feet to a point; running thence southerly along the east face of a brick building and the southerly extension thereof, along a line making an interior angle with the last mentioned course of 89° 56' 40", a distance of 202.0 feet to a point; running thence westerly, along a line making an interior angle with the last mentioned course of 89° 43' 44", which line is parallel with the northerly right of way line of Con-Rail Corp., a distance of 368.0 feet to a point; running thence southerly, parallel with Elmwood Avenue, along a line making an interior angle with the last mentioned course of 268° 19' 25", a distance of 74.0 feet to a point; running thence westerly, at right angles, a distance of 135.13 feet to a point; running thence southerly, at right angles, and parallel with Elmwood Avenue, a distance of 212.87 feet to the northerly right of way line of Con-Rail Corp., which is also the south line of Lot 84; running thence westerly, along the south line of Lot 84, a distance of 497.0 feet to the point or place of beginning.

Map 53 (JAW)

1980 SEP 18 PM 3:08

FILED
ERIE COUNTY
CLERK'S OFFICE

BARGAIN AND SALE DEED
WITH COVENANT

Helen Schmincke

TO 158

Erie County Industrial
Development Agency

Section: ____
Block: ____
Lot: ____
County: ____

Record and Return to:

STATE OF NEW YORK
ERIE COUNTY CLERK'S OFFICE
Recorded in Liber 8943 Page 422
of Deeds
on the 18 day of September
A. D., 1980, at 3:08 o'clock P M
and examined.

County Clerk

nb
1- 1900 - 39

LIBER 8943 PAGE 427

Section VII

Requestor Eligibility Information

1. Enforcement actions pending - No active enforcement actions are pending against the Site. However, recent order on consent was issued and satisfied, summarized below.

NYSDEC Order on Consent No. R9-20160302 was issued on May 23, 2016 to MOD-PAC Corp. for violations of the Resource Conservation and Recovery Act (RCRA) and 6 NYCRR 372, 373, and 374 (Hazardous Waste Regulations). Noted violations included labeling deficiencies for the facility's hazardous waste satellite accumulation containers and improper storage practices of Universal Wastes. The order imposed a civil penalty in the amount of $34,498. MOD-PAC Corp. responded to the Order with documentation of the corrective actions taken including proper labeling of all hazardous waste containers both in satellite accumulation areas and storage areas, proper storage practices including closed containers, proper containment of all universal waste on-Site, and appropriate labeling of all universal waste containers stored at the facility in accordance with the regulations. The facility paid the fine in full in the amount of $34,498 to the NYSDEC. The matter was closed when the corrective actions were approved and payment was received by the Department on June 22, 2016.

Volunteer – MOD-PAC CORP should be considered a volunteer, as the liability for the historic industrial fill and its resulting impacts to soil and groundwater arise solely from ownership of the Site. New York Environmental Conservation Law §27-1405(1)(b) and 6 NYCRR 375-3.2 define an "Applicant", "Participant" and "Volunteer" as follows:

> *Applicant* means a person whose request to participate in the Brownfield Cleanup Program has been accepted by the department:
>
> (1) *Participant* means an applicant who either:
>
> (i) was the owner of the site at the time of the disposal or discharge of contaminants;
>
> (ii) is otherwise a person responsible according to applicable principles of statutory or common law liability, unless such person's liability arises solely as a result of such person's ownership or operation of or involvement with the site subsequent to the disposal or discharge of contaminants.
>
> (2) *Volunteer* means an applicant other than a participant, including without limitation a person whose liability arises solely as a result of such person`s ownership or operation of or involvement with the site subsequent to the disposal or discharge of contaminants; provided, however, such person exercises appropriate care with respect to contamination found at the facility by taking reasonable steps to:
>
> (i) stop any continuing release;
>
> (ii) prevent any threatened future release; and

(iii) prevent or limit human, environmental, or natural resource exposure to any previously released contamination.

As the following demonstrates, MOD-PAC CORP. was not the owner of the Site at the time of disposal of contaminants and its liability arises only out of its acquisition of the property. Further, MOD-PAC has taken appropriate care with respect to the discovered contaminants since there was no continuing or threatened release and no exposure of existing contamination to humans or environmental or natural resources.

MOD-PAC CORP. has occupied the central portion of the building since the mid 1980s for use in the printing and manufacturing of premium quality folding cartons. Over the next 20 years, MOD-PAC grew in size and needed more space. Parking areas were added at 33 Mandan (1988) and at 86 and 94 Ledger (s002). MOD-PAC also expanded to occupy the full building space, acquiring the property at 1809 Elmwood (northern portion of building) in 2004 and the 1801 Elmwood parcel (southern portion of building and vacant land area) in 2005.

During routine operations, MOD-PAC typically utilized chemicals associated with printing, including volatile organic compounds (VOCs) such as toluene and xylene for carrier for the ink and used as a solvent to clean the presses between uses. During the timeframe which MOD-PAC utilized the VOC compounds in the printing process, no discharge or releases occurred during operations. The subsurface investigation completed throughout the southern portion of the subject Site, as well as around the MOD-PAC facility, did identify trace amounts of xylene and toluene within the soil samples. Xylene was detected within the historic industrial fill in several of the samples from the southern portion of the Site and surrounding the building, with the highest concentration of xylene detected in the historic industrial fill in the southern portion of the property, an area that was not occupied or operated by MOD-PAC. The concentration exceeded the Unrestricted Use Soil Cleanup Objectives (UUSCO), but was below the Restricted Residential Use Soil Cleanup Objectives (RRSCO). Additionally, the xylene concentration at the remaining locations was below the UUSCO in each case. Trace amounts of toluene were also detected in the historic industrial fill samples surrounding the Site building. However, the detected concentrations were identified as trace amounts and estimates, and were all well below the UUSCO, and therefore, not indicative of a release, but rather historic industrial fill. Xylene was detected in one groundwater sample, which was collected from the southern portion of the subject Site, in the area neither occupied nor utilized by MOD-PAC. Based on evaluation of the on-Site VOC usage and trace detections present throughout the historical industrial fill at the subject Site, these detections are attributed to past operations and not current usage by MOD-PAC. Over the past 10 years, MOD-PAC has been changing to more environmental friendly solvents such as petroleum distillates and isobutyl alcohol.

The proposed BCP property was originally developed in the 1900s by American Radiator which occupied the Site until at least the 1970s. During that time, the American Radiator building covered not only the existing building, but buildings extended to the now-vacant southern extent of the Site. The southern portion of the Site was occupied by a large building including a foundry (with earthen floor), finishing department, oil house, shed containing coal, coke and sand, as well as numerous smaller rooms. The existing buildings were constructed over several years, and included stamping plan, welding areas, several machine shops, factory building, castings room, cleaning room, transformer house, and numerous smaller areas.

The southern buildings were demolished in the 1950s, and the area has remained vacant and underutilized. The area is overgrown with trees that have been present for over 20 years, long before the purchase of the property by MOD-PAC. The contamination that has been identified in the southern portion of the Site is typical historical industrial that includes brick, debris, metal pieces, wood, concrete, slag and foundry sand. Depth of the fill material various throughout the southern area, as there are large fill piles with fill extending over 16 feet depth to areas that are below road grade with less than 5 feet of fill present. PAHs have been identified within the analytical testing results throughout the soil as well as available groundwater samples. The PAHs identified in groundwater correlate with those identified in the fill soils. Additionally, the presence of limited metals and VOCs were also identified in the fill soils and groundwater throughout the vacant southern area.

The soil conditions and analytical testing results from the soil borings completed throughout the remaining portions of the Site were similar to that of the southern portion of the Site, with fill in some areas extending to depth of 14 feet below grade. Additionally, the PAHs identified in the fill soils throughout the southern portion of the Site, correlate with that found throughout soil and groundwater samples the remaining areas of the Site. As the buildings occupied by MOD-PAC have been present upon their occupation and MOD-PAC has not partaken in filling activities, the historic industrial fill is a direct result of the past operations associated with American Radiator, and not related to MOD-PAC operations.

The presence of PAHs and metals, as well as limited VOCs present in the soil and groundwater that is consistent throughout the subject Site is a result of the past usage as a factory and foundry that generated the historic industrial fill. These materials were present on Site before MOD-PAC CORP purchased the property. Additionally, the further development of the subject Site, to include both expansion and upgrading of the MOD-PAC facility to continue manufacturing within the City of Buffalo, as well as the development of the southern vacant portion of the Site, is impeded by the presence of the historic industrial fill and its contaminants.

In light of the foregoing, we believe that MOD-PAC CORP meets the definition of a Volunteer and should be treated as such under the BCP.

Proof of Site Access - Requestor is current owner

1801, 1805, 1809 ELMWOOD AVENUE, 33 MANDAN, 86 & 94 LEDGER, BUFFALO, NEW YORK

CONSENT OF MOD-PAC CORP. TO PARTICIPATE IN THE NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION BROWNFIELD CLEANUP PROGRAM

THE UNDERSIGNED, Daniel G. Keane, in his capacity as Chief Executive Officer of Mod-Pac Corp.

DOES HEREBY CERTIFY:

RESOLVED, Daniel G. Keane in his capacity as Chief Executive Officer of Mod-Pac Corp., is hereby authorized to execute documentation for Mod-Pac Corp.'s participation in the New York State Department of Conservation's Brownfield Cleanup Program in relation to 1801, 1805, 1809 ELMWOOD AVENUE, 33 MANDAN, 86 & 94 LEDGER (Tax parcel ID Nos. SBL 78.69-2-4.21, 78.69-2-4.1, 78.69-2-3, 78.70-2-13, 78.70-2-12 and SBL 78.70-2-11), encompassing 20.03 total acres in Buffalo, NY bounded by Elmwood Avenue to the West, CSX Railroad to the South, 1803 Elmwood Avenue to the East and 1833 Elmwood Avenue to the North (the "Site").

IN WITNESS WHEREOF, the undersigned has hereto affixed the hand and seal of Mod-Pac Corp. this 7 day of February, 2017.

MOD-PAC CORP.

Daniel G. Keane
Mod-Pac Corp.

Sworn to before me this
7th day of February, 2017.

Notary Public

MARY J. YOUNG
Notary Public, State of New York
Qualified in Erie County
My Commission Expires March 11, 2019

Section VIII

Property Eligibility Information

Spill History – Two NYSDEC Spills have been identified for the Site:

- Spill #9505712 – listed on August 9, 1995 due to oil water and sludge in vicinity of railroad siding. Four underground storage tanks (USTs) were ultimately discovered. One of the tanks were removed, whereas three tanks were closed in place. Confirmatory soil samples identified residual contamination and the spill was given an "inactive" status on August 14, 1996. Copy of the Spill Report Form is attached.

- Spill #0651320 was identified for 1801 Elmwood. However, the spill was associated with a former tank located on the northwestern adjoining property, formerly part of the Site. The spill is therefore not located within proposed BCP limits.

Section IX

Contact List

Contact List

Letter from Repository

Contact List		
Federal Representative		
U.S. Representative Brian Higgins 27th District Local Office 640 Park Place Niagara Falls, NY 14301 716-282-1274	US Senator Hon. Charles E. Schumer 130 South Elmwood Ave. #660 Buffalo, NY 14202 716-846-4111	US Senator Hon. Kristen Gillibrand 726 Exchange St., Suite 511 Buffalo, NY 14201 716-854-9725
New York Representative		
New York State Senator Timothy M. Kennedy 2239 South Park Ave Buffalo, NY 14220 Phone: 716-826-2683 Fax: 716-826-2793	New York State Assemblyman Sean Ryan District Office 936 Delaware Avenue Buffalo, NY 14209 716-885-9630 Fax: 716-885-9636	
Erie County Representative		
Erie County Executive Mark Poloncarz 95 Franklin Street 16th Floor Buffalo, New York 14202 (716) 858-8500	Erie County Clerk Christopher L. Jacobs 92 Franklin Street Buffalo, New York 14202 (716) 858-8865	Commissioner of Environment and Planning Thomas R. Hersey, Jr. Edward A. Rath County Office Building 95 Franklin Street 10th Floor Buffalo, New York 14202 (716) 858-8390
City of Buffalo Representative		
Office of the Mayor Mayor Byron W. Brown 201 City Hall Buffalo, New York 14202 (716) 852-3300	Division of Environment Dennis Sutton 920 City Hall Buffalo, New York 14202 (716) 851-6587	Office of Strategic Planning Brendan Mehaffy, Executive Director 201 City Hall Buffalo, New York 14202 (716) 851-2872
Planning Board Nadine Marrero Director of Planning 901 City Hall Buffalo, New York 14202 (716) 851-5029		
Adjacent Property Owners		
1738 Elmwood Avenue Foundry Lofts, LLC 391 Washington Street Buffalo, NY 14207	1770 Elmwood Avenue Seventeen Hundred Properties 606 N. French Road Amherst, NY 14228	1800 Elmwood Elmwood Warehousing Co. Inc. PO Box 21 Buffalo, NY 14207
1807 Elmwood Arco Lofts, Inc. 391 Washington Street Buffalo, NY 14207	1833 Elmwood Herwood Properties 45 S. Rossler Ave Buffalo, NY 14206	63 Mandan Herwood Properties PO Box 1410 Buffalo, NY 14240

Adjacent Property Owners		
35 Mandan Timothy and Tracy Salter 35 Mandan Buffalo, NY 14216	43 Mandan Steven Andres 43 Mandan Buffalo, NY 14216	98 Ledger Scott Vater 98 Ledger Buffalo, NY 14216
101 Ledger Debbie Nappo 102 Brendan Avenue Kenmore, NY 14217	99 Ledger Linda and Gary Storm 198 State Road Glorieta, NM 87535	95 Ledger David Velasquez 795 Parkside Buffalo, NY 14216
1803 Elmwood New Buff Associates LLC 1801 Elmwood Avenue Buffalo, NY 14207	79 Rosalia Brink's Inc. PO Box 18100 Richmond, VA 23226	2226 Delaware Del-Linden LLC c/o Benderson Development 570 Delaware Avenue Buffalo, NY 14202
157 Great Arrow Great Arrow Development LLC 255 Great Arrow Avenue Buffalo, NY 14207	177 Great Arrow Great Arrow Acquisition Inc. 255 Great Arrow Ave Buffalo, NY 14207	1727 Elmwood GreatArrow Inc 91 Rowley Avenue Kenmore, NY 14217
1728 Elmwood Hadley Exhibits Inc. 1700 Elmwood Avenue Buffalo, NY 14207	1700 Elmwood Hadley Exhibits Inc. 1700 Elwmood Avenue Buffalo, NY 14207	
Local News Media		
Buffalo News One News Plaza PO Box 100 Buffalo, NY 14240 716-849-4444	WGRZ-TV Channel 2 259 Delaware Avenue Buffalo, NY 14202 716-849-2222	WIVB-TV Channel 4 2077 Elmwood Avenue Buffalo, NY 14202 716-874-4410
WKBW-ABC Channel 7 7 Broadcast Plaza Buffalo, NY 14202 716-845-6100	WUTV-FOX (Channel 29) 699 Hertal Avenue, Suite 100 Buffalo, New York 14207	
Public Water Supplier		
Buffalo Water Authority 281 Exchange Street Buffalo, New York 14202		
Persons who have requested to be on the list		
None requested		
Administrator of School and Daycare Facilities near the Property		
Tapestry Charter School 65 Great Arrow Avenue Buffalo, NY 14216 716-204-5883 Eric Klapper - Executive Director	PS 64 Frederick Law Olmsted School 874 Amherst Street Buffalo, NY 14216 716-816-3420 Marquita Bryant - Principal	

Local Document Repositories		
North Park Library 975 Hertel Avenue Buffalo, NY 14216 716-875-3748 Paul Guminski – Branch Manager	NYSDEC Region 9 Office 270 Michigan Avenue Buffalo, NY 14203 716-851-7220	

Thanks April
From: April Tompkins [mailto:tompkinsa@buffalolib.org]
To: gbittner@hazardevaluations.com
Subject: FW: Repository Request

Good afternoon Greg,

Your message regarding the BCP was forwarded to me.

This is to inform you and confirm that the Buffalo and Erie County Public Library will be the repository for the Brownfield Clean Program document(s) and will be made available for public review. ***Also, this serves as permission to submit future document and updates.***

Please keep the following in mind:

- Documents (including updates) for public review should be sent or brought in person to the Central Library to the attention of Carol Batt, of whom I assist. Documents sent via e-mail will not be accepted. The mailing address is:

  Attention: Carol Ann Batt
  Chief Operating Officer
  Buffalo and Erie County Public Library
  1 Lafayette Square
  Buffalo, NY 14203

- Documents for the Central/Downtown library are made available on the first floor in the Information Services Department within a day or so after receipt. If received Friday afternoon, they go out the following Monday.
- If you would like the document(s) distributed at libraries other than Central, you will need to send the appropriate quantity of copies with labels regarding their destinations. We will distribution accordingly. We do not make copies for distribution.
- It's your choice regarding the format (hard copy and / or disk) you wish to submit. If the document is very large, part in hard copy and part on disk is acceptable. If submitting in both formats, please be sure that they are titled/labeled accordingly. Although CD-ROMs cannot be used on public library computers, if someone brings in their personal laptop, the disc can be viewed in house. If optional, an alternative is the availability to go online using a provided link for patrons to read/review/print.

If you still have any questions/concerns, please feel free to contact me by replying to this e-mail or by phone at 716-858-7129. Thank you.

Regards,
April Tompkins, Sr. Library Clerk
Office of Chief Operating Officer & Information Technology
Buffalo and Erie County Public Library
1 Lafayette Square | Buffalo, NY 14203
Voice: 716-858-7129 | Fax: 716-858-6211
E-mail: tompkinsa@buffalolib.org

Section X

Land Use Factors

2. Current Use – For over 130 years, MOD-PAC has been a pioneer in the printing and manufacturing of premium quality folding cartons. Founded in 1881 as Cooper Paper Box, the company was acquired by Astronics Corporation (Nasdaq ATRO) in 1972, at which time the MOD-PAC CORP. name was established. The printing & packaging segment of Astronics that was operated through MOD-PAC became a separate corporation in March 2003 (Nasdaq MPAC). Then in 2013, the company was taken private by Kevin Keane, Chairman, and Daniel Keane, President and CEO, and their associates and affiliates.

MOD-PAC has grown to be the largest printing firm in Western New York, currently employing over 370 employees. At the current 500,000 square foot manufacturing facility in Buffalo, New York, MOD-PAC produces high quality folding cartons for large companies and small businesses alike.

MOD-PAC manufactures cartons that are used to package a wide range of consumer products that includes the simplest to the most expensive: from foodstuffs such as dry food, cakes and biscuits, chocolate and confectionary, frozen food, and convenience food; to non-food products such as household products, medical, and pharmaceuticals. The packaging gets products safely and securely from the point of production to the point of sale and use. Without packaging, food and other goods would be lost due to handling damage, lack of hygiene and insufficient information on product use.

The Site was historically occupied by American Radiator. Specific areas of usage and possible contaminant source areas are not known. Operations ceased prior to mid-1970s.

3. Reasonably Anticipated Use Post Remediation – The main building and the Site will remain under the operation of MOD-PAC CORP. The southern portion of the Site will be developed in conjunction with Nardin Academy to construct a Sports Complex. The proposed complex will include one to two soccer fields, tennis courts, and possibly a softball diamond. Nardin and Mod-Pac have completed construction of one of the only indoor soccer facilities in the city of Buffalo on the eastern adjoining facility. A 30,000 square foot indoor soccer and squash facility opened this year. The facility is open to the community and will serve the youth of Western New York. The new Sports Complex on the southern portion of the Site will support and complement the recently completed indoor facility. The Brownfield redevelopment project will repurpose the industrial land into an asset for the community.