Brownfield Cleanup Program Application

399 Ohio Street Site Buffalo, New York

April 2014 0136-013-011

Prepared for:

1093 Group, LLC



<u>Prepared by:</u>
TurnKey Environmental Restoration, LLC





NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION BROWNFIELD CLEANUP PROGRAM (BCP)



ECL ARTICLE 27 / TITLE 14

DEPARTMENT USE ONLY BCP SITE #:

08/2013			BCP SITE #:		
Section I. Requestor Information					
NAME 1093 Group, LLC					
ADDRESS 295 Main Street, Suite 2	210				
CITY/TOWN Buffalo, New York		zip code 142	203		
PHONE 716-854-0060	FAX 716-852-28	329	E-MAIL bpaladino@ellicottdevelopment.com		
from the database must be submitted to DEC with	or other entity requiring authors, in the NYS Department the application, to docume ments, as well as their employers.	nt of State's Corporation & Busin nt that the applicant is authorized overs, meet the requirements of S	ess Entity Database. A print-out of entity information I to do business in NYS. (See Attachment 1 ection 1.5 of <u>DER-10</u> : <u>Technical Guidance for Site</u>		
NAME OF REQUESTOR'S REPRESENTATIV	EMr. William Pala	dino			
ADDRESS 295 Main Street, Suite 2	210				
CITY/TOWN Buffalo, New York		ZIP CODE 142	203		
PHONE 716-854-0060	FAX 716-852-282	9	$\hbox{$E$-MAIL}\ bpaladino@ellicottdevelopment.com$		
NAME OF REQUESTOR'S CONSULTANT M	r. Michael Lesakows	ki (Benchmark Environn	nental Engineering and Science, PLLC)		
ADDRESS 2558 Hamburg Turnpike	e, Suite 300				
CITY/TOWN Buffalo, New York		ZIP CODE 142	218		
PHONE (716) 856-0635	fax (716) 856-05	83	$\hbox{$E$-MAIL}\ \hbox{mlesakowski@benchmarkturnkey.com}$		
Name of requestor's attorney Mr .	NAME OF REQUESTOR'S ATTORNEY Mr. Craig Slater, Esq. (The Slater Law Firm, PLLC)				
ADDRESS 26 Mississippi Street, S	uite 400				
CITY/TOWN Buffalo, New York	CITY/TOWN Buffalo, New York ZIP CODE 14203				
PHONE (716) 845-6760	fax (716) 845-67	64	E-MAIL cslater@cslaterlaw.com		
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.		solely as a result of ownership, operation of or involvement with the site subsequent to the disposal of hazardous waste or discharge of petroleum.			
Requestor Relationship to Property (check one):					
Previous Owner ☐ Current Owner ✓ Potential /Future Purchaser ☐ Other					
If requestor is not the site owner, requestor will h -Proof of site access must be submitted for non-		nroughout the BCP project.	Yes No		

Section II. Property Information Check here if this application is to request significant change Existing BCP site number:	ges to propei	rty set fortl	h in an exi	isting BC	A: 🗌
PROPERTY NAME 399 Ohio Street Site					
ADDRESS/LOCATION 399 Ohio Street CITY/TOWN	_N Buffalo		ZIP C	ODE 1420	4
MUNICIPALITY(IF MORE THAN ONE, LIST ALL): City of Buffalo					
COUNTY Erie SITE SIZE	(ACRES) 5.0				
LATITUDE (degrees/minutes/seconds) $$ N42 $^{\circ}$ $$ 52 $^{\circ}$ $$ 08 $^{\circ}$	LONGITUDE	(degrees/minut	tes/seconds) V	V78 ∘ 52	' 09 "
HORIZONTAL COLLECTION METHOD: SURVEY GPS MAP	HORIZONTA	L REFERENCI	e datum: N	IAD 83	
COMPLETE TAX MAP INFORMATION FOR ALL TAX PARCELS INCLUDED V PER THE APPLICATION INSTRUCTIONS. Parcel Address	Parcel No.	Section No.	NDARIES. A	TTACH REQ Lot No.	UIRED MAPS Acreage
portion of 399 Ohio Street	399	122.10	2	7.21	5.0
 Do the property boundaries correspond to tax map metes and bour If no, please attach a metes and bounds description of the property Is the required property map attached to the application? (applicat Is the property part of a designated En-zone pursuant to Tax Law Is For more information please see Empire State Development's web. If yes, identify area (name) A and B; Census Tract 1302 (see Figure 8) Percentage of property in En-zone (check one):	tion will not be \$21(b)(6)?	350-99% where the dev	without map	✓ Y €00%	es No es No
· · · · · · · · · · · · · · · · · · ·	escription				
7. List of Permits issued by the NYSDEC or USEPA Relating to the Type Issuing Agency D	Proposed Site escription	(type here	or attach in	formation)	
	Petroleum I				•
If any changes to Section II are required prior to application approval, a Initials of each Requestor:	a new page, in	itialed by ea	ch requesto	r, must be s	submitted.

Section III. Current Property Owner/Operator Information				
OWNER'S NAME Paladino and Magnano Revocable Trust				
ADDRESS 295 Main Street				
CITY/TOWN Buffalo, New York	ZIP CODE 143	303		
PHONE 716-854-0060	FAX 716-852-2829	E-MAIL		
OPERATOR'S NAME same as owner				
ADDRESS				
CITY/TOWN	ZIP CODE			
PHONE	FAX	E-MAIL		
Section IV. Requestor Eligibility	y Information (Please refer to ECL § 2	27-1407)		
 Are any enforcement actions pending Is the requestor subject to an existing Is the requestor subject to an outstand Has the requestor been determined to Has the requestor previously been determined to Has the requestor been found in a civact involving contaminants? Has the requestor been convicted of a theft, or offense against public admin Has the requestor knowingly falsified false statement in a matter before the Is the requestor an individual or entity 	il proceeding to have committed a negligent or a criminal offense that involves a violent felony, istration? I or concealed material facts or knowingly subm	intentionally tortious fraud, bribery, perjury, itted or made use of a	☐ Yes	☑ No
Section V. Property Eligibility Information (Please refer to ECL § 27-1405)				
1. Is the property, or was any portion of the property, listed on the National Priorities List? ☐ Yes ☐ No If yes, please provide relevant information as an attachment. 2. Is the property, or was any portion of the property, listed on the NYS Registry of Inactive Hazardous Waste Disposal Sites? If yes, please provide: Site # ☐ Class # ☐ Yes ☐ No 3. Is 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: ☐ EPA ID Number: ☐ Date permit issued: ☐ Permit expiration date: 4. Is the property subject to a cleanup order under navigation law Article 12 or ECL Article 17 Title 10? ☐ Yes ☐ No If yes, please provide: Order # ☐ Yes ☐ No 15. Is the property subject to a state or federal enforcement action related to hazardous waste or petroleum? ☐ Yes ☐ No				
If yes, please provide explanation as an attachment.				
Section VI. Project Description	7 Innertication Dr.	diskis ::		
What stage is the project starting at?				
Please attach a description of the project which includes the following components:				
Purpose and scope of the projectEstimated project schedule	(See Attachment 3)			

Section VII. Property's Environmental History					
To the extent that existing information/studies/reports are available to the requestor, please attach the following: 1. Environmental Reports A Phase I environmental site assessment report prepared in accordance with ASTM E 1527 (American Society for Testing and Materials: Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process), and all environmental reports related to contaminants on or emanating from the site. If a final investigation report is included, indicate whether it meets the requirements of ECL Article 27-1415(2):					
			D THE MEDIA WHICH AR ED AND COPIES INCLUD		E BEEN
Contaminant Category	Soil	Groundwater	Surface Water	Sediment	Soil Gas
Petroleum	х				
Chlorinated Solvents					
Other VOCs					
SVOCs	х				
Metals	х				
Pesticides					
PCBs					
Other*					
*Please describe:					
3. SUSPECTED CONTAI AFFECTED. PROVIDE I			TAMINANTS AND THE M INT.	EDIA WHICH MAY	HAVE BEEN
Contaminant Category	Soil	Groundwater	Surface Water	Sediment	Soil Gas
Petroleum	Х				
Chlorinated Solvents					
Other VOCs					
SVOCs	Х				
Metals	Х				
Pesticides	Х				
PCBs					
Other*					
*Please describe:					
4. INDICATE KNOWN OR SUSPECTED SOURCES OF CONTAMINANTS (CHECK ALL THAT APPLY). PROVIDE BASIS FOR ANSWER AS AN ATTACHMENT.					
✓ Above Ground Pipeline or Tank					
5. INDICATE PAST LAND USES (CHECK ALL THAT APPLY):					
□ Coal Gas Manufacturing □ Agricultural Co-op □ Dry Cleaner □ Salvage Yard □ Bulk Plant □ Pipeline □ Service Station □ Landfill □ Tannery □ Electroplating □ Unknown Other: Historic rail lines, warehouses, commercial-industrial operations, bus and truck repair facility, including USTs/ASTs - See Attachments 3 and 4					
ADDRESSES AND TEL	6. PROVIDE A LIST OF PREVIOUS PROPERTY OWNERS AND OPERATORS WITH NAMES, LAST KNOWN ADDRESSES AND TELEPHONE NUMBERS AS AN ATTACHMENT. DESCRIBE REQUESTOR'S RELATIONSHIP, IF ANY, TO EACH PREVIOUS OWNER AND OPERATOR. IF NO RELATIONSHIP, PUT "NONE".				

Section VIII. Contact List Information

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. In cities with a population of one million or more, the local community board if the proposed site is located within such community board's boundaries (*note: per the 2010 census, New York City is the only city in NY with a population over one million).
- 8. The location of a document repository for the project (e.g., local library). In addition, attach a copy of a letter sent to the repository acknowledging that it agrees to act as the document repository for the property.

Section IX. Land Use Factors (Please refer to ECL § 27-1415(3))				
1. Current Use: ☐Residential ☐Commercial ☐Industrial ☐Vacant ☐Recreational (check all that apply) Provide summary of business operations as an attachment.				
2. Intended Use Post Remediation: ☐Unrestricted ☐Residential ☐Commercial ☐Industrial (check all the Provide specifics as an attachment.	hat apply)			
3. Do current historical and/or recent development patterns support the proposed use? (See #14 below re: discussion of area land uses)	✓Yes □No			
4. Is the proposed use consistent with applicable zoning laws/maps? (See Attachment 7)	☑Yes □No			
5. Is the proposed use consistent with applicable comprehensive community master plans, local waterfront revitalization plans, designated Brownfield Opportunity Area plans, other adopted land use plans? (See A	☑Yes □No ttachment 7)			
6. Are there any Environmental Justice Concerns? (See §27-1415(3)(p)).	□Yes ☑No			
7. Are there any federal or state land use designations relating to this site?	□Yes ☑No			
8. Do the population growth patterns and projections support the proposed use?	✓Yes □No			
9. Is the property accessible to existing infrastructure?	✓Yes □No			
10. Are there important cultural resources, including federal or state historic or heritage sites or Native American religious sites within ½ mile? (See Attachment 7)	☑Yes □No			
11. Are there important federal, state or local natural resources, including waterways, wildlife refuges, wetlands, or critical habitats of endangered or threatened species within ½ mile? (See Attachment	✓Yes □No 7)			
12. Are there floodplains within ½ mile? (See Attachment 7)	✓Yes □No			
13. Are there any institutional controls currently applicable to the property?	□Yes ☑No			
14. Describe the proximity to real property currently used for residential use, and to urban, commercial, industri recreational areas in an attachment. (See Atta	ial, agricultural, and achment 7)			
15. Describe the potential vulnerability of groundwater to contamination that might migrate from the property, it to wellhead protection and groundwater recharge areas in an attachment. (See Atta				
16. Describe the geography and geology of the site in an attachment. (See Atta	chment 7)			

Sec	tion X. Statement of Certificat	ion and Signatures
(Ву	requestor who is an individual)	
of D forth info	DEC's approval letter. I also agree that in DER-32 and the terms contained in rmation provided on this form and its a false statement made herein is punishal	lige and agree to the general terms and conditions set forth in DER-32 <i>Brownfield</i> ments and to execute a Brownfield Cleanup Agreement (BCA) within 60 days of the date in the event of a conflict between the general terms and conditions of participation set a site-specific BCA, the terms in the BCA shall control. I hereby affirm that attachments is true and complete to the best of my knowledge and belief. I am aware that ble as a Class A misdemeanor pursuant to section 210.45 of the Penal Law.
Date	e:Signature:	Print Name:
(By	an requestor other than an individual)	
appl ackr Agre agre cont attac	dication; that this application was preparation which are to the general terms elements and to execute a Brownfield Core that in the event of a conflict between tained in a site-specific BCA, the terms channels is true and complete to the beside hable as a Class A misdemeanor pursional true and complete to the beside hable as a Class A misdemeanor pursional true and complete to the beside hable as a Class A misdemeanor pursional true and complete to the beside hable as a Class A misdemeanor pursional true and complete to the beside hable as a Class A misdemeanor pursion and the control of the contro	(title) of
7	MITTAL INFORMATION: e (3) complete copies are required.	
	Two (2) copies, one paper copy wit CD, must be sent to:	th original signatures and one electronic copy in Portable Document Format (PDF) on a
	Chief, Site Control Section New York State Department of Env Division of Environmental Remedia 625 Broadway Albany, NY 12233-7020	vironmental Conservation ation
•	One (1) paper copy must be sent to located. Please check our website f	the DEC regional contact in the regional office covering the county in which the site is for the address of our regional offices.
FOR I	DEPARTMENT USE ONLY	
DCD C	HTE TEACODE.	I FAD OFFICE.

BCP Application – Section I

REQUESTER INFORMATION

NYS DEPARTMENT OF STATE CORPORATION & BUSINESS ENTITY
DATABASE

AUTHORIZATION TO SIGN

SITE ACCESS LETTER



NYS Department of State

Division of Corporations

Entity Information

The information contained in this database is current through January 7, 2014.

Selected Entity Name: 1093 GROUP, LLC Selected Entity Status Information

Current Entity Name: 1093 GROUP, LLC

DOS ID #: 3078310

Initial DOS Filing Date: JULY 15, 2004

County: ERIE

Jurisdiction: **NEW YORK**

Entity Type: DOMESTIC LIMITED LIABILITY COMPANY

Current Entity Status: ACTIVE

Selected Entity Address Information

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

1093 GROUP, LLC 295 MAIN ST **STE 210** BUFFALO, NEW YORK, 14203

Registered Agent

NONE

This office does not require or maintain information regarding the names and addresses of members or managers of nonprofessional limited liability companies. Professional limited liability companies must include the name(s) and address(es) of the original members, however this information is not recorded and only available by viewing the certificate.

Entity Information 1/8/14

*Stock Information

Type of Stock # of Shares **\$ Value per Share**

No Information Available

*Stock information is applicable to domestic business corporations.

Name History

Entity Name Filing Date Name Type 1093 GROUP, LLC JUL 15, 2004 Actual

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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RESOLVED, that Mr. William Paladino, Managing Member of 1093 Group, LLC (Company) be hereby authorized and empowered to sign a Brownfield Cleanup Agreement (BCA) for property referred to as the 399 Ohio Street Sitewith New York State Department of Environmental Conservation (NYSDEC), in the name of and on behalf of this Company.

The undersigned hereby certify that he is the duly qualified Managing Member and custodian of the books and recordsof 1093 Group, LLC, a corporation duly formed pursuant to the laws of the State of New York, and that the foregoing is a true record of a resolution duly adopted by the Membersat a meeting of 1093 Group, LLC and that said meeting was held in accordance with state law and the Bylaws of the above-named Corporation on February 20, 2014, and that said resolution is now in full force and effect without modification or rescission.

IN WITNESS WHEREOF, I have executed my name as Memberof the above-named Company this 20th day of February 2014.

William Paladino	Managing Member
(Print Name)	(Title)
Joseph M/lay	
(Print Name)	(Title)
	Member
(Print Name)	(Title)
	(Print Name) Tose of M/bag (Print Name)

ACKNOWLEDGMENT

(STATE OF NEW YORK)

(COUNTY OF ERIE)

On the ______ day of February in the year 2014, before me, the undersigned, a Notary Public in and for said State, personally appeared little and for said State, personally appeared by 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 the behalf of which the individual(s) acted, executed the instrument.

Notary Public

WENDY SCHOOTER HOU tary Public, State of New York

My Commission Expans February 20, 20 15



210 Ellicott Square 295 Main Street Buffalo, N.Y. 14203-2219 Real Estate Development, Management & Leasing Commercial • Residential 716.854.0060 fax 716.852.2829 www.ellicottdevelopment.com

February 19, 2014

Mr. Anthony Lopes, Environmental Engineer New York State Division of Environmental Conservation 270 Michigan Avenue Buffalo, NY 14203

Re:

399 Ohio Street Site

Buffalo, New York

Dear Mr. Lopes:

Please be advised that the property located at 399 Ohio Streetis currently under a contract of sale to 1093 Group, LLC.1093 Group, LLC and its agents have full right of access to the property to undertake investigation and remediation of the property under the New York Brownfield Cleanup Program.

I hope this letter is satisfactory for your purpose. If you have any questions whatsoever, please do not hesitate to call me.

Very truly yours,

Acord Macenner, Luc.

Joseph Hannon

Paladino and Magnano Revocable Trust

BCP Application – Section II

PROPERTY INFORMATION

PROPERTY DESCRIPTION
FIGURE 1; SITE LOCATION AND VICINITY MAP
FIGURE 2; SITE PLAN (AERIAL)
FIGURE 3; PARCEL MAP
FIGURE 4; TAX MAP
FIGURE 5; PROPERTY BASE MAP
FIGURE 6; NEARBY LAND USE/ ZONING MAP
FIGURE 7; ADJACENT PROPERTY OWNERS MAP
FIGURE 8; EN-ZONE MAP
PETROLEUM BULK STORAGE (PBS) RECORDS
CITY OF BUFFALO HISTORIC PERMITS
TAX MAP (ELECTRONIC COPY)



BCP Application – Section II Property Information 399 Ohio Street Site

SECTION II - QUESTIONS 1-4

PARCEL DESCRIPTION

The subject property (hereinafter, the "Project Site" or the "Site") subject to the BCP Application is identified as:

 5.0 acre portion of 399 Ohio Street, City of Buffalo, Erie County, New York -S.B.L. # 122.10-2-7.21

It should be noted that prior operations at the Site were addressed from 301-399 Ohio Street, and as such historic records were researched according to the address range. For the purpose of this application, the Site is referred to herein as the 399 Ohio Street Site (see Figures 1 and 2). Erie County Real Property parcel and tax boundaries are presented on Figures 3 and 4, respectively. A property boundary survey (Frandina, PLS) that was prepared for several Ohio Street parcels, including the 399 Ohio Street parcel, and draft legal description for the Brownfield Cleanup Program Area (Frandina, PLS) for the Site is provided in Attachment 2. After acceptance into the BCP an updated certified metes and bounds description will be provided to the Department.

As indicated on the tax map (see Figure 4), and the attached survey (attached) the 399 Ohio Street property extends into the Buffalo River. 1093 Group, LLC does not wish to include the submerged portion of the parcel in the BCP application; the western boundary of the BCP Site coincides with the top of the river bank. A metes and bounds description of the BCP site (i.e., modified to limit the western edge to the top of the river bank) will be prepared as part of the Final Engineering Report and Site Management Plan (if required).

The Site is located in a historically mixed use heavy industrial, commercial, and residential area of the City of Buffalo, Erie County, New York. The Site is bound by recreational property (River Fest Park) with commercial/industrial properties beyond to the north, the Buffalo Scholastic Rowing Association boathouse to the south, Ohio Street with commercial,

BCP Application – Section II Property Information 399 Ohio Street Site

residential, and vacant property beyond to the east, and the Buffalo River to the west with industrial and commercial beyond (see Figure 5).

Land use surrounding the Site includes industrial, commercial, residential, recreational and vacant (see Figure 6). Residential properties are located approximately 0.2-miles to the southeast of the Site across Ohio Street. Adjacent property owners are identified on Figure 7.

The Site is located within Census Tract 13.02 (2000) and is 100% included in the applicable En-Zone 021100, meeting both the A and B Eligibility Criteria (see Figure 8).

SECTION II - QUESTION 5

PROPERTY DESCRIPTION NARRATIVE

The 399 Ohio Street Site is currently improved with an approximately 10,000 square foot vehicle maintenance and office building, with the remainder of the site covered by asphalt/concrete. The Site has a long history of industrial and commercial operation which has contaminated the Site. The Site has been utilized for various industrial and commercial operations since at least 1889. Operations included rail lines, material handling and shipping equipment maintenance, the likely application of pesticides and rodenticides related to the shipping and storage of raw food materials, and the use and storage of paints, solvents, thinners, greases, hydraulic oils and lubricants common among former commercial operations. More recent property uses have included the operation of bus and trucking terminal and maintenance operations, including the placement of underground storage tanks (USTs), aboveground storage tanks (ASTs) and fuel dispensing pump(s).

A subsurface investigation (BDC, 1995) was completed on multiple Ohio Street parcels including several boring locations on the 399 Ohio Street Site. One boring location, B-3,

BCP Application – Section II Property Information 399 Ohio Street Site

was field identified to have potential petroleum contamination. The report also notes that a UST was reportedly removed in May 1995.

A Phase I Environmental Site Assessment (CLS, 2005) was completed on the southern portion of the Site (see Attachment 4), which identified multiple recognized environmental conditions (RECs) including:

- Past use of the property included automotive repair operations, including multiple USTs, pump island, and ASTs.
- Storage of 55-gallon drums of suspect oil
- Presence of floor drain in the maintenance pit and trench drains in the floor, with unknown discharge points
- Staining noted proximate waste oil/grease storage area.
- Railroad spurs were noted historically on Site; rail operations are frequently associated with elevated levels of semi-volatile organic compounds (SVOCs) and metals.
- City of Buffalo historic permit records indicate the potential for at least three (3) USTs on Site.
- NYSDEC PBS database records (Site No. 9-600347) indicate that two (2) ASTs had been located on Site.

A limited Phase II Environmental Investigation Report (TurnKey, 2013) was completed across the 399 Ohio Street Site, including the excavation of eight (8) test pits. Findings have the investigation, included:

- Numerous PAHs were detected in on-Site soil above their respective Unrestricted, Restricted-Residential and Commercial Use SCOs;
- Several RCRA metals (arsenic, cadmium, chromium, lead, silver and mercury)
 were detected above their respective Unrestricted, Restricted-Residential and/or
 Commercial Use SCOs.

BCP Application – Section II Property Information 399 Ohio Street Site

A detailed summary of the previous investigations is provided in Attachment 4, and the reports are included electronically (Attachment 4).

QUESTIONS 6 AND 7

The Site is not subject to any known easements.

Based on review of the on-line NYSDEC Environmental Site database and USEPA ECHO database, no permits were issued for the Site except the following:

- NYSDEC Petroleum Bulk Storage (PBS) permit No. 9-600347, addressed to Bulkmatic Transport Company, addressed at 301 Ohio Street, including;
 - Tank No. 001 10,000 gallon diesel aboveground storage tank (AST)
 - Tank No. 002 275 gallon kerosene (#1 fuel oil) AST

Though not issued by NYSDEC or USEPA, additional permits have been researched with the City of Buffalo. Historic permits potentially related to the Site are described below.

- City of Buffalo Permits Office Records
 Historic permits indicate the potential for historic USTs, dispensers, and truck
 maintenance operations were located on-Site, including:
 - Dated 04/11/1941 Place gasoline tank 1,000 gallon. Addressed at 393 Ohio Street (N.Y.C.R.R.)
 - Dated 6/10/1974 Erect steel building for storage and truck repair.
 Addressed at 263-393 Ohio Street (Modern Terminal of Boss Linco.)
 - Dated 12/10/1986 Place and use UST (1) 10,000 gallon at existing truck repair garage. Addressed at 375 Ohio Street (Blue Bird Bus Lines)
 - Dated 3/05/1987 Electrical permit to install conduit and wiring to gas pump. Addressed at 301 Ohio Street (Blue Bird Bus)

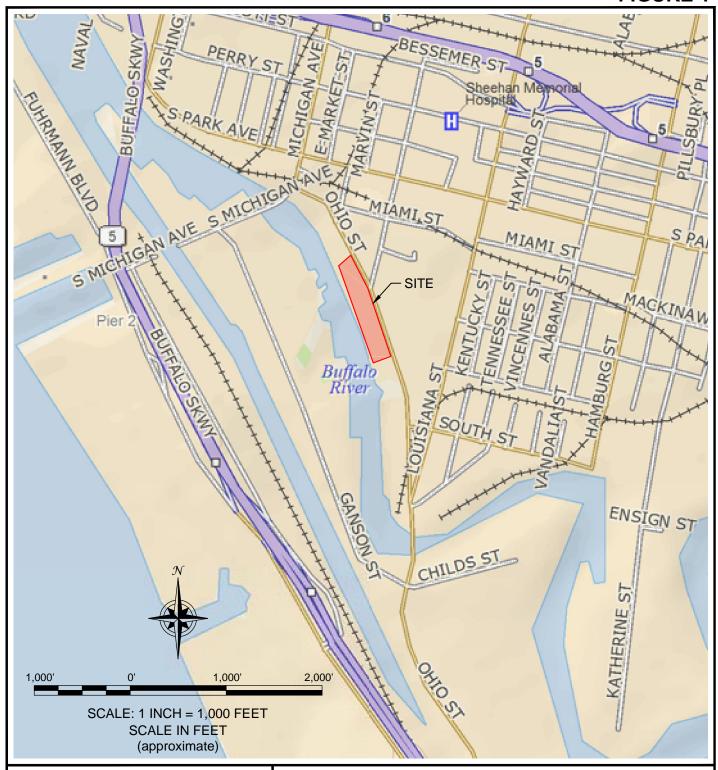


BCP Application – Section II Property Information 399 Ohio Street Site

The NYSDEC PBS record and historic permits are included in Attachment 2.



FIGURE 1





2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0635

PROJECT NO.: 0136-013-011

DATE: JANUARY 2014

DRAFTED BY: JGT

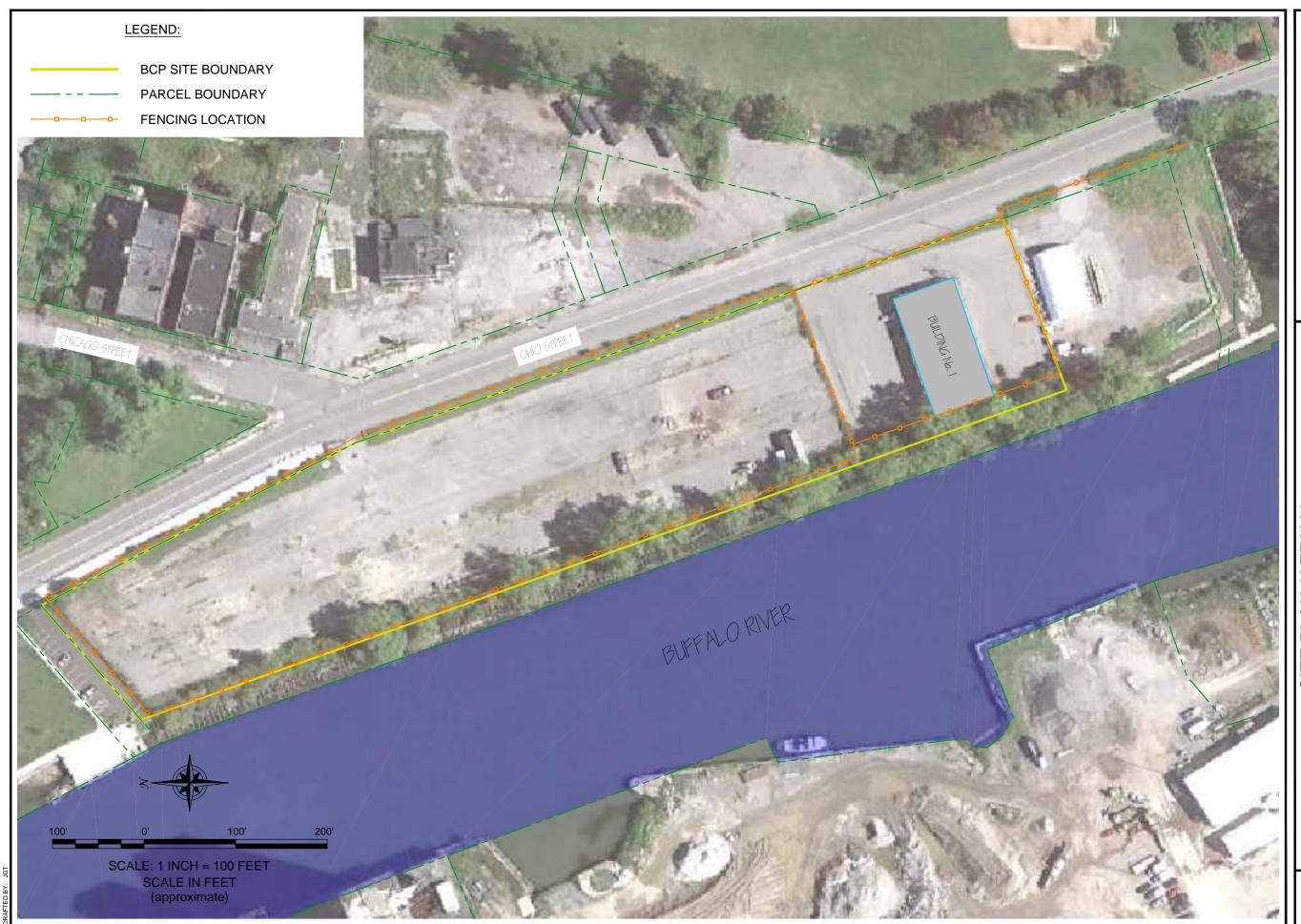
SITE LOCATION AND VICINITY MAP

BROWNFIELD CLEANUP PROGRAM APPLICATION
399 OHIO STREET SITE

BUFFALO, NEW YORK
PREPARED FOR
1093 GROUP, LLC

DISCLAIMER.

PROPERTY OF TURNKEY ENV. REST., LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENV. REST., LLC.



SITE PLAN (AERIAL)

BROWNFIELD CLEANUP PROGRAM APPLICATION

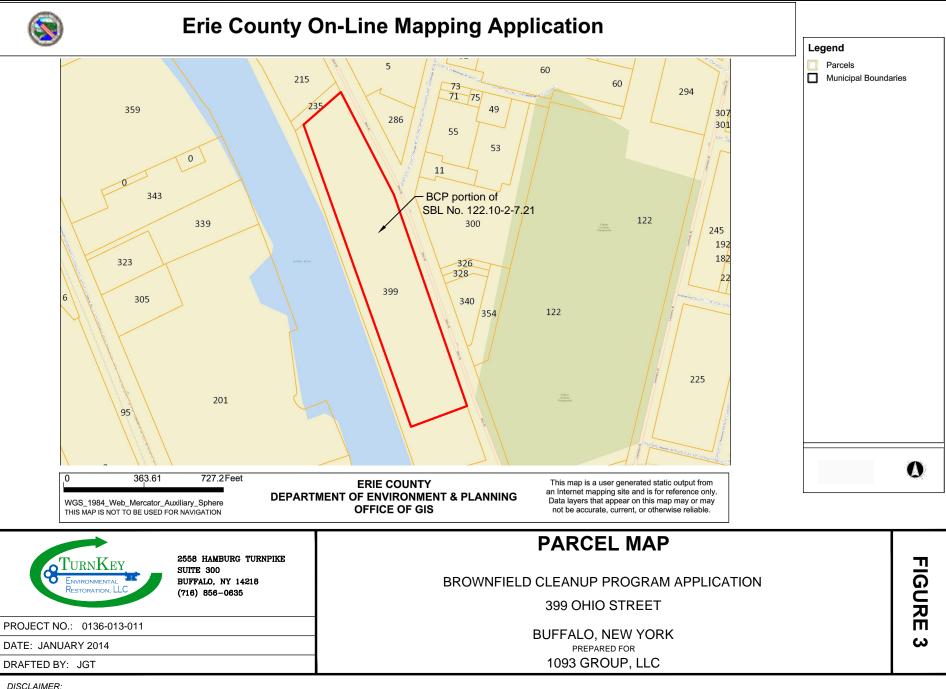
399 OHIO STREET SITE

BUFFALO, NEW YORK

TURNKEY ENV. REST., LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT ED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENV. REST., LLC.

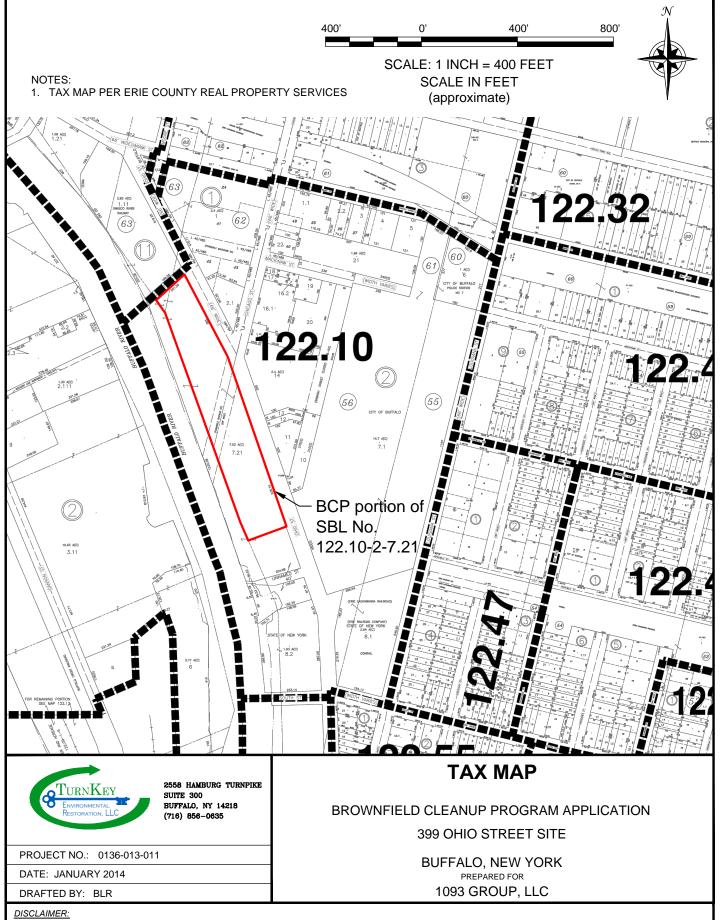
JOB NO.: 0136-013-011

FIGURE 2

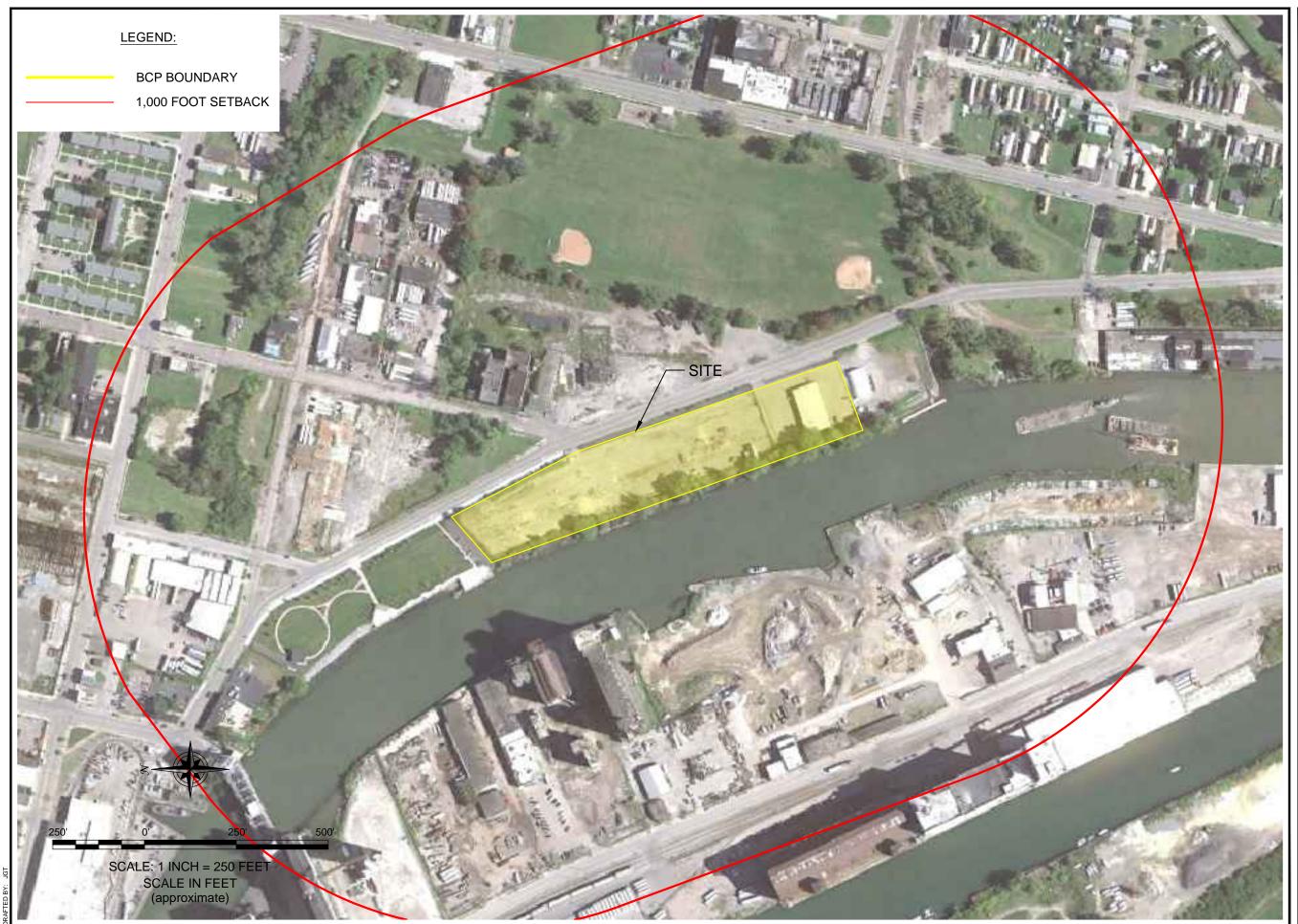


PROPERTY OF TURNKEY ENV. REST., LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENV. REST., LLC.

FIGURE 4



PROPERTY OF TURNKEY ENV. REST., LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENV. REST., LLC.



PROPERTY BASEMAP (1,000'

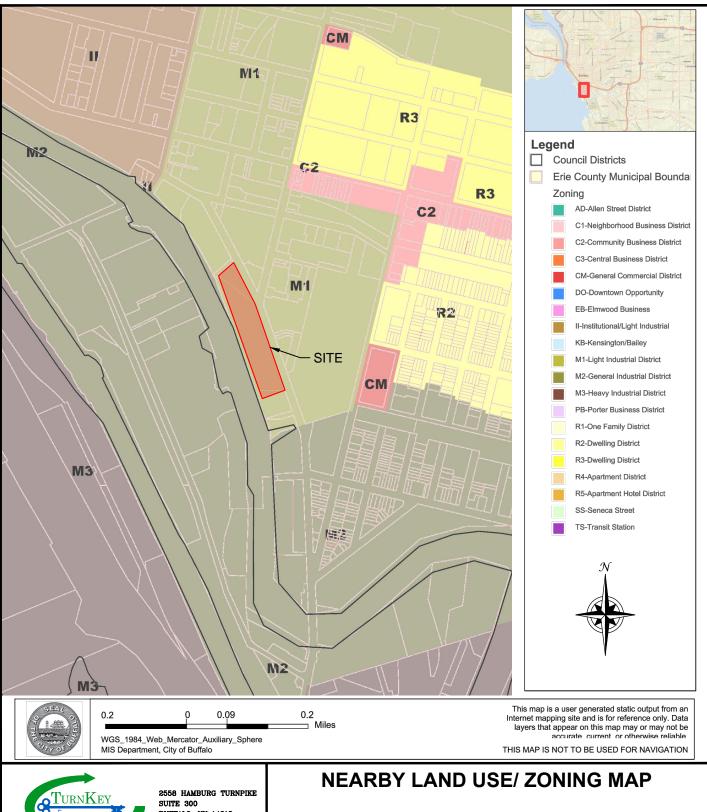
BROWNFIELD CLEANUP PROGRAM APPLICATION

JOB NO.: 0133-013-011

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FIGURE 5

FIGURE 6





DATE: JANUARY 2014 DRAFTED BY: JGT

PROJECT NO.: 0136-013-011

BROWNFIELD CLEANUP PROGRAM APPLICATION 399 OHIO STREET SITE

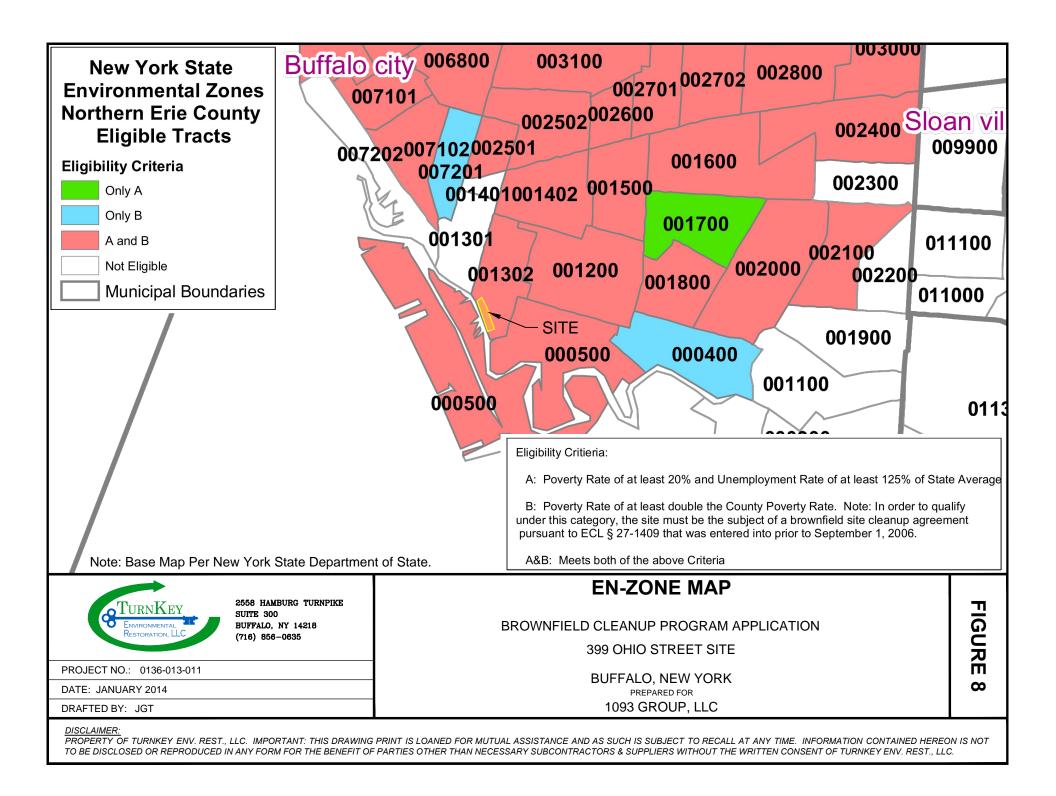
> BUFFALO, NEW YORK PREPARED FOR 1093 GROUP, LLC

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BUFFALO, NEW YORK PREPARED FOR 1093 GROUP, LLC

JOB NO.: 0136-013-011





Bulk Storage Database Search Details

First Site

Previous Site

Next Site

Last Site

Facility Information

Site No.: 9-600347 Status: Unregulated

Expiration Date: 09/15/2002

Site Type: PBS

Site Name: BULKMATIC TRANSPORT COMPANY

Address: 301 OHIO STREET BUFFALO, NY TERMINAL FACILITY

Locality: BUFFALO

State: NY

Zipcode: 14203 County: ERIE

Owner(s) Information

Facility Owner: BULKMATIC TRANSPORT COMPANY 2001 N. CLINE AVENUE . GRIFFITH, IN. 46319

Mail Contact: BULKMATIC TRANSPORT COMPANY 2001 NORTH CLINE AVENUE . GRIFFITH, IN. 46319

Tank Information

2 Tanks Found

Tank No	Tank Location	Status	Capacity (Gal.)
001	Aboveground - No Contact (on saddles, legs, rack, cradle, etc.)	Closed - Removed	10000
002	Aboveground - No Contact (on saddles, legs, rack, cradle, etc.)	Closed - Removed	275

Refine Current Search

Back to Search Results

CITY OF BUFFALO HISTORIC BUILDING PERMITS



LOCATION Ohio & South Sts.

PERMIT NO. 19206 R.O. DATE 3/18/27

OWNER D. C. Ryan

DESCRIPTION alter 2d. story frame flour mill

LOCATION Ohio & South Sts.

PERMIT NO. 18557 R.O. DATE 5/12/26

OWNER Erie R. R.

DESCRIPTION repair freight house

LOCATION Ohio St. & Buffalo River

PERMIT No. 26533 DATE October 30, 1934

OWNER Gulf Refining Co.

DESCRIPTION Construct brick service station and place steel gasoline tanks. 4000 gals.

LOCATION 393 Ohio St.

PERMIT No. 33033

DATE 4/11/41

OWNER N. Y. C. R. R.

DESCRIPTION place gasoline tank. 1600 gallons.

\$100.00

DATE Dec. 10, 1986

385

LOCATION 350 Ohio St.

PERMIT No. 23487

DATE March 15, 1932

OWNER

Great Lakes Transit Co.

DESCRIPTION Construct steel loading platform.

LOCATION

375 Opio St.

Blue Bird Bus Lines

OWNER ADDRESS

CONTRACTOR

S.L. Robles Inc.

DESCRIPTION OF WORK Place & use underground tank (1) 10,000

gallon at exist. truck repair garage. Approved by Bureau of Fire Prevention 12/4/86.

CONDITIONS

VALUE

\$5,000

\$60

APPLICATION #

190776

PLAN FILE #

BUILDING PERMIT # B 4087

LOCATION 345 Ohio Street

PERMIT NO. RO 48305 DATE January 23, 1950

OWNER Phil Strauss

Demolish brick freight house.

\$500

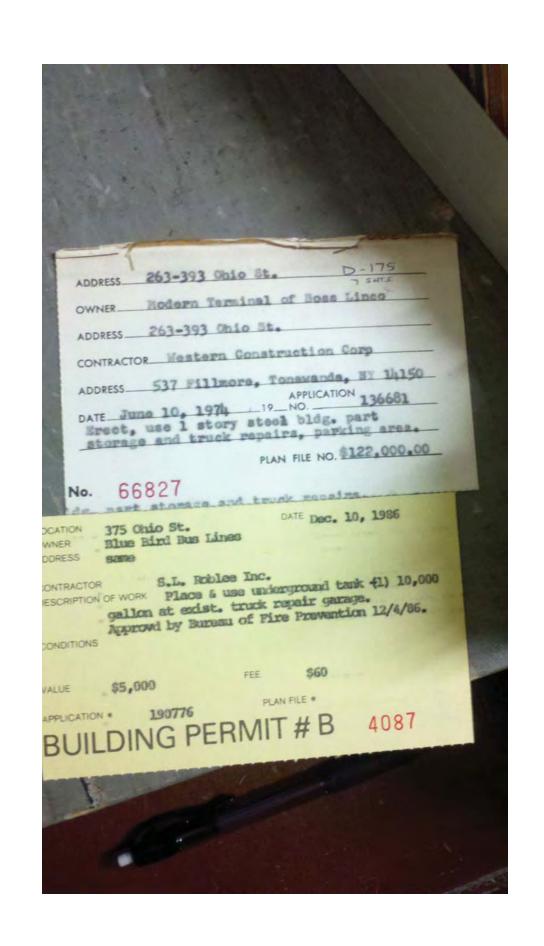
LOCATION 363 Ohio St.

PERMIT NO. RO 50225

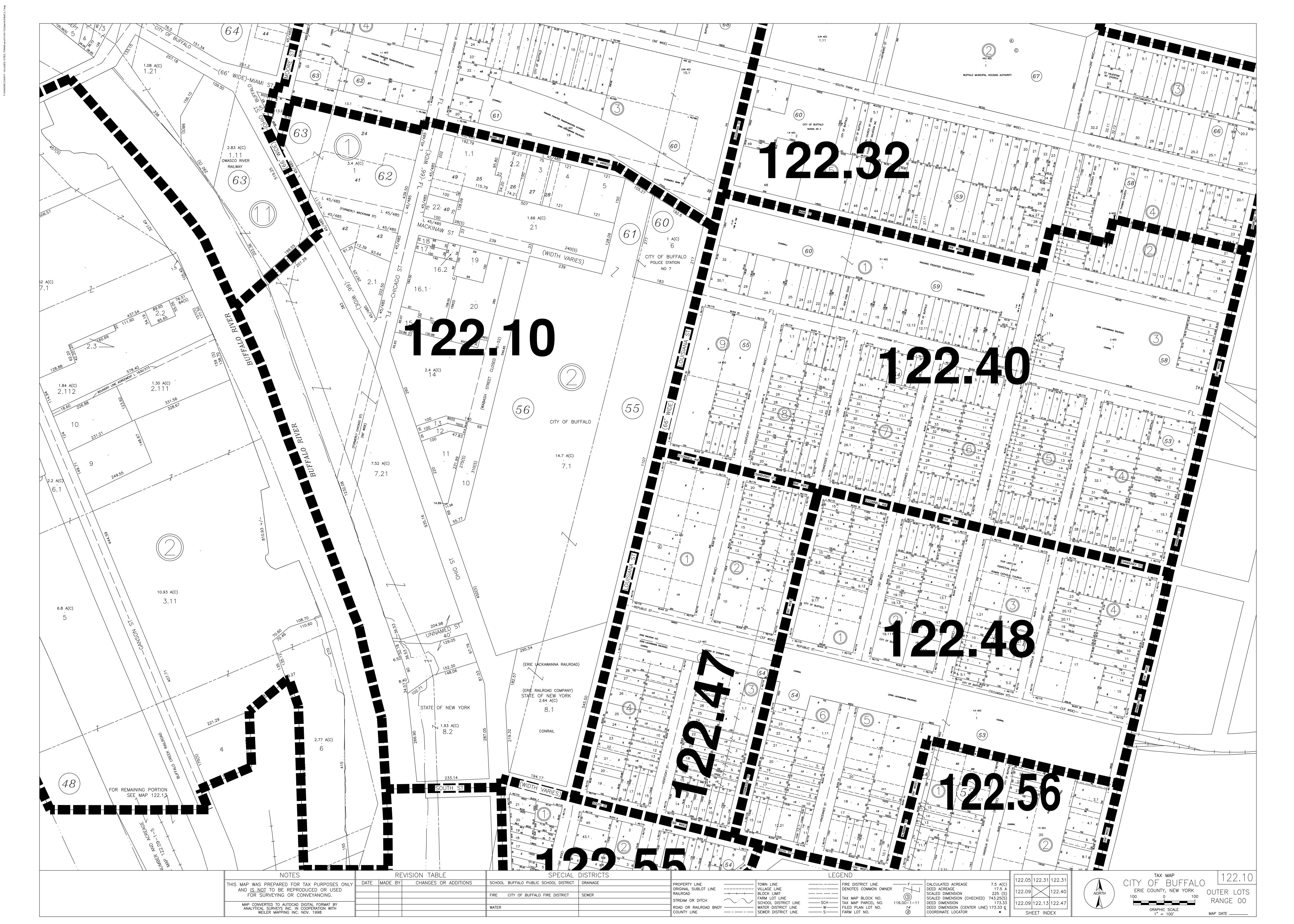
DATE July 19, 1951

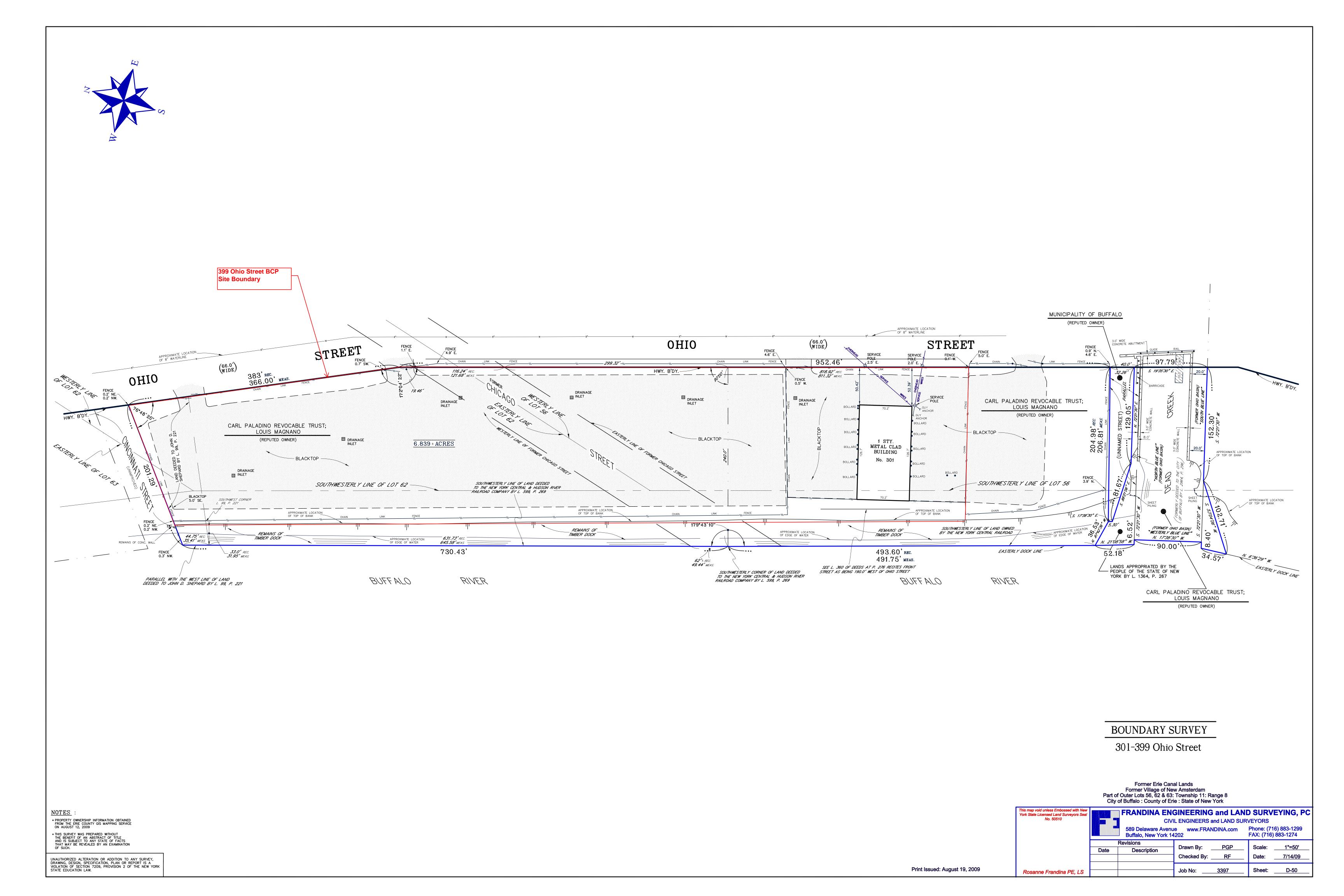
OWNER Jos. T. Ryerson

DESCRIPTION Alter exterior -- bfick- for storage \$2500.



LOCATION-	302 for 310	Ohio St.		
PERMIT NO.	566 DATE	Feb 3	18693	PLAN FILE
OWNER Con	tral Man	n Co.		
		Framo USE	Shed	500
PERMIT NO.	DATE		190	PLAN FILE
OWNER				
DESCRIPTION-	STORY	USE		
		THE STATE OF		21
LOCATION	301 Ohio Blue Bird 301 Dhio	Bus	DATE	3/05/87
CONTRACTOR DESCRIPTION OF	WORK INST	Noffman I all conduc	nc. tit a	nd wiring
CONDITIONS				
VALUE		FEE		\$7.50
		PLAT	N FILE#	





DRAFT 399 OHIO STREET BROWNFIELD CLEANUP PROGRAM AREA LEGAL DESCRIPTION

ALL THAT TRACT OR PARCEL OF LAND situate in the City of Buffalo, County of Erie and State of New York, being part of Outer Lot No. 56 bounded and described as follows:

COMMENCING at a point on the southwesterly line of Ohio Street (66 feet wide) at its intersection with the southerly line of lands conveyed by Laidlaw Transport, Inc to Carl P. Paladino and Louis A. Magnano by deed recorded in the Erie County Clerk's Office in Liber 9219 of deeds at page 505; thence northwesterly along the southwesterly line of Ohio Street a distance of 192.00 feet to the POINT of BEGINNING; thence northwesterly and continuing along the southwesterly line of Ohio Street a distance of 760.46 feet to an angle point in said southwesterly line of Ohio Street; thence continuing along the southwesterly line of Ohio Street at an interior angle of 172°04'22", a distance of 366.00 feet to a point; thence southwesterly at an interior angle of 76°48'25" a distance of 117.00 feet to a point; thence southeasterly at an interior angle of 110°54'00" a distance of 1059.15 feet to a point; thence northeasterly at an interior angle of 90°56'15" a distance of 205.00 feet to the point of beginning, containing 5.012 acres more or less

•

BCP Application – Section V & VI

PROPERTY ELIGIBILITY INFORMATION

PROJECT DESCRIPTION & ELIGIBILITY STATEMENT

PROJECT DESCRIPTION

FIGURE 9; ESTIMATED PROJECT SCHEDULE



BCP Application – Sections V and VI Project Description and BCP Eligibility Statement 399 Ohio Street Site

PROJECT DESCRIPTION

The subject property (hereinafter, the "Project Site" or the "Site") subject to this BCP application is a 5.0 acre portion of a larger 7.26 acre property, located in a highly developed mixed use industrial, commercial, residential, and recreational area of the City of Buffalo, Erie County, New York (see Figures 1 and 2).

The Site is bound by recreational property (River Fest Park) with commercial/industrial properties beyond to the north, the Buffalo Scholastic Rowing Association boathouse to the south, Ohio Street with commercial, residential, and vacant property beyond to the east, and the Buffalo River to the west with industrial and commercial beyond (see Figure 5).

Land use surrounding the Site includes industrial, commercial, residential, recreational and vacant (see Figure 6). Residential properties are located approximately 0.2-miles to the southeast of the Site across Ohio Street. Adjacent property owners are identified on Figure 7.

The 399 Ohio Street Site has a long history of industrial and commercial operation which has contaminated the Site. The Site has been utilized for various commercial operations including a bulk flour transport service, New York Central Railroad Freight Warehouses, Niagara Elevators, and the Plimpton Fire Proof Elevator. Portions of the property have been utilized as a tractor trailer repair facility, bus terminal and maintenance (Blue Bird Bus Lines), and NYSDOT maintenance facility.

Operations included multiple rail spurs, truck parking, material handling and shipping equipment use and maintenance, the likely application of pesticides and rodenticides related to the storage of raw food materials, and the use and storage of waste greases, hydraulic oils, and lubricants common among commercial automotive repair operations.

Previous investigations completed on the Site (see Attachment 4) identified multiple recognized environmental conditions (RECs) including:

- Potential petroleum contamination was field noted in historic soil borings on Site.
- Past use of the property included automotive repair operations, including multiple USTs, pump island, and ASTs.
- Storage of 55-gallon drums of suspect oil
- Presence of floor drain in the maintenance pit and trench drains in the floor, with unknown discharge points



BCP Application – Sections V and VI Project Description and BCP Eligibility Statement 399 Ohio Street Site

- Staining noted proximate waste oil/grease storage area.
- Railroad spurs were noted historically on Site. Rail operations are frequently associated with elevated levels of semi-volatile organic compounds (SVOCs) and metals.
- City of Buffalo historic permit records indicate the potential for at least three (3) USTs on Site.
- NYSDEC PBS database records indicate that two (2) ASTs had been located on Site.

Results of the limited Phase II Environmental Investigation indicated:

- Elevated SVOCs across the Site above 6NYCRR Part 375 Unrestricted, Restricted Residential and Commercial Use SCOs.
- Elevated metals, including arsenic, cadmium, chromium, lead, silver, and mercury were detected across the Site above their respective 6NYCRR Part 375 Unrestricted, Residential, Restricted Residential, and Commercial Use SCOs.

The environmental investigations and supplemental historical information are provided electronically in Attachment 4.

As clearly evidenced by the known contamination associated with the historic Site use, and the known contamination identified on-Site; and the potential impacts associated with historic on-Site operations; the confirmed and potential environmental contamination of the Site complicates use and future redevelopment/reuse of the Project Site.

The Applicant plans to redevelop the Site for mixed commercial and residential use. The Applicant currently is in the process of purchasing the Site, and upon acceptance into the BCP, is willing to complete the required Remedial Investigation and Remediation, and redevelop the parcel. The preliminary Site Redevelopment Plan estimates capital investments of approximately \$15,000,000 to \$20,000,000 to investigate, remediate and redevelop the Site. This Project will results in the remediation and redevelopment of an idle, abandoned, environmentally-impaired Site along a targeted area of the City of Buffalo for redevelopment to productive use. Estimated Project Schedule is presented on Figure 9.



BCP Application – Sections V and VI Project Description and BCP Eligibility Statement 399 Ohio Street Site

ELIGIBILITY FOR ACCEPTANCE INTO THE BROWNFIELD CLEANUP PROGRAM

The Site meets the definition of a "Brownfield site" as set forth in New York State Environmental Conservation Law (the "ECL"). The ECL Section 27-1405(2) defines a "Brownfield site" as "any real property, the development or reuse of which may be complicated by the presence or potential presence of a contaminant". The regulations in 6NYCRR 375-3.3(a)(1) reiterate that a brownfield site has two elements and adds a "reasonable basis" test to each:

- (1) A brownfield site has two elements:
- (i) There must be confirmed contamination on the property or a reasonable basis to believe that contamination is likely to be present on the property (the "Contamination Element"); and,
- (ii) There must be a reasonable basis to believe that the contamination or potential presence of contamination may be complicating the development, use or reuse of the property (the "Complication Element")

Moreover, the New York State Department of Environmental Conservation BCP Eligibility Guidance dated March 2005, which is incorporated into the Brownfield Cleanup Program Guide establishes several factors that the Department considers in evaluating whether the Contamination Element and the Complication Element exist.

The Contamination Element

The Department considers the following factors with respect to the Contamination Element; to the extent they are relevant to the proposed Site:

- (A) The nature and extent of known or suspected contamination;
- (B) Whether contaminants are present at levels that exceed standards, criteria or guidance;
- (C) Whether contamination on the proposed site is historic fill material or exceeds background levels;
- (D) Whether there are or were industrial or commercial operations at the proposed site which may have resulted in environmental contamination; and/or,
- (E) Whether the proposed site has previously been subject to closure, a removal action, an interim or final remedial action, corrective action or any other cleanup activities performed by or under the oversight of the State or Federal government.



BCP Application – Sections V and VI Project Description and BCP Eligibility Statement 399 Ohio Street Site

The Contamination Element of the BCP Eligibility Test has clearly been met in this application because:

- A. The previous investigations have established that on-site soils have been impacted by contaminants that will require remediation.
- B. Contaminated soils, evidenced by elevated PID readings and analytical sample results are present on-Site exceeding Part 375 Commercial Use SCOs and are complicating redevelopment efforts
- C. Contamination identified on Site that exceeds Part 375 Commercial Use SCOs and is associated with the historic use and operations of the Site.
- D. Historic industrial/commercial operations on-Site have resulted in environmental contamination.
- E. The Site has not previously been subject to cleanup activities by or under the oversight of State or Federal agencies.

The Complication Element

The Department considers the following factors with respect to the Complication Element; to the extent they are relevant to the proposed Site:

- (A) Whether the proposed site is idled, abandoned or underutilized;
- (B) Whether the proposed site is unattractive for redevelopment or reuse due to the presence or reasonable perception of contamination;
- (C) Whether properties in the immediate vicinity of the proposed site show indicators of economic distress such as high commercial vacancy rates or depressed property values; and/or,
- (D) Whether the estimated cost of any necessary remedial program is likely to be significant in comparison to the anticipated value of the proposed site as redeveloped or reused.

The Complication Element of the BCP Eligibility Test has clearly been met in this application because the proposed Site is unattractive for redevelopment or reuse due to the presence of contamination. This factor is clearly established by the following:

(A) The majority of the Site is currently vacant and underutilized.



BCP Application – Sections V and VI Project Description and BCP Eligibility Statement 399 Ohio Street Site

- (B) The Site is currently unattractive for redevelopment or reuse due to the actual presence of contamination and the reasonable perception that there is contamination present on the Site related to the historic operations that will require remediation.
- (C) The Site is located in an NYS En-Zone (see Figure 8), indicative of the economic conditions of the surrounding area, including a poverty rate of at least 20% and unemployment of at 125% of the State average; and a poverty rate of at least double the Erie County poverty rate. Additionally, the Site is located within the Buffalo River Corridor Brownfield Opportunity Area (BOA). Because the site is located in these designated distressed areas, it is eligible for certain local, state, and federal financial incentives, further indicating that the Site is unattractive for redevelopment particularly outside of the context of the BCP.
- (D) The estimated cost of a proposed remedial program with regard to the Site is significant in comparison to the value of the Site (i.e., estimated at approximately 10-20% of the value of the Site if it were not environmentally impaired).

The Requestor as a Volunteer

A BCP applicant may be either a "Participant" or a "Volunteer."

A "Participant" is an applicant who either (i) was the owner of the site at the time of the disposal or discharge of contaminants; or (ii) is otherwise 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. NY ECL 27-1405(1)(a). This definition is repeated verbatim at 6 NYCRR 375-3.2(b)(1) and is paraphrased in the Brownfield Cleanup Program Guide at Section 2.4(1)(A).

A "Volunteer" is an applicant other than a participant, including 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 that such person exercises appropriate care with respect to the contamination. NY ECL 27-1405(1)(b). This definition is repeated verbatim at 6 NYCRR 375-3.2(b)(2) and is paraphrased in the Brownfield Cleanup Program Guide at Section 2.4(1)(B).



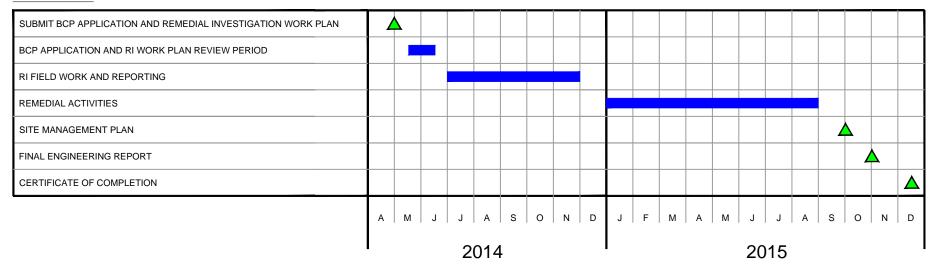
BCP Application – Sections V and VI Project Description and BCP Eligibility Statement 399 Ohio Street Site

Since the Applicant, 1093 Group, LLC, became involved with the property after the disposal or discharge of contaminants, and has exercised appropriate care with respect to the contamination, it is entitled to Volunteer status under NY ECL27-1405(1)(b).

Based on the foregoing and as further set forth in this BCP application, the Site meets the Contamination Element and the Complication Element tests. As such, the Site qualifies as a Brownfield Site eligible for participation in the BCP, with the Applicant as a Volunteer, because (A) there is confirmed contamination at the Site, and (B) the contamination is complicating the redevelopment and re-use of the Site.



PROJECT TASKS:





2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0635

PROJECT NO.: 0136-013-011

DATE: APRIL 2014

DRAFTED BY: BLR

PROJECT SCHEDULE

BROWNFIELD CLEANUP PROGRAM APPLICATION 399 OHIO STREET SITE

> **BUFFALO, NEW YORK** PREPARED FOR

1093 GROUP, LLC

PROPERTY OF TURNKEY ENV. REST., LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENV. REST., LLC.

BCP Application – Section VII

PROPERTY ENVIRONMENTAL HISTORY

PREVIOUS ENVIRONMENTAL REPORTS SUMMARY

PAST LAND USES

LIST OF PREVIOUS PROPERTY OWNERS AND OPERATORS



BCP Application – Section VII Previous Environmental Investigations 399 Ohio Street Site

A summary of the previous environmental findings completed for the Site is presented below.

<u>Site Inspection Report – 282-301 Ohio Street (aka 399 Ohio Street), Buffalo, Erie County, New York, June 1995</u>

Buffalo Drilling Company, Inc. completed a Site Inspection Report on several Ohio Street properties, including the 399 Ohio Street Site. Findings for the 399 Ohio Street Site are summarized below.

- Olfactory field evidence of potential petroleum contaminated soil was noted in soil boring B-3;
- Staining noted on concrete, in the vicinity of suspected waste oil/grease storage pails.
- Railroad spurs were noted historically on Site, through research of historic maps.
 Rail operations are frequently associated with elevated levels of semi-volatile organic compounds (SVOCs) and metals.

<u>Phase I Environmental Site Assessment – 301 Ohio Street (aka 399 Ohio Street),</u> <u>Buffalo, New York, November 2005</u>

Construction Lending Services, Inc. (CLS) completed a Phase I Environmental Site Assessment on the Site, and the findings are summarized below.

- Past Site uses included: automotive repair including, tractor trailer storage and repair, Bulkmatic transport, and Blue Bird Bus Lines.
- City of Buffalo records indicate the presence of at least three (3) tanks on the Site.
- NYSDEC Petroleum Bulk Storage (PBS) database indicate that two (2) AST had been located on Site and removed in approximately 2002.
- Oil staining was noted proximate to floor drains in the service pit and a trench drain near the overhead doors. Discharge point drains were not identified during site reconnaissance.



BCP Application – Section VII Previous Environmental Investigations 399 Ohio Street Site

<u>Limited Phase II Environmental Investigation Report – 301 Ohio Street (aka 399 Ohio Street), Buffalo, Erie County, New York</u>

TurnKey Environmental Restoration (TurnKey) completed a Limited Phase II Environmental Investigation on the 301 Buffalo Avenue Site, and the findings are summarized below.

- Elevated PAHs, including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene were detected above their respective Part 375 Unrestricted, Restricted-Residential and/or Commercial Use SCOs;
- Several RCRA metals (arsenic, cadmium, chromium, lead, silver and mercury) were detected above their respective Part 375 Unrestricted, Restricted-Residential and/or Commercial Use SCOs across the Site.

Copies of the previous environmental reports are provided electronically in Attachment 4.



BCP Application – Section VI Listing of Property Owners and Operators 399 Ohio Street Site

INTRODUCTION

Reasonable attempts were made to attain complete previous site owner contact information.

The following table lists the current and previous property owners/operators:

Parcel Address	Date(s)	Relationship to Applicant		
399 Ohio Street				
Current Owner/Operator				
Carl Paladino Revocable Trust Carl Paladino & Louis Magnano 295 Main Street Buffalo, NY 14203 (716) 854-0060	1983- current	Potentially related entity		
Previous Owner/Operator				
Bulkmatic Transport Company (Operator only) 500 Bison Parkway Buffalo, NY 14227 (716) 894-0009	2001	None		
Blue Bird Bus Lines Laidlaw Transit Bus Lines (Operator only) 51 Botsford Place Buffalo, NY 14216 (716) 874-9684	1986 – at least 1992	None		
Modern Terminal Boss Linco	1974	None		
New York Central Railroad Freight Warehouses Great Lake Transit Co.	1899 – at least 1951	None		
Niagara Elevators / Plimpton Fire Proof Elevator	At least 1889	None		

Limited Phase II Environmental Investigation Report

301 Ohio Street Site Buffalo, New York

November 2013

0136-013-004

Prepared For:

Ellicott Development Company



Prepared By:



LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT

301 Ohio Street Site Buffalo, New York

November 2013 0136-013-004

Prepared for:

Ellicott Development Company

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT

301 Ohio Street Site Buffalo, New York Table of Contents

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	1.1 Background and Site Description	1
2.0	SUBSURFACE SOIL/FILL INVESTIGATION	2
	2.1 Test Pits	2
	2.2 Soil Characterization	2
	2.3 Laboratory Analysis	
3.0	Investigation Findings	3
	3.1 Qualitative Soil Screening	
	3.2 Site Hydrogeology	
	3.2 Soil Analytical Results	4
4.0	CONCLUSIONS AND RECOMMENDATIONS	6
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LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT

301 Ohio Street Site Buffalo, New York Table of Contents

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LIST OF FIGURES

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Figure 2 Site Plan

APPENDICES

Appendix A	Soil Boring	and Test Pit Logs
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Appendix B Laboratory Analytical Data Summary Package

Appendix C Previous Investigation



1.0 Introduction

1.1 Background and Site Description

TurnKey Environmental Restoration, LLC (TurnKey) performed a Limited Phase II Environmental Investigation on behalf of Ellicott Development Company at 301 Ohio Street, City of Buffalo, Erie County, New York (Site; see Figure 1). This investigation was performed to assess the condition of subsurface soil at the Site.

The subject property is located in a highly developed commercial area of Buffalo, New York. The subject Site, addressed at 301 Ohio Street, is also identified as Tax ID No. 122.10-2-7.21. The Site, totaling approximately 7.26-acres, is bordered by vacant commercial property and River Fest Park to the north; Dead Creek to the south, commercial properties and Conway Park across Ohio Street to the east; and the Buffalo River to the west. The Site is improved with two structures one metal clad building and one hoop frame building toward the south end of the property.

This Limited Phase II investigation included completion of a soil investigation to assess potential environmental impacts from chemical constituents of concern, including volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and Resource Conservation and Recovery Act (RCRA) metals.



2.0 SUBSURFACE SOIL/FILL INVESTIGATION

2.1 Test Pits

On October 15th, 2013, TurnKey mobilized a track-mounted excavator to the site and excavated eight test pits, identified as TP-1 through TP-8, at various locations across the Site. Test pit locations are shown on Figure 2. Soil samples were collected for laboratory analytical analysis from TP-2 through TP-7. Test pit logs are presented in Appendix A. Soil descriptions were completed in the field via visual characterization of excavated soils and test pit excavation faces using the Unified Soil Classification System (USCS), and scanned for total volatile organic vapors with a calibrated MiniRae 2000 PID equipped with a 10.6 eV lamp.

2.2 Soil Characterization

The subsurface soil/fill for the 301 Ohio Street parcel of the Site observed in TP-1 through TP-8 was typically characterized as asphalt in TP-2, TP-4, and TP-7, or topsoil in TP-3, TP-5, TP-6, and TP-8 from 0-0.5 fbgs overlying a soil/fill layer with varying depth and amounts of material (i.e. ash, brick, and sand) overlying native clay. Test pit logs are presented in Appendix A. Groundwater was encountered in native clay material at TP-4, TP6, and TP-8 at approximately 4-6 fbgs during the test pit excavations.

2.3 Laboratory Analysis

Soil samples collected from test pits were placed in pre-cleaned, laboratory provided sample bottles using dedicated stainless steel sampling tools, and cooled to 4° C in the field. The samples were transported under chain-of-custody command to Alpha Analytical of Westborough, MA for analysis. Soil samples from TP-2 through TP-7 were analyzed for polycyclic aromatic hydrocarbons (PAHs) and Resource Conservation and Recovery Act (RCRA) metals while TP-2 and TP-5 were also analyzed for Target Compound List (TCL) volatile organic compounds (VOCs).



3.0 Investigation Findings

Eight test pits (TP-1 through TP-8) were completed and six soil/fill samples were collected for analysis. Table 1 presents a summary of the soil sample results. Each compound that was analyzed and detected above the laboratory reporting limit is listed on the table with its associated result to provide a complete data summary. For comparison purposes, Table 1 presents soil cleanup objectives (SCOs) for each of the detected parameters as published in 6 NYCRR Part 375 Soil Cleanup Objectives dated May 2010. Appendix B contains a copy of the laboratory analytical data package.

3.1 Qualitative Soil Screening

Soil samples were screened via headspace for VOCs using a MiniRae 2000 PID. PID measurements ranged from 0 ppm to approximately 161 ppm (TP-2). Fill material was noted at varying thickness in TP-1 through TP-8 consisting of ash, brick, and sand. Refer to the test pit logs Appendix A for a summary of soil classification for each sample interval, field observations, and PID measurements.

3.2 Site Hydrogeology

The property is located within the Erie-Ontario lake plain physiographic province, which is typified by little topographic relief, except in the immediate vicinity of major drainage ways. Surface soils are generally characterized as urban land with level to gently sloping land in which 80 percent or more of the soil surface is covered by asphalt, concrete, buildings, or other impervious structures typical of an urban environment. In addition, the presence of overburden fill material is widespread and common throughout the City of Buffalo.

Groundwater flow direction likely follows regional topography in the vicinity of the subject property and is to the west toward the Buffalo River. Local groundwater flows, however, may be influenced by subsurface features, such as excavations, utilities, and localized fill-conditions. Groundwater was encountered in native clay material in test pits on the western side of the Site, nearest the Buffalo River, from 4-6 fbgs during the test pit excavations.



3.2 Soil Analytical Results

Soil samples from TP-2 through TP-7 were analyzed for PAHs and RCRA metals. Soil samples from soil borings TP-2 and TP-5 were also analyzed for TCL VOCs. As indicated on Table 2, the analytical data results indicate several PAHs were detected above their respective Unrestricted, Restricted-Residential and/or Commercial Use SCOs in TP-2 and TP-5; including benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, and dibenzo(a,h)anthracene. Several RCRA metals were detected above their respective Unrestricted, Restricted-Residential and/or Commercial Use SCOs in TP-2, TP-3 and TP-5. Of note, arsenic, cadmium and lead were detected above Commercial Use SCOs on-Site.



4.0 Previous Investigation

TurnKey reviewed "Preliminary Subsurface Exploration Report for 282-301 Ohio Street, Buffalo, New York", dated June 15, 1995, completed by Buffalo Drilling Company, Inc. (see Appendix C). The report was an attachment to "Site Inspection Report" also completed by Buffalo Drilling Company, Inc, and dated June 15, 1995. Four subsurface soil borings, designated B-3 through B-6, were completed on-Site (B-1 and B-2 were completed on an adjacent site). Based on that report, elevated levels of VOCs were detected in soil samples screened with a photoionization detector (PID) in each of the borings, with highest VOC concentrations noted in borings B-3 and B-4. Soil boring B-3 also had evidence of petroleum-like sheen and petroleum-like odors from four to eight fbgs.



5.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the soil investigation at the Site, TurnKey offers the following conclusions and recommendations:

- Elevated PID readings were noted in current test pits (TP-2, TP-5) and historical soil borings (B-3, B-4);
- Petroleum-like odors and petroleum-like sheen were noted in historical soil boring B-3;
- Numerous PAHs were detected in on-Site soil above their respective Unrestricted, Restricted-Residential and/or Commercial Use SCOs;
- Several RCRA metals (arsenic, cadmium, chromium, lead, silver and mercury)
 were detected above their respective Unrestricted, Restricted-Residential and/or
 Commercial Use SCOs.
- Based on the findings of this investigation, additional Site investigation and remediation appears warranted. We understand that Ellicott Development Company is considering redeveloping the property; based on environmental impacts noted during the 2013 and historic 1995 investigation, the Site may be eligible for the New York Brownfield Cleanup Program.



6.0 LIMITATIONS

This report has been prepared for the exclusive use of Ellicott Development Company. The contents of this report are limited to information available at the time of the site investigation activities and to data referenced herein, and assume all referenced historic information sources to be true and accurate. The findings herein may be relied upon only at the discretion of Ellicott Development Company. Use of or reliance on this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.



TABLES





TABLE 1

SUMMARY OF SOIL ANALYTICAL RESULTS

301 OHIO STREET SITE

BUFFALO, NEW YORK

				Sample Locations (Depth)							
Parameter ¹	Unrestricted Use SCOs ²	Restricted Residential Use SCOs ²	Commercial Use SCOs ²	TP-2 (1-3)	TP-3 (1-3)	TP-4 (1-3)	TP-5 (2-4)	TP-6 (0-2)	TP-7 (2-4)		
				10/15/13	10/15/13	10/15/13	10/15/13	10/15/13	10/15/13		
Volatile Organic Compounds (VOCs)) - mg/Kg ³										
Methylene chloride	0.05	100	500	0.0039 J			ND				
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg	g ³									
2-Methylnaphthalene				ND	0.52	0.072 J	ND	ND	ND		
Acenaphthene	20	100	500	ND	0.078 J	ND	ND	ND	ND		
Acenaphthylene	100	100	500	1.9	ND	0.039 J	0.93 J	0.085 J	ND		
Anthracene	100	100	500	1 J	ND	0.067 J	1.8	0.14 J	ND		
Benzo(a)anthracene	1	1	5.6	2.7	0.13 J	0.29	7.8	0.38	ND		
Benzo(a)pyrene	1	1	1	2.8	0.092 J	0.26	7.4	0.5	ND		
Benzo(b)fluoranthene	1	1	5.6	4.7	0.24	0.38	9.9	0.54	ND		
Benzo(g,h,i)perylene	100	100	500	2.8	0.099 J	0.19	4.7	0.54	ND		
Benzo(k)fluoranthene	0.8	3.9	56	1.8	0.069 J	0.12	4.1	0.19 J	ND		
Chrysene	1	3.9	56	3	0.24	0.35	7.9	0.41	ND		
Dibenzo(a,h)anthracene	0.33	0.33	0.56	0.72 J	ND	0.049 J	1.1	0.12 J	ND		
Fluoranthene	100	100	500	4.5	0.29	0.54	19	0.61	ND		
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	3.2	0.091 J	0.19	5.3	0.44	ND		
Naphthalene	12	100	500	1.5 J	0.57	0.064 J	ND	ND	ND		
Phenanthrene	100	100	500	2.4	0.7	0.38	7.5	0.41	ND		
Pyrene	100	100	500	3.4	0.22	0.45	16	0.59	ND		
Total Metals - mg/Kg											
Arsenic	13	16	16	89	7.3	1.9	3.9	3.7	2.4		
Barium	350	400	400	68	110	27	73	37	140		
Cadmium	2.5	4.3	9.3	19	32	0.14 J	4.8	0.42 J	0.29 J		
Chromium	30	180	1500	170	110	2.7	27	5.9	7		
Lead	63	400	1000	1200	1300	16	230	16	10		
Selenium	3.9	180	1500	0.26 J	ND	0.17 J	0.13 J	0.14 J	1.8		
Silver	2	180	1500	1.4	7.3	ND	0.82	0.11 J	0.12 J		
Mercury	0.18	0.81	2.8	0.14	0.39	ND	0.22	0.02 J	ND		

Notes:

- 1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
- 2. Values per NYSDEC Part 375 Soil Cleanup Objectives (December 2006)
- 3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparison to SCOs.

Definitions:

ND = Parameter not detected above laboratory detection limit.

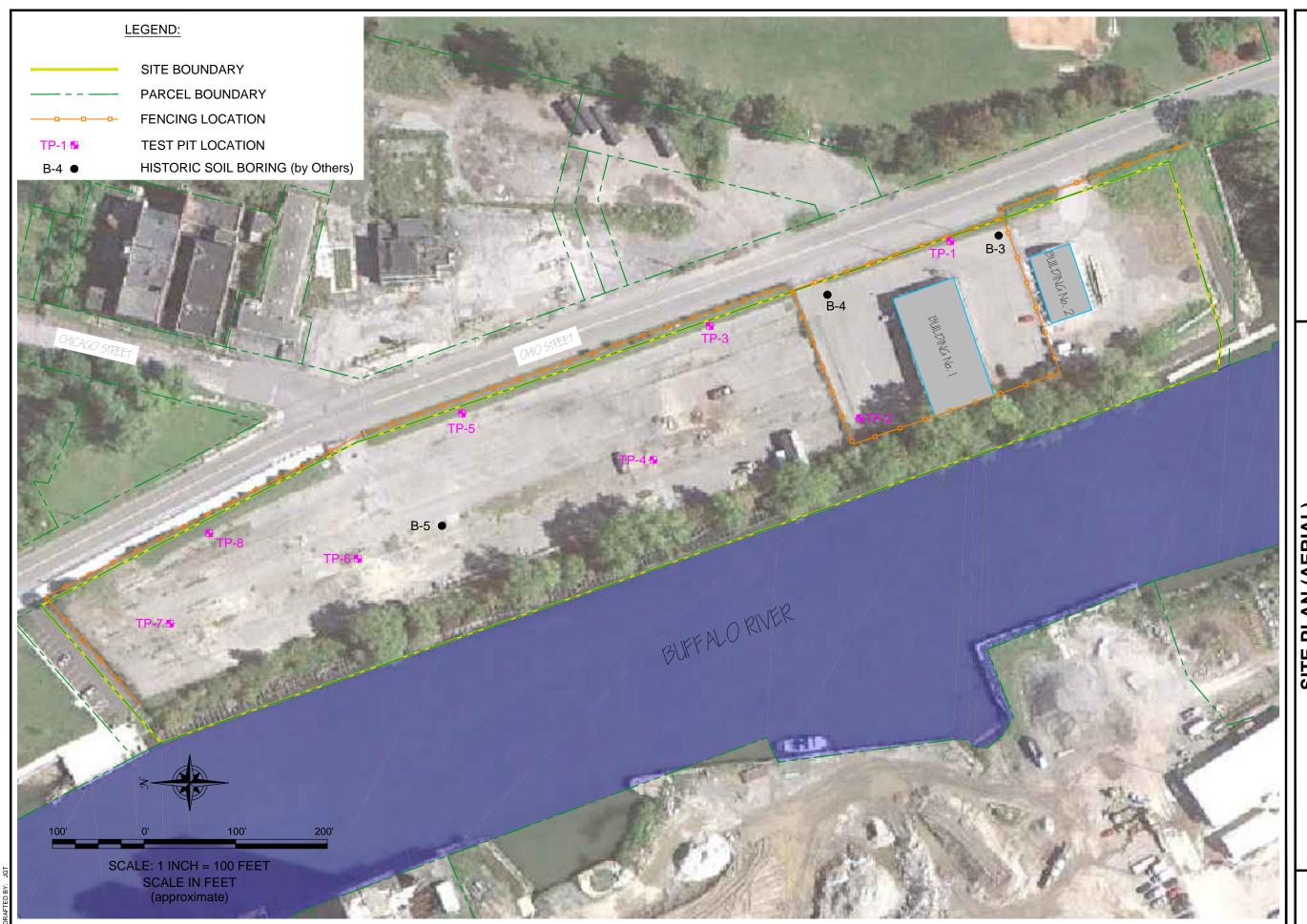
- "--" = Sample not analyzed for parameter or no SCO available for the parameter.
- J = Estimated value; result is less than the sample quantitation limit but greater than zero.

 BOLD = Result exceeds Part 375 Unrestricted Use SCOs

BOLD	= Result exceeds Part 375 Unrestricted Use SCOs.
BOLD	= Result exceeds Part 375 Restricted Residential Use SCOs.
BOLD	= Result exceeds Part 375 Commercial Use SCOs.

FIGURES





SITE PLAN (AERIAL)

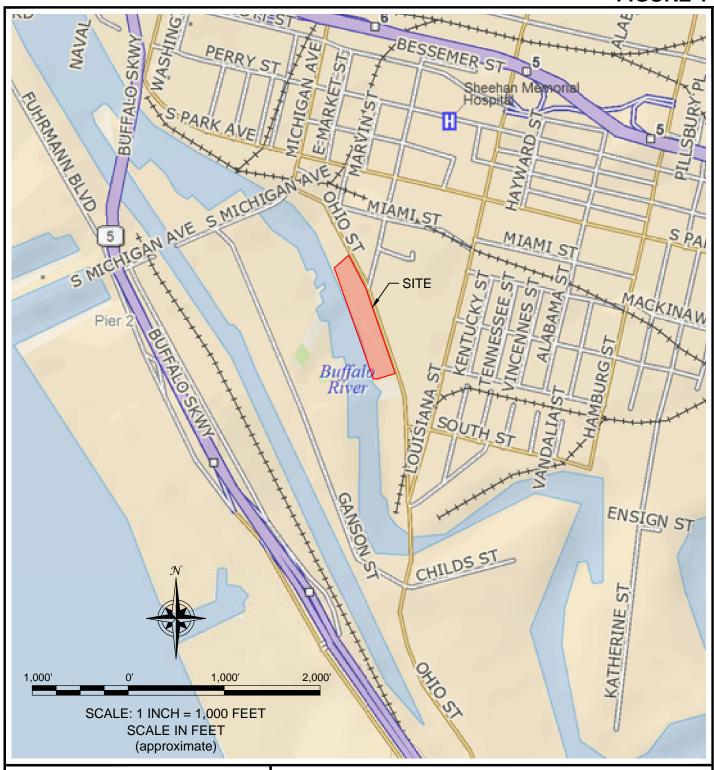
PHASE II SITE INVESTIGATION

TURNKEY ENV. REST., LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT ED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENV. REST., LLC.

JOB NO.: 0136-013-004

FIGURE 2

FIGURE 1





2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0635

PROJECT NO.: 013-013-004

DATE: OCTOBER 2013

DRAFTED BY: JGT

SITE LOCATION AND VICINITY MAP

PHASE II SITE INVESTIGATION
301 OHIO STREET SITE

BUFFALO, NEW YORK PREPARED FOR

ELLICOTT DEVELOPMENT COMPANY

DISCLAIMER.

PROPERTY OF TURNKEY ENV. REST., LLC. IMPORTANT: THIS DRAWING PRINT IS LOANED FOR MUTUAL ASSISTANCE AND AS SUCH IS SUBJECT TO RECALL AT ANY TIME. INFORMATION CONTAINED HEREON IS NOT TO BE DISCLOSED OR REPRODUCED IN ANY FORM FOR THE BENEFIT OF PARTIES OTHER THAN NECESSARY SUBCONTRACTORS & SUPPLIERS WITHOUT THE WRITTEN CONSENT OF TURNKEY ENV. REST., LLC.

APPENDIX A

SOIL BORING AND TEST PIT LOGS



Test Pit I.D.: TP-01 Project No: 0136-013-004

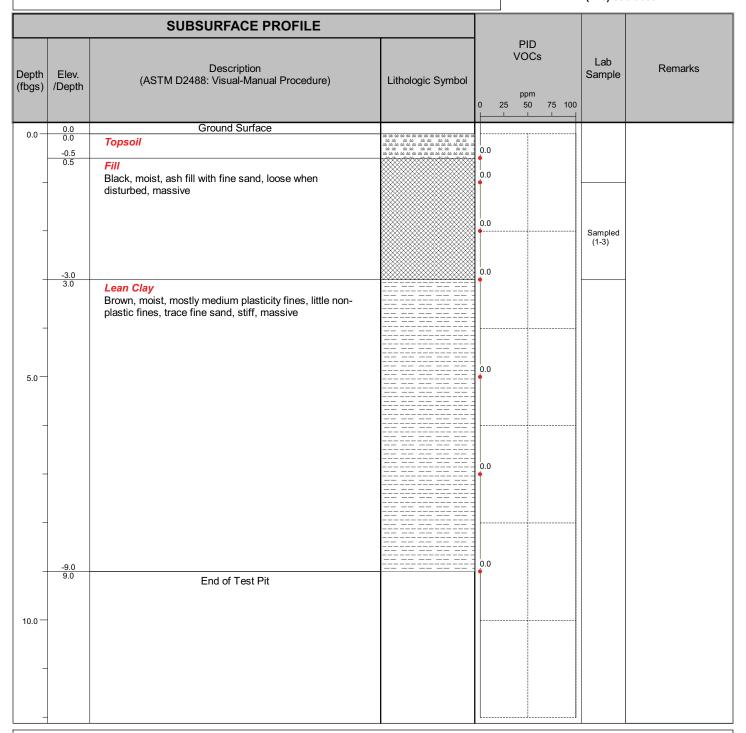
Project: 301 Ohio Street Logged By: PWW

Checked By: BCH Client: Ellicott Development Company

Site Location: 301 Ohio Strret



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



Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Depth to Water: none Width: 2.5' Visual Impacts: none Depth: 9.0 fbgs

Olfactory Observations: none

Project No: 0136-013-004 **Test Pit I.D.:** TP-02

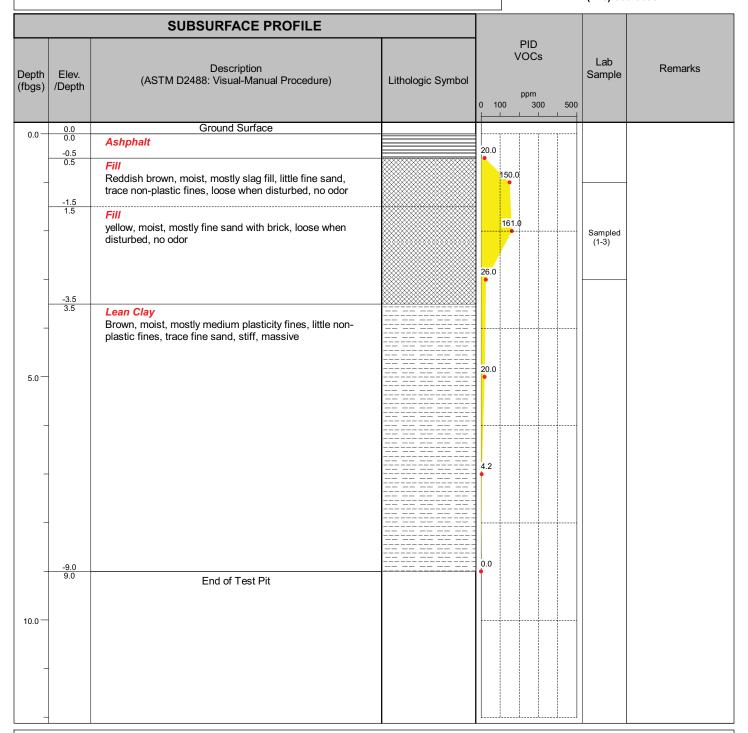
Project: 301 Ohio Street Logged By: PWW

Client: Ellicott Development Company Checked By: BCH

Site Location: 301 Ohio Strret



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



Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Depth to Water: none
Width: 2.5' Visual Impacts: none
Depth: 9.0 fbgs Olfactory Observation

Olfactory Observations: none; although elevated PID

Project No: 0136-013-004 **Test Pit I.D.:** TP-03

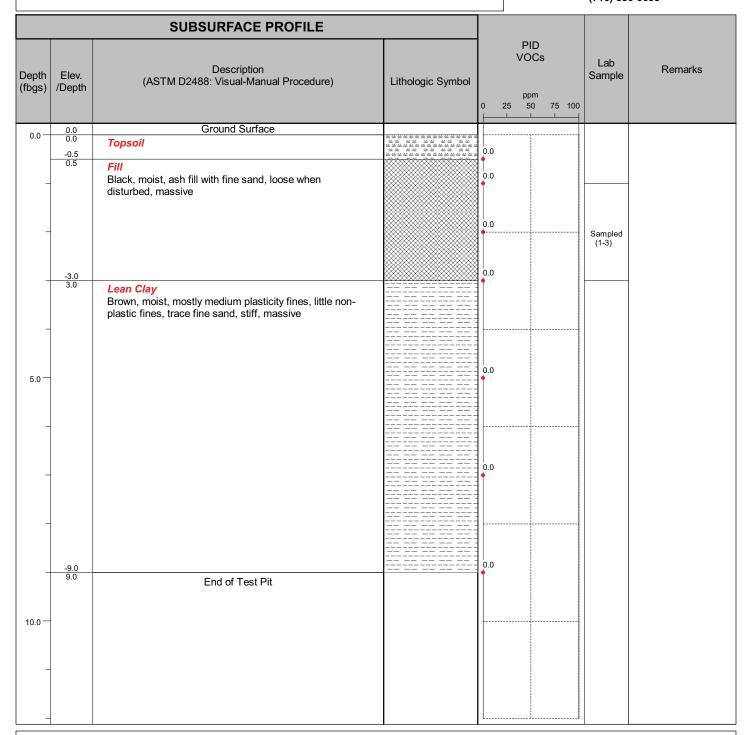
Project: 301 Ohio Street Logged By: PWW

Client: Ellicott Development Company Checked By: BCH

Site Location: 301 Ohio Strret



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



Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Width: 2.5' Depth: 9.0 fbgs Depth to Water: none Visual Impacts: none Olfactory Observations: none

Project No: 0136-013-004 **Test Pit I.D.:** TP-04

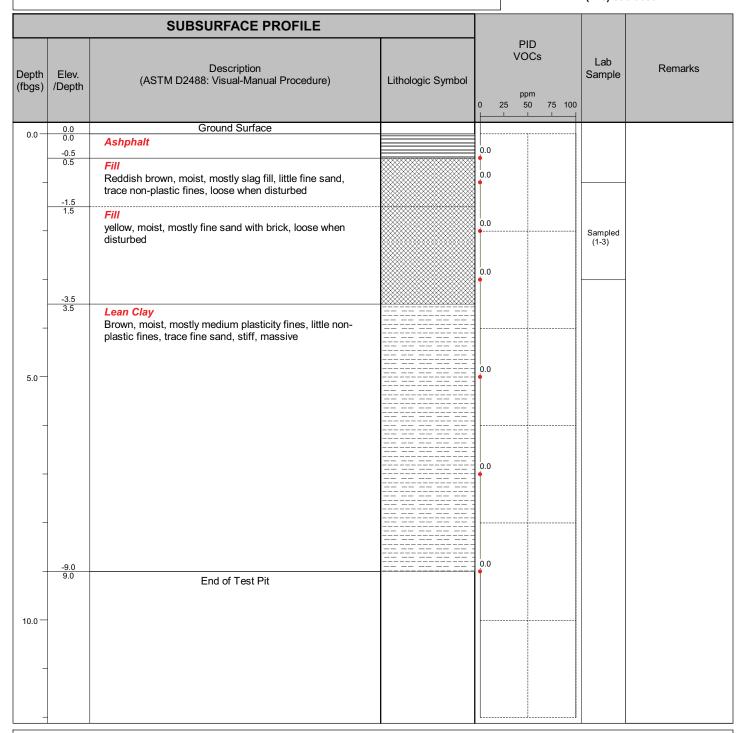
Project: 301 Ohio Street Logged By: PWW

Client: Ellicott Development Company Checked By: BCH

Site Location: 301 Ohio Strret



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



Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Depth to Water: none
Width: 2.5' Visual Impacts: none
Depth: 9.0 fbgs Olfactory Observations: none

Project No: 0136-013-004 **Test Pit I.D.:** TP-05

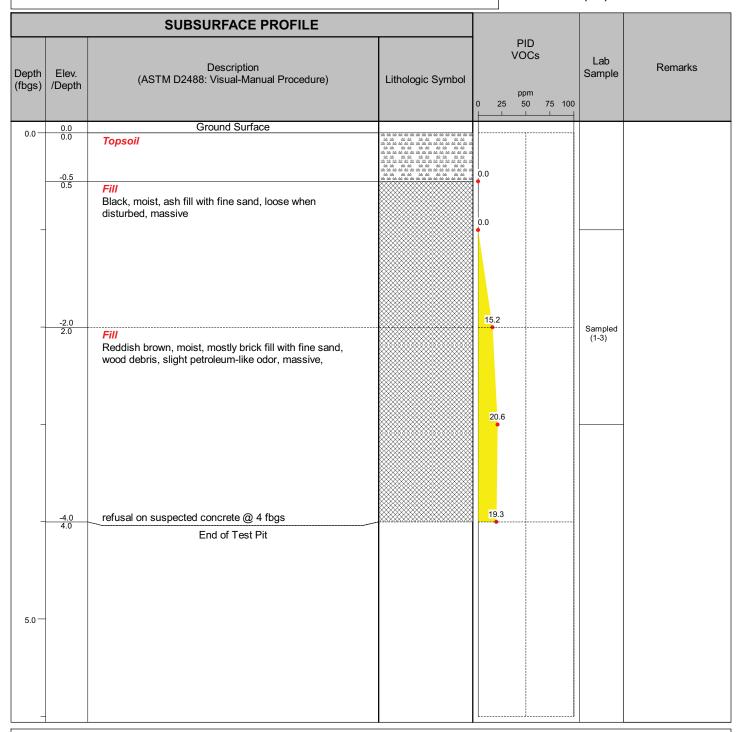
Project: 301 Ohio Street Logged By: PWW

Client: Ellicott Development Company Checked By: BCH

Site Location: 301 Ohio Strret



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



Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Depth to Water: none Width: 2.5' Visual Impacts: none

Depth: 4.0 fbgs Olfactory Observations: slight petroleum-like odor

Project No: 0136-013-004 **Test Pit I.D.:** TP-06

Project: 301 Ohio Street Logged By: PWW

Client: Ellicott Development Company Checked By: BCH

Site Location: 301 Ohio Strret



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

	SUBSURFACE PROFILE										
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Lithologic Symbol	0	ppm				5 10	Lab Sample	Remarks
0.0	0.0	Ground Surface	****	<u></u>						1	
	-0.5	Topsoil	200 200 <td>0.0</td> <td>)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	0.0)						
_	0.5	Fill Reddish brown, moist, mostly brick fill with fine sand, wood debris, refusal on concrete floor @ 4', massive, slight petroleum-like odor		0.0						Sampled (0.5-2')	
-	-2.0 2.0	Lean Clay		•						l	-
_		Brown, moist to wet (7'), mostly medium plasticity fines, little fine sand, stiff, massive		0.0							
5.0				0.0							s6q,
_				0.0)						or DTW = 7 fbgs
	-9.0			0.0)						
	9.0	End of Test Pit									
10.0 —											

Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Depth to Water: 7.0 fbgs Width: 2.5' Visual Impacts: none Depth: 9.0 fbgs Olfactory Observations:

Olfactory Observations: slightly petroleum-like odor

TEST PIT EXCAVATION LOG

Project No: 0136-013-004 **Test Pit I.D.:** TP-07

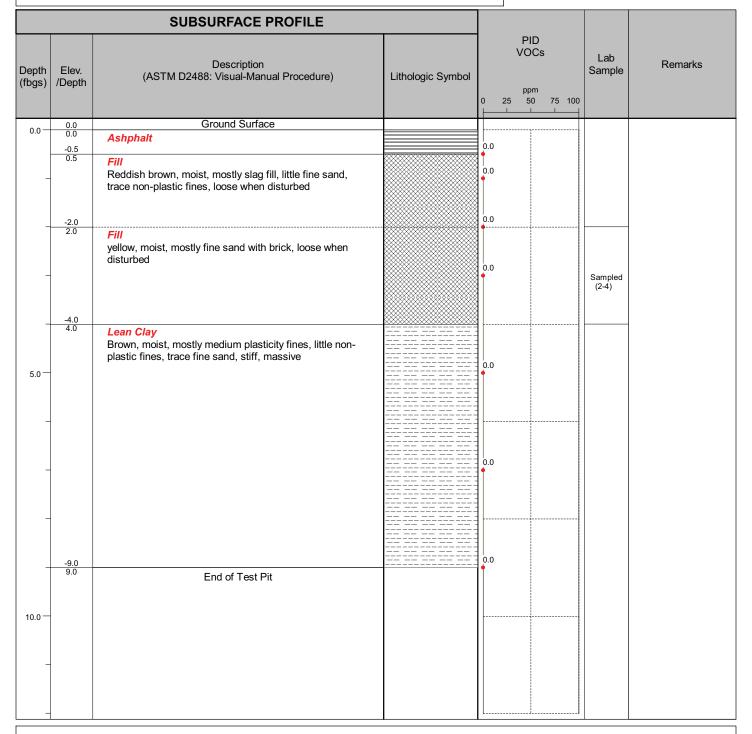
Project: 301 Ohio Street Logged By: PWW

Client: Ellicott Development Company Checked By: BCH

Site Location: 301 Ohio Strret



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



Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Dept Width: 2.5' Visu Depth: 9.0 fbgs Olfac

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

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: 0136-013-004 **Test Pit I.D.:** TP-08

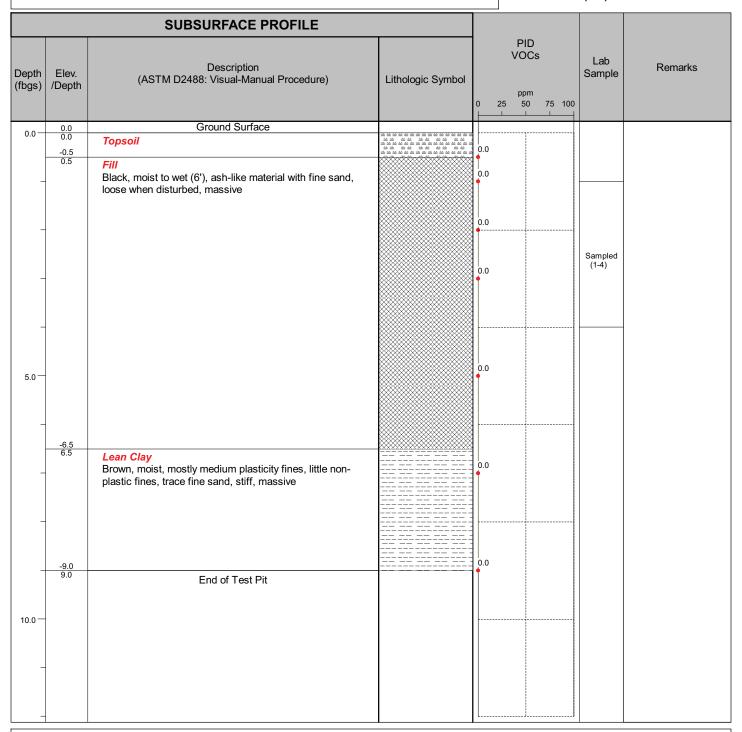
Project: 301 Ohio Street Logged By: PWW

Client: Ellicott Development Company Checked By: BCH

Site Location: 301 Ohio Strret



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



Excavated By: Turnkey Environmental Restoration Excavator Type: Bobcat Excavator ZHS

Excavation Date(s): 10-15-13

Comments:

Length: 6.0' Width: 2.5' Depth: 9.0 fbgs Depth to Water: none Visual Impacts: none Olfactory Observations: none

Sheet: 1 of 1

APPENDIX B

LABORATORY ANALYTICAL DATA SUMMARY PACKAGE





ANALYTICAL REPORT

Lab Number: L1320788

Client: Benchmark & Turnkey Companies

2558 Hamburg Turnpike

Suite 300

Buffalo, NY 14218

ATTN: Mike Lesakowski Phone: (716) 856-0599

Project Name: 301 OHIO ST

Project Number: 0136-013-004

Report Date: 10/23/13

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

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

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



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1320788-01	TP-02 (1-3)	301 OHIO ST	10/15/13 11:45
L1320788-02	TP-03 (1-3)	301 OHIO ST	10/15/13 14:15
L1320788-03	TP-04 (1-3)	301 OHIO ST	10/15/13 14:30
L1320788-04	TP-05 (2-4)	301 OHIO ST	10/15/13 14:45
L1320788-05	TP-06 (0-2)	301 OHIO ST	10/15/13 15:10
L1320788-06	TP-07 (2-4)	301 OHIO ST	10/15/13 15:35



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

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 all of the requirements of NELAC, for all NELAC accredited parameters. 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. 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. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for 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 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.

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



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Case Narrative (continued)

Report Submission

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

Volatile Organics

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

Semivolatile Organics

L1320788-01, -04, -05 and -06 have elevated detection limits due to the dilutions required by the sample matrices.

Metals

The CCV recovery associated with WG645024-1 was above the acceptance criteria for silver. Any associated samples with positive detections were re-analyzed under a passing CCV. The samples that were non-detect for this element are reporting results from the original analyses.

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.

Michelle M. Morris

Authorized Signature:

Title: Technical Director/Representative

Date: 10/23/13



ORGANICS



VOLATILES



Project Name: 301 OHIO ST Lab Number: L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-01 Date Collected: 10/15/13 11:45

Client ID: TP-02 (1-3)
Sample Location: 301 OHIO ST

Matrix: Soil Analytical Method: 1,8260C

Analytical Date: 10/22/13 05:48

Analyst: PP Percent Solids: 83% Date Received: 10/16/13

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Wes	tborough Lab					
Methylene chloride	3.9	J	ug/kg	12	2.4	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.21	1
Chloroform	ND		ug/kg	1.8	0.45	1
Carbon tetrachloride	ND		ug/kg	1.2	0.25	1
1,2-Dichloropropane	ND		ug/kg	4.2	0.28	1
Dibromochloromethane	ND		ug/kg	1.2	0.37	1
1,1,2-Trichloroethane	ND		ug/kg	1.8	0.37	1
Tetrachloroethene	ND		ug/kg	1.2	0.17	1
Chlorobenzene	ND		ug/kg	1.2	0.42	1
Trichlorofluoromethane	ND		ug/kg	6.0	0.15	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.18	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.28	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
Bromoform	ND		ug/kg	4.8	0.50	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.20	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.13	1
Ethylbenzene	ND		ug/kg	1.2	0.18	1
Chloromethane	ND		ug/kg	6.0	0.94	1
Bromomethane	ND		ug/kg	2.4	0.41	1
Vinyl chloride	ND		ug/kg	2.4	0.17	1
Chloroethane	ND		ug/kg	2.4	0.38	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.25	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.25	1
Trichloroethene	ND		ug/kg	1.2	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
1,3-Dichlorobenzene	ND		ug/kg	6.0	0.22	1
1,4-Dichlorobenzene	ND		ug/kg	6.0	0.29	1
Methyl tert butyl ether	ND		ug/kg	2.4	0.12	1



Project Name: 301 OHIO ST **Lab Number:** L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-01 Date Collected: 10/15/13 11:45

Client ID: TP-02 (1-3) Date Received: 10/16/13
Sample Location: 301 OHIO ST Field Prep: Not Specified

Parameter	Result	Qualifier Unit	s RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborou	gh Lab				
p/m-Xylene	ND	ug/ko	2.4	0.39	1
o-Xylene	ND	ug/kg	2.4	0.33	1
cis-1,2-Dichloroethene	ND	ug/kg	1.2	0.18	1
Styrene	ND	ug/ko	2.4	0.37	1
Dichlorodifluoromethane	ND	ug/ko	12	0.26	1
Acetone	ND	ug/ko	12	3.7	1
Carbon disulfide	ND	ug/ko	12	2.4	1
2-Butanone	ND	ug/ko	12	0.43	1
4-Methyl-2-pentanone	ND	ug/ko	12	0.29	1
2-Hexanone	ND	ug/kg	12	0.23	1
Bromochloromethane	ND	ug/kg	6.0	0.24	1
1,2-Dibromoethane	ND	ug/kg	4.8	0.21	1
n-Butylbenzene	ND	ug/kg	1.2	0.24	1
sec-Butylbenzene	ND	ug/kg	1.2	0.25	1
tert-Butylbenzene	ND	ug/ko	6.0	0.68	1
1,2-Dibromo-3-chloropropane	ND	ug/ko	6.0	0.95	1
Isopropylbenzene	ND	ug/kg	1.2	0.20	1
p-Isopropyltoluene	ND	ug/kg	1.2	0.23	1
Naphthalene	ND	ug/kg	6.0	0.93	1
n-Propylbenzene	ND	ug/ko	1.2	0.15	1
1,2,3-Trichlorobenzene	ND	ug/kg	6.0	0.20	1
1,2,4-Trichlorobenzene	ND	ug/ko	6.0	0.95	1
1,3,5-Trimethylbenzene	ND	ug/ko	6.0	0.17	1
1,2,4-Trimethylbenzene	ND	ug/ko	6.0	0.69	1
Methyl Acetate	ND	ug/ko	24	0.92	1
Cyclohexane	ND	ug/kç	24	1.3	1
1,4-Dioxane	ND	ug/ko	120	21.	1
Freon-113	ND	ug/ko	24	0.33	1
Methyl cyclohexane	ND	ug/kg	4.8	1.5	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
1,2-Dichloroethane-d4	101		70-130	
Toluene-d8	97		70-130	
4-Bromofluorobenzene	106		70-130	
Dibromofluoromethane	101		70-130	



10/16/13

Not Specified

Project Name: 301 OHIO ST **Lab Number:** L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: Date Collected: 10/15/13 14:45

Client ID: TP-05 (2-4) Date Received: Sample Location: 301 OHIO ST Field Prep:

Matrix: Soil
Analytical Method: 1,8260C

Analytical Date: 10/22/13 06:16

Analyst: PP Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westboro	ugh Lab					
Methylene chloride	ND		ug/kg	12	2.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.20	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	0.36	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	ND		ug/kg	1.2	0.16	1
Chlorobenzene	ND		ug/kg	1.2	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.8	0.14	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.17	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.13	1
Bromodichloromethane	ND		ug/kg	1.2	0.26	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
Bromoform	ND		ug/kg	4.6	0.48	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.20	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.7	0.13	1
Ethylbenzene	ND		ug/kg	1.2	0.17	1
Chloromethane	ND		ug/kg	5.8	0.90	1
Bromomethane	ND		ug/kg	2.3	0.39	1
Vinyl chloride	ND		ug/kg	2.3	0.16	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.24	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	ND		ug/kg	1.2	0.18	1
1,2-Dichlorobenzene	ND		ug/kg	5.8	0.21	1
1,3-Dichlorobenzene	ND		ug/kg	5.8	0.21	1
1,4-Dichlorobenzene	ND		ug/kg	5.8	0.28	1
Methyl tert butyl ether	ND		ug/kg	2.3	0.12	1



Project Name: 301 OHIO ST **Lab Number:** L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: Date Collected: 10/15/13 14:45

Client ID: TP-05 (2-4) Date Received: 10/16/13
Sample Location: 301 OHIO ST Field Prep: Not Specified

•					-	•
Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westb	orough Lab					
p/m-Xylene	ND		ug/kg	2.3	0.37	1
o-Xylene	ND		ug/kg	2.3	0.31	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.3	0.36	1
Dichlorodifluoromethane	ND		ug/kg	12	0.25	1
Acetone	ND		ug/kg	12	3.6	1
Carbon disulfide	ND		ug/kg	12	2.3	1
2-Butanone	ND		ug/kg	12	0.41	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.28	1
2-Hexanone	ND		ug/kg	12	0.22	1
Bromochloromethane	ND		ug/kg	5.8	0.23	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	ND		ug/kg	1.2	0.23	1
sec-Butylbenzene	ND		ug/kg	1.2	0.24	1
tert-Butylbenzene	ND		ug/kg	5.8	0.65	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.8	0.91	1
Isopropylbenzene	ND		ug/kg	1.2	0.19	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.22	1
Naphthalene	ND		ug/kg	5.8	0.89	1
n-Propylbenzene	ND		ug/kg	1.2	0.14	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.8	0.19	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.8	0.91	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.8	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.8	0.66	1
Methyl Acetate	ND		ug/kg	23	0.88	1
Cyclohexane	ND		ug/kg	23	1.2	1
1,4-Dioxane	ND		ug/kg	120	20.	1
Freon-113	ND		ug/kg	23	0.32	1
Methyl cyclohexane	ND		ug/kg	4.6	1.4	1

Surrogate	% Recovery	Acceptance Qualifier Criteria	
1,2-Dichloroethane-d4	99	70-130	
Toluene-d8	98	70-130	
4-Bromofluorobenzene	103	70-130	
Dibromofluoromethane	100	70-130	



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 10/21/13 21:51

Analyst: PP

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough La	b for sample(s): 01,	04 Batch:	WG645907-3
Methylene chloride	ND	ug/kg	10	2.0
1,1-Dichloroethane	ND	ug/kg	1.5	0.18
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	0.31
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	0.12
1,2-Dichloroethane	ND	ug/kg	1.0	0.15
1,1,1-Trichloroethane	ND	ug/kg	1.0	0.11
Bromodichloromethane	ND	ug/kg	1.0	0.23
trans-1,3-Dichloropropene	ND	ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND	ug/kg	1.0	0.13
Bromoform	ND	ug/kg	4.0	0.41
1,1,2,2-Tetrachloroethane	ND	ug/kg	1.0	0.17
Benzene	ND	ug/kg	1.0	0.12
Toluene	ND	ug/kg	1.5	0.11
Ethylbenzene	ND	ug/kg	1.0	0.15
Chloromethane	ND	ug/kg	5.0	0.78
Bromomethane	ND	ug/kg	2.0	0.34
Vinyl chloride	ND	ug/kg	2.0	0.14
Chloroethane	ND	ug/kg	2.0	0.32
1,1-Dichloroethene	ND	ug/kg	1.0	0.20
trans-1,2-Dichloroethene	ND	ug/kg	1.5	0.21
Trichloroethene	ND	ug/kg	1.0	0.15
1,2-Dichlorobenzene	ND	ug/kg	5.0	0.18
1,3-Dichlorobenzene	ND	ug/kg	5.0	0.18
1,4-Dichlorobenzene	ND	ug/kg	5.0	0.24
Methyl tert butyl ether	ND	ug/kg	2.0	0.10



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 10/21/13 21:51

Analyst: PP

arameter	Result	Qualifier Units	RL	MDL
olatile Organics by GC/MS	- Westborough La	b for sample(s): 0	1,04 Batch:	WG645907-3
p/m-Xylene	ND	ug/kg	2.0	0.32
o-Xylene	ND	ug/kg	2.0	0.27
cis-1,2-Dichloroethene	ND	ug/kg	1.0	0.15
Styrene	ND	ug/kg	2.0	0.31
Dichlorodifluoromethane	ND	ug/kg	10	0.22
Acetone	ND	ug/kg	10	3.1
Carbon disulfide	ND	ug/kg	10	2.0
2-Butanone	ND	ug/kg	10	0.36
4-Methyl-2-pentanone	ND	ug/kg	10	0.24
2-Hexanone	ND	ug/kg	10	0.19
Bromochloromethane	ND	ug/kg	5.0	0.20
1,2-Dibromoethane	ND	ug/kg	4.0	0.18
n-Butylbenzene	ND	ug/kg	1.0	0.20
sec-Butylbenzene	ND	ug/kg	1.0	0.20
tert-Butylbenzene	ND	ug/kg	5.0	0.56
1,2-Dibromo-3-chloropropane	ND	ug/kg	5.0	0.79
Isopropylbenzene	ND	ug/kg	1.0	0.17
p-Isopropyltoluene	ND	ug/kg	1.0	0.19
Naphthalene	ND	ug/kg	5.0	0.77
n-Propylbenzene	ND	ug/kg	1.0	0.12
1,2,3-Trichlorobenzene	ND	ug/kg	5.0	0.17
1,2,4-Trichlorobenzene	ND	ug/kg	5.0	0.79
1,3,5-Trimethylbenzene	ND	ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND	ug/kg	5.0	0.57
Methyl Acetate	ND	ug/kg	20	0.76
Cyclohexane	ND	ug/kg	20	1.1
1,4-Dioxane	ND	ug/kg	100	17.
Freon-113	ND	ug/kg	20	0.27
Methyl cyclohexane	ND	ug/kg	4.0	1.3



Project Name: 301 OHIO ST Lab Number: L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C Analytical Date: 10/21/13 21:51

Analyst: PP

Parameter Result Qualifier Units RL MDL

Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04 Batch: WG645907-3

		Acceptance		
Surrogate	%Recovery	Qualifier	Criteria	
1,2-Dichloroethane-d4	107		70-130	
Toluene-d8	96		70-130	
4-Bromofluorobenzene	99		70-130	
Dibromofluoromethane	105		70-130	



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough I	Lab Associated	sample(s):	01,04 Batch:	WG645907-1	WG645907-2			
Methylene chloride	110		106		70-130	4		30
1,1-Dichloroethane	111		108		70-130	3		30
Chloroform	116		113		70-130	3		30
Carbon tetrachloride	127		123		70-130	3		30
1,2-Dichloropropane	107		105		70-130	2		30
Dibromochloromethane	107		104		70-130	3		30
1,1,2-Trichloroethane	102		100		70-130	2		30
Tetrachloroethene	108		106		70-130	2		30
Chlorobenzene	104		102		70-130	2		30
Trichlorofluoromethane	122		121		70-139	1		30
1,2-Dichloroethane	117		114		70-130	3		30
1,1,1-Trichloroethane	121		118		70-130	3		30
Bromodichloromethane	113		110		70-130	3		30
trans-1,3-Dichloropropene	106		103		70-130	3		30
cis-1,3-Dichloropropene	108		107		70-130	1		30
1,1-Dichloropropene	111		110		70-130	1		30
Bromoform	102		100		70-130	2		30
1,1,2,2-Tetrachloroethane	95		92		70-130	3		30
Benzene	109		106		70-130	3		30
Toluene	100		98		70-130	2		30
Ethylbenzene	105		102		70-130	3		30



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Parameter	LCS %Recovery	Qual	LCSD %Recovery	' Qual	%Recovery Limits	RPD	RPD Qual Limits	
Volatile Organics by GC/MS - Westborough I	_ab Associated	sample(s):	01,04 Batch:	WG645907-1	WG645907-2			
Chloromethane	134	Q	132	Q	52-130	2	30	
Bromomethane	133		115		57-147	15	30	
Vinyl chloride	126		128		67-130	2	30	
Chloroethane	122		120		50-151	2	30	
1,1-Dichloroethene	111		109		65-135	2	30	
trans-1,2-Dichloroethene	111		108		70-130	3	30	
Trichloroethene	115		110		70-130	4	30	
1,2-Dichlorobenzene	103		100		70-130	3	30	
1,3-Dichlorobenzene	102		101		70-130	1	30	
1,4-Dichlorobenzene	102		101		70-130	1	30	
Methyl tert butyl ether	109		108		66-130	1	30	
p/m-Xylene	108		105		70-130	3	30	
o-Xylene	108		106		70-130	2	30	
cis-1,2-Dichloroethene	110		108		70-130	2	30	
Dibromomethane	114		111		70-130	3	30	
Styrene	110		107		70-130	3	30	
Dichlorodifluoromethane	126		115		30-146	9	30	
Acetone	106		83		54-140	24	30	
Carbon disulfide	103		100		59-130	3	30	
2-Butanone	101		90		70-130	12	30	
Vinyl acetate	106		105		70-130	1	30	



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Parameter	LCS %Recovery	Qual		LCSD ecovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough L	ab Associated	sample(s):	01,04	Batch:	WG645907-1	WG645907-2			
4-Methyl-2-pentanone	102			100		70-130	2		30
1,2,3-Trichloropropane	100			91		68-130	9		30
2-Hexanone	89			83		70-130	7		30
Bromochloromethane	115			112		70-130	3		30
2,2-Dichloropropane	121			117		70-130	3		30
1,2-Dibromoethane	103			101		70-130	2		30
1,3-Dichloropropane	100			98		69-130	2		30
1,1,1,2-Tetrachloroethane	108			106		70-130	2		30
Bromobenzene	98			98		70-130	0		30
n-Butylbenzene	105			102		70-130	3		30
sec-Butylbenzene	103			102		70-130	1		30
tert-Butylbenzene	104			102		70-130	2		30
o-Chlorotoluene	101			91		70-130	10		30
p-Chlorotoluene	101			100		70-130	1		30
1,2-Dibromo-3-chloropropane	109			103		68-130	6		30
Hexachlorobutadiene	106			103		67-130	3		30
Isopropylbenzene	101			100		70-130	1		30
p-Isopropyltoluene	106			104		70-130	2		30
Naphthalene	97			96		70-130	1		30
Acrylonitrile	109			100		70-130	9		30
Isopropyl Ether	103			103		66-130	0		30



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Parameter	LCS %Recovery	Qual	LCSD %Recovery	' Qual	%Recovery Limits	RPD	RPD Qual Limits	
Volatile Organics by GC/MS - Westborough	Lab Associated	sample(s):	01,04 Batch:	WG645907-1	WG645907-2			
tert-Butyl Alcohol	106		98		70-130	8	30	
n-Propylbenzene	100		98		70-130	2	30	
1,2,3-Trichlorobenzene	100		98		70-130	2	30	
1,2,4-Trichlorobenzene	103		99		70-130	4	30	
1,3,5-Trimethylbenzene	105		103		70-130	2	30	
1,2,4-Trimethylbenzene	106		104		70-130	2	30	
Methyl Acetate	103		98		51-146	5	30	
Ethyl Acetate	102		98		70-130	4	30	
Acrolein	104		101		70-130	3	30	
Cyclohexane	107		106		59-142	1	30	
1,4-Dioxane	90		82		65-136	9	30	
Freon-113	114		111		50-139	3	30	
1,4-Diethylbenzene	106		104		70-130	2	30	
4-Ethyltoluene	102		101		70-130	1	30	
1,2,4,5-Tetramethylbenzene	107		105		70-130	2	30	
Tetrahydrofuran	96		94		66-130	2	30	
Ethyl ether	132	Q	134	Q	67-130	2	30	
trans-1,4-Dichloro-2-butene	106		101		70-130	5	30	
Methyl cyclohexane	108		105		70-130	3	30	
Ethyl-Tert-Butyl-Ether	109		109		70-130	0	30	
Tertiary-Amyl Methyl Ether	109		107		70-130	2	30	



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number:

L1320788

Report Date:

10/23/13

	LCS		LCSD		%Recovery			RPD
Parameter	%Recovery	Qual	%Recovery	Qual	Limits	RPD	Qual	Limits

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 Batch: WG645907-1 WG645907-2

	LCS	LCS			Acceptance Criteria	
Surrogate	%Recovery	Qual	%Recovery Qual			
1,2-Dichloroethane-d4	110		107		70-130	
Toluene-d8	97		96		70-130	
4-Bromofluorobenzene	95		96		70-130	
Dibromofluoromethane	107		105		70-130	



SEMIVOLATILES



10/16/13

EPA 3546

Not Specified

10/17/13 17:34

Date Received:

Extraction Date:

Extraction Method:

Field Prep:

Project Name: 301 OHIO ST Lab Number: L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-01 D Date Collected: 10/15/13 11:45

Client ID: TP-02 (1-3)
Sample Location: 301 OHIO ST

Matrix: Soil Analytical Method: 1,8270D

Analytical Date: 10/23/13 09:38

Analyst: RC Percent Solids: 83%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	stborough Lab					
Acenaphthene	ND		ug/kg	1600	410	10
2-Chloronaphthalene	ND		ug/kg	2000	650	10
Fluoranthene	4500		ug/kg	1200	370	10
Naphthalene	1500	J	ug/kg	2000	660	10
Benzo(a)anthracene	2700		ug/kg	1200	390	10
Benzo(a)pyrene	2800		ug/kg	1600	490	10
Benzo(b)fluoranthene	4700		ug/kg	1200	400	10
Benzo(k)fluoranthene	1800		ug/kg	1200	380	10
Chrysene	3000		ug/kg	1200	390	10
Acenaphthylene	1900		ug/kg	1600	370	10
Anthracene	1000	J	ug/kg	1200	330	10
Benzo(ghi)perylene	2800		ug/kg	1600	410	10
Fluorene	ND		ug/kg	2000	570	10
Phenanthrene	2400		ug/kg	1200	390	10
Dibenzo(a,h)anthracene	720	J	ug/kg	1200	390	10
Indeno(1,2,3-cd)pyrene	3200		ug/kg	1600	440	10
Pyrene	3400		ug/kg	1200	390	10
2-Methylnaphthalene	ND		ug/kg	2400	640	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	70		23-120	
2-Fluorobiphenyl	91		30-120	
4-Terphenyl-d14	81		18-120	



Project Name: 301 OHIO ST Lab Number: L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: Date Collected: 10/15/13 14:15

Client ID: TP-03 (1-3) Date Received: 10/16/13
Sample Location: 301 OHIO ST Field Prep: Not Specified
Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8270D Extraction Date: 10/17/13 17:34
Analytical Date: 10/23/13 10:06

Analyst: RC Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - We	stborough Lab					
Acenaphthene	ND		ug/kg	190	48.	1
2-Chloronaphthalene	ND		ug/kg	230	76.	1
Fluoranthene	290		ug/kg	140	43.	1
Naphthalene	570		ug/kg	230	78.	1
Benzo(a)anthracene	130	J	ug/kg	140	46.	1
Benzo(a)pyrene	92	J	ug/kg	190	57.	1
Benzo(b)fluoranthene	240		ug/kg	140	47.	1
Benzo(k)fluoranthene	69	J	ug/kg	140	45.	1
Chrysene	240		ug/kg	140	46.	1
Acenaphthylene	ND		ug/kg	190	44.	1
Anthracene	78	J	ug/kg	140	39.	1
Benzo(ghi)perylene	99	J	ug/kg	190	49.	1
Fluorene	ND		ug/kg	230	67.	1
Phenanthrene	700		ug/kg	140	46.	1
Dibenzo(a,h)anthracene	ND		ug/kg	140	45.	1
Indeno(1,2,3-cd)pyrene	91	J	ug/kg	190	52.	1
Pyrene	220		ug/kg	140	46.	1
2-Methylnaphthalene	520		ug/kg	280	75.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	62		23-120	
2-Fluorobiphenyl	73		30-120	
4-Terphenyl-d14	65		18-120	



Project Name: 301 OHIO ST Lab Number: L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-03 Date Collected: 10/15/13 14:30

Client ID: TP-04 (1-3) Date Received: 10/16/13
Sample Location: 301 OHIO ST Field Prep: Not Specified
Matrix: Soil Extraction Method: EPA 3546

Analytical Method: 1,8270D Extraction Date: 10/17/13 17:34
Analytical Date: 10/23/13 10:34

Analytical Date: 10/23/13 10:34
Analyst: RC
Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	
Semivolatile Organics by GC/MS - V	Vestborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1	
2-Chloronaphthalene	ND		ug/kg	180	60.	1	
Fluoranthene	540		ug/kg	110	34.	1	
Naphthalene	64	J	ug/kg	180	61.	1	
Benzo(a)anthracene	290		ug/kg	110	36.	1	
Benzo(a)pyrene	260		ug/kg	150	45.	1	
Benzo(b)fluoranthene	380		ug/kg	110	37.	1	
Benzo(k)fluoranthene	120		ug/kg	110	35.	1	
Chrysene	350		ug/kg	110	36.	1	
Acenaphthylene	39	J	ug/kg	150	34.	1	
Anthracene	67	J	ug/kg	110	30.	1	
Benzo(ghi)perylene	190		ug/kg	150	38.	1	
Fluorene	ND		ug/kg	180	52.	1	
Phenanthrene	380		ug/kg	110	36.	1	
Dibenzo(a,h)anthracene	49	J	ug/kg	110	35.	1	
Indeno(1,2,3-cd)pyrene	190		ug/kg	150	41.	1	
Pyrene	450		ug/kg	110	36.	1	
2-Methylnaphthalene	72	J	ug/kg	220	58.	1	

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	74		23-120	
2-Fluorobiphenyl	89		30-120	
4-Terphenyl-d14	91		18-120	



10/16/13

EPA 3546

Not Specified

10/17/13 17:34

Date Received:

Field Prep:

Project Name: 301 OHIO ST Lab Number: L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-04 D Date Collected: 10/15/13 14:45

Client ID: TP-05 (2-4)
Sample Location: 301 OHIO ST

Matrix:SoilExtraction Method:Analytical Method:1,8270DExtraction Date:Analytical Date:10/23/13 11:03

Analyst: RC Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS	- Westborough Lab					
Acenaphthene	ND		ug/kg	1500	390	10
2-Chloronaphthalene	ND		ug/kg	1900	620	10
Fluoranthene	19000		ug/kg	1100	350	10
Naphthalene	ND		ug/kg	1900	630	10
Benzo(a)anthracene	7800		ug/kg	1100	370	10
Benzo(a)pyrene	7400		ug/kg	1500	470	10
Benzo(b)fluoranthene	9900		ug/kg	1100	380	10
Benzo(k)fluoranthene	4100		ug/kg	1100	360	10
Chrysene	7900		ug/kg	1100	380	10
Acenaphthylene	930	J	ug/kg	1500	360	10
Anthracene	1800		ug/kg	1100	320	10
Benzo(ghi)perylene	4700		ug/kg	1500	400	10
Fluorene	ND		ug/kg	1900	550	10
Phenanthrene	7500		ug/kg	1100	370	10
Dibenzo(a,h)anthracene	1100		ug/kg	1100	370	10
Indeno(1,2,3-cd)pyrene	5300		ug/kg	1500	420	10
Pyrene	16000		ug/kg	1100	370	10
2-Methylnaphthalene	ND		ug/kg	2300	610	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	65		23-120	
2-Fluorobiphenyl	80		30-120	
4-Terphenyl-d14	77		18-120	



Project Name: Lab Number: 301 OHIO ST L1320788

Project Number: Report Date: 0136-013-004 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-05 D Date Collected: 10/15/13 15:10

Client ID: TP-06 (0-2) Date Received: 10/16/13 301 OHIO ST Sample Location: Field Prep:

Not Specified Soil **Extraction Method:** EPA 3546 Matrix: Analytical Method: 1,8270D **Extraction Date:** 10/17/13 17:34 Analytical Date: 10/23/13 11:31

Analyst: RC 89% Percent Solids:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	estborough Lab					
Acenaphthene	ND		ug/kg	300	77.	2
2-Chloronaphthalene	ND		ug/kg	370	120	2
Fluoranthene	610		ug/kg	220	68.	2
Naphthalene	ND		ug/kg	370	120	2
Benzo(a)anthracene	380		ug/kg	220	73.	2
Benzo(a)pyrene	500		ug/kg	300	91.	2
Benzo(b)fluoranthene	540		ug/kg	220	75.	2
Benzo(k)fluoranthene	190	J	ug/kg	220	71.	2
Chrysene	410		ug/kg	220	73.	2
Acenaphthylene	85	J	ug/kg	300	70.	2
Anthracene	140	J	ug/kg	220	62.	2
Benzo(ghi)perylene	540		ug/kg	300	78.	2
Fluorene	ND		ug/kg	370	110	2
Phenanthrene	410		ug/kg	220	73.	2
Dibenzo(a,h)anthracene	120	J	ug/kg	220	72.	2
Indeno(1,2,3-cd)pyrene	440		ug/kg	300	83.	2
Pyrene	590		ug/kg	220	72.	2
2-Methylnaphthalene	ND		ug/kg	450	120	2

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	51		23-120	
2-Fluorobiphenyl	70		30-120	
4-Terphenyl-d14	68		18-120	



10/16/13

Not Specified

Project Name: 301 OHIO ST Lab Number: L1320788

Project Number: 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-06 D Date Collected: 10/15/13 15:35

Client ID: TP-07 (2-4) Date Received:
Sample Location: 301 OHIO ST Field Prep:

Matrix: Soil Extraction Method:

Matrix: Soil Extraction Method: EPA 3546
Analytical Method: 1,8270D Extraction Date: 10/17/13 17:34
Analytical Date: 10/23/13 11:59

Analyst: RC Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - W	Vestborough Lab					
Acenaphthene	ND		ug/kg	1500	390	10
2-Chloronaphthalene	ND		ug/kg	1900	620	10
Fluoranthene	ND		ug/kg	1100	350	10
Naphthalene	ND		ug/kg	1900	630	10
Benzo(a)anthracene	ND		ug/kg	1100	370	10
Benzo(a)pyrene	ND		ug/kg	1500	470	10
Benzo(b)fluoranthene	ND		ug/kg	1100	380	10
Benzo(k)fluoranthene	ND		ug/kg	1100	360	10
Chrysene	ND		ug/kg	1100	380	10
Acenaphthylene	ND		ug/kg	1500	360	10
Anthracene	ND		ug/kg	1100	320	10
Benzo(ghi)perylene	ND		ug/kg	1500	400	10
Fluorene	ND		ug/kg	1900	550	10
Phenanthrene	ND		ug/kg	1100	370	10
Dibenzo(a,h)anthracene	ND		ug/kg	1100	370	10
Indeno(1,2,3-cd)pyrene	ND		ug/kg	1500	420	10
Pyrene	ND		ug/kg	1100	370	10
2-Methylnaphthalene	ND		ug/kg	2300	610	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria	
Nitrobenzene-d5	83		23-120	
2-Fluorobiphenyl	93		30-120	
4-Terphenyl-d14	81		18-120	



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 1,8270D 10/23/13 09:37

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 10/17/13 17:34

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	01-06	Batch:	WG644882-1
Acenaphthene	ND		ug/kg	130		34.
Hexachlorobenzene	ND		ug/kg	98		30.
Bis(2-chloroethyl)ether	ND		ug/kg	150		46.
2-Chloronaphthalene	ND		ug/kg	160		53.
3,3'-Dichlorobenzidine	ND		ug/kg	160		43.
2,4-Dinitrotoluene	ND		ug/kg	160		35.
2,6-Dinitrotoluene	ND		ug/kg	160		42.
Fluoranthene	ND		ug/kg	98		30.
4-Chlorophenyl phenyl ether	ND		ug/kg	160		50.
4-Bromophenyl phenyl ether	ND		ug/kg	160		38.
Bis(2-chloroisopropyl)ether	ND		ug/kg	200		58.
Bis(2-chloroethoxy)methane	ND		ug/kg	180		49.
Hexachlorobutadiene	ND		ug/kg	160		46.
Hexachlorocyclopentadiene	ND		ug/kg	470		100
Hexachloroethane	ND		ug/kg	130		30.
Isophorone	ND		ug/kg	150		43.
Naphthalene	ND		ug/kg	160		54.
Nitrobenzene	ND		ug/kg	150		39.
NDPA/DPA	ND		ug/kg	130		34.
n-Nitrosodi-n-propylamine	ND		ug/kg	160		49.
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160		43.
Butyl benzyl phthalate	ND		ug/kg	160		32.
Di-n-butylphthalate	ND		ug/kg	160		32.
Di-n-octylphthalate	ND		ug/kg	160		40.
Diethyl phthalate	ND		ug/kg	160		34.
Dimethyl phthalate	ND		ug/kg	160		42.
Benzo(a)anthracene	ND		ug/kg	98		32.
Benzo(a)pyrene	ND		ug/kg	130		40.
Benzo(b)fluoranthene	ND		ug/kg	98		33.
Benzo(k)fluoranthene	ND		ug/kg	98		31.
Chrysene	ND		ug/kg	98		32.



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D Analytical Date: 1,8270D 10/23/13 09:37

Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 10/17/13 17:34

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS	6 - Westborough	Lab for s	ample(s):	01-06	Batch:	WG644882-1
Acenaphthylene	ND		ug/kg	130		30.
Anthracene	ND		ug/kg	98		27.
Benzo(ghi)perylene	ND		ug/kg	130		34.
Fluorene	ND		ug/kg	160		47.
Phenanthrene	ND		ug/kg	98		32.
Dibenzo(a,h)anthracene	ND		ug/kg	98		32.
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130		36.
Pyrene	ND		ug/kg	98		32.
Biphenyl	ND		ug/kg	370		54.
4-Chloroaniline	ND		ug/kg	160		43.
2-Nitroaniline	ND		ug/kg	160		46.
3-Nitroaniline	ND		ug/kg	160		45.
4-Nitroaniline	ND		ug/kg	160		44.
Dibenzofuran	ND		ug/kg	160		54.
2-Methylnaphthalene	ND		ug/kg	200		52.
1,2,4,5-Tetrachlorobenzene	ND		ug/kg	160		51.
Acetophenone	ND		ug/kg	160		51.
2,4,6-Trichlorophenol	ND		ug/kg	98		31.
p-Chloro-m-cresol	ND		ug/kg	160		47.
2-Chlorophenol	ND		ug/kg	160		49.
2,4-Dichlorophenol	ND		ug/kg	150		53.
2,4-Dimethylphenol	ND		ug/kg	160		49.
2-Nitrophenol	ND		ug/kg	350		51.
4-Nitrophenol	ND		ug/kg	230		53.
2,4-Dinitrophenol	ND		ug/kg	780		220
4,6-Dinitro-o-cresol	ND		ug/kg	420		60.
Pentachlorophenol	ND		ug/kg	130		35.
Phenol	ND		ug/kg	160		48.
2-Methylphenol	ND		ug/kg	160		53.
3-Methylphenol/4-Methylphenol	ND		ug/kg	240		54.
2,4,5-Trichlorophenol	ND		ug/kg	160		53.



10/17/13 17:34

Project Name: Lab Number: 301 OHIO ST L1320788

Project Number: 0136-013-004 Report Date: 10/23/13

Method Blank Analysis Batch Quality Control

Analytical Method: Extraction Method: EPA 3546 1,8270D Analytical Date: 10/23/13 09:37 Extraction Date:

Analyst: RC

Parameter	Result	Qualifier	Units	RL		MDL
Semivolatile Organics by GC/MS -	Westborough	Lab for s	ample(s):	01-06	Batch:	WG644882-1
Carbazole	ND		ug/kg	160		35.
Benzaldehyde	ND		ug/kg	220		66.
Caprolactam	ND		ug/kg	160		45.
Atrazine	ND		ug/kg	130		37.
2,3,4,6-Tetrachlorophenol	ND		ug/kg	160		28.

	Acceptance
%Recovery	Qualifier Criteria
70	25.420
79	25-120
80	10-120
74	23-120
73	30-120
70	0-136
79	18-120
	79 80 74 73 70



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Parameter	LCS %Recovery	Qual	LCSD %Recove		Qual	%Recovery Limits	RPD	Qual	RPD Limits	
Semivolatile Organics by GC/MS - Westb	orough Lab Assoc	iated sample(s):	01-06	Batch:	WG644882	2-2 WG644882	2-3			
Acenaphthene	86		87			31-137	1		50	
1,2,4-Trichlorobenzene	71		73			38-107	3		50	
Hexachlorobenzene	83		81			40-140	2		50	
Bis(2-chloroethyl)ether	78		78			40-140	0		50	
2-Chloronaphthalene	84		87			40-140	4		50	
1,2-Dichlorobenzene	75		75			40-140	0		50	
1,3-Dichlorobenzene	74		74			40-140	0		50	
1,4-Dichlorobenzene	74		74			28-104	0		50	
3,3'-Dichlorobenzidine	66		68			40-140	3		50	
2,4-Dinitrotoluene	96	Q	97		Q	28-89	1		50	
2,6-Dinitrotoluene	93		96			40-140	3		50	
Fluoranthene	95		95			40-140	0		50	
4-Chlorophenyl phenyl ether	88		87			40-140	1		50	
4-Bromophenyl phenyl ether	84		84			40-140	0		50	
Bis(2-chloroisopropyl)ether	80		82			40-140	2		50	
Bis(2-chloroethoxy)methane	82		86			40-117	5		50	
Hexachlorobutadiene	67		68			40-140	1		50	
Hexachlorocyclopentadiene	74		75			40-140	1		50	
Hexachloroethane	72		72			40-140	0		50	
Isophorone	84		87			40-140	4		50	
Naphthalene	78		79			40-140	1		50	



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number:

L1320788

Report Date:

10/23/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	%Recovery Qual Limits	RPD	RPD Qual Limits
Semivolatile Organics by GC/MS - Westbord	ough Lab Associ	ated sample(s):	01-06 Batc	h: WG644882-2 WG644882-	3	
Nitrobenzene	80		83	40-140	4	50
NDPA/DPA	94		94		0	50
n-Nitrosodi-n-propylamine	81		85	32-121	5	50
Bis(2-ethylhexyl)phthalate	93		91	40-140	2	50
Butyl benzyl phthalate	92		96	40-140	4	50
Di-n-butylphthalate	94		93	40-140	1	50
Di-n-octylphthalate	91		91	40-140	0	50
Diethyl phthalate	92		92	40-140	0	50
Dimethyl phthalate	89		90	40-140	1	50
Benzo(a)anthracene	89		89	40-140	0	50
Benzo(a)pyrene	88		88	40-140	0	50
Benzo(b)fluoranthene	88		86	40-140	2	50
Benzo(k)fluoranthene	94		92	40-140	2	50
Chrysene	92		91	40-140	1	50
Acenaphthylene	89		92	40-140	3	50
Anthracene	95		93	40-140	2	50
Benzo(ghi)perylene	74		80	40-140	8	50
Fluorene	91		90	40-140	1	50
Phenanthrene	91		90	40-140	1	50
Dibenzo(a,h)anthracene	79		83	40-140	5	50
Indeno(1,2,3-cd)pyrene	76		80	40-140	5	50



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Parameter	LCS %Recovery	Qual	LCSD %Recov		Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westbor	rough Lab Assoc	iated sample(s):	01-06	Batch:	WG644882	2-2 WG644882	2-3		
Pyrene	94		95			35-142	1		50
Biphenyl	78		79				1		50
4-Chloroaniline	74		76			40-140	3		50
2-Nitroaniline	96		99			47-134	3		50
3-Nitroaniline	75		80			26-129	6		50
4-Nitroaniline	89		92			41-125	3		50
Dibenzofuran	88		88			40-140	0		50
2-Methylnaphthalene	78		80			40-140	3		50
1,2,4,5-Tetrachlorobenzene	70		71			40-117	1		50
Acetophenone	79		80			14-144	1		50
2,4,6-Trichlorophenol	92		96			30-130	4		50
p-Chloro-m-cresol	98		102			26-103	4		50
2-Chlorophenol	84		88			25-102	5		50
2,4-Dichlorophenol	88		90			30-130	2		50
2,4-Dimethylphenol	102		107			30-130	5		50
2-Nitrophenol	82		84			30-130	2		50
4-Nitrophenol	118	Q	122		Q	11-114	3		50
2,4-Dinitrophenol	88		94			4-130	7		50
4,6-Dinitro-o-cresol	92		95			10-130	3		50
Pentachlorophenol	81		80			17-109	1		50
Phenol	88		93		Q	26-90	6		50



Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS -	Westborough Lab Assoc	ated sample(s)	: 01-06 Bate	ch: WG644	882-2 WG644882	-3		
2-Methylphenol	90		94		30-130.	4		50
3-Methylphenol/4-Methylphenol	95		100		30-130	5		50
2,4,5-Trichlorophenol	92		94		30-130	2		50
Benzoic Acid	80		84			5		50
Benzyl Alcohol	83		88		40-140	6		50
Carbazole	94		93		54-128	1		50
Benzaldehyde	83		84			1		50
Caprolactam	108		111			3		50
Atrazine	113		114			1		50
2,3,4,6-Tetrachlorophenol	85		86			1		50

	LCS	LCSD		Acceptance		
Surrogate	%Recovery	Qual	%Recovery	Qual	Criteria	
2-Fluorophenol	88		91		25-120	
Phenol-d6	90		96		10-120	
Nitrobenzene-d5	84		87		23-120	
2-Fluorobiphenyl	87		90		30-120	
2,4,6-Tribromophenol	86		84		0-136	
4-Terphenyl-d14	85		86		18-120	



METALS



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-01
 Date Collected:
 10/15/13 11:45

 Client ID:
 TP-02 (1-3)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 Field Prep:
 Not Specified

Matrix: Soil Percent Solids: 83%

Percent Solids:	83%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Motols West	orough I	o b									
Total Metals - Westh	borough L	_ab									
Arsenic, Total	89		mg/kg	0.46	0.09	1	10/18/13 10:30	10/19/13 16:40	EPA 3050B	1,6010C	MG
Barium, Total	68		mg/kg	0.46	0.14	1	10/18/13 10:30	10/19/13 16:40	EPA 3050B	1,6010C	MG
Cadmium, Total	19		mg/kg	0.46	0.03	1	10/18/13 10:30	10/19/13 16:40	EPA 3050B	1,6010C	MG
Chromium, Total	170		mg/kg	0.46	0.09	1	10/18/13 10:30) 10/19/13 16:40	EPA 3050B	1,6010C	MG
Lead, Total	1200		mg/kg	2.3	0.09	1	10/18/13 10:30) 10/19/13 16:40	EPA 3050B	1,6010C	MG
Mercury, Total	0.14		mg/kg	0.10	0.02	1	10/23/13 10:31	10/23/13 13:58	EPA 7471B	1,7471B	MC
Selenium, Total	0.26	J	mg/kg	0.92	0.14	1	10/18/13 10:30) 10/19/13 16:40	EPA 3050B	1,6010C	MG
Silver, Total	1.4		mg/kg	0.46	0.09	1	10/18/13 10:30) 10/22/13 02:07	EPA 3050B	1,6010C	TT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-02
 Date Collected:
 10/15/13 14:15

 Client ID:
 TP-03 (1-3)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 Field Prep:
 Not Specified

Matrix: Soil Percent Solids: 70%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - West	borough l	_ab									
Arsenic, Total	7.3		mg/kg	0.54	0.11	1	10/18/13 10:30	10/19/13 16:44	EPA 3050B	1,6010C	MG
Barium, Total	110		mg/kg	0.54	0.16	1	10/18/13 10:30	10/19/13 16:44	EPA 3050B	1,6010C	MG
Cadmium, Total	32		mg/kg	0.54	0.04	1	10/18/13 10:30	10/19/13 16:44	EPA 3050B	1,6010C	MG
Chromium, Total	110		mg/kg	0.54	0.11	1	10/18/13 10:30	10/19/13 16:44	EPA 3050B	1,6010C	MG
Lead, Total	1300		mg/kg	2.7	0.11	1	10/18/13 10:30	10/19/13 16:44	EPA 3050B	1,6010C	MG
Mercury, Total	0.39		mg/kg	0.11	0.02	1	10/23/13 10:31	10/23/13 14:00	EPA 7471B	1,7471B	МС
Selenium, Total	ND		mg/kg	1.1	0.16	1	10/18/13 10:30	10/19/13 16:44	EPA 3050B	1,6010C	MG
Silver, Total	7.3		mg/kg	0.54	0.11	1	10/18/13 10:30	10/22/13 02:12	EPA 3050B	1,6010C	TT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-03
 Date Collected:
 10/15/13 14:30

 Client ID:
 TP-04 (1-3)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 Field Prep:
 Not Specified

Matrix: Soil Percent Solids: 90%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
	Nesuit	Qualifier	Offics	INE.	WIDE		· · · · · · · · · · · · · · · · · · ·				Allalyst
Total Metals - West	borough L	₋ab									
Arsenic, Total	1.9		mg/kg	0.44	0.09	1	10/18/13 10:30) 10/19/13 16:47	EPA 3050B	1,6010C	MG
Barium, Total	27		mg/kg	0.44	0.13	1	10/18/13 10:30) 10/19/13 16:47	EPA 3050B	1,6010C	MG
Cadmium, Total	0.14	J	mg/kg	0.44	0.03	1	10/18/13 10:30) 10/19/13 16:47	EPA 3050B	1,6010C	MG
Chromium, Total	2.7		mg/kg	0.44	0.09	1	10/18/13 10:30) 10/19/13 16:47	EPA 3050B	1,6010C	MG
Lead, Total	16		mg/kg	2.2	0.09	1	10/18/13 10:30) 10/19/13 16:47	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.09	0.02	1	10/23/13 10:31	10/23/13 14:02	EPA 7471B	1,7471B	МС
Selenium, Total	0.17	J	mg/kg	0.87	0.13	1	10/18/13 10:30) 10/19/13 16:47	EPA 3050B	1,6010C	MG
Silver, Total	ND		mg/kg	0.44	0.09	1	10/18/13 10:30	10/19/13 16:47	EPA 3050B	1,6010C	MG



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-04
 Date Collected:
 10/15/13 14:45

 Client ID:
 TP-05 (2-4)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 Field Prep:
 Not Specified

Matrix: Soil Percent Solids: 87%

reiterit Solius.	07 /6					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - West	horough I	ah									
Total Metals - West	bolougili	Lab									
Arsenic, Total	3.9		mg/kg	0.44	0.09	1	10/18/13 10:30	10/19/13 17:09	EPA 3050B	1,6010C	MG
Barium, Total	73		mg/kg	0.44	0.13	1	10/18/13 10:30	10/19/13 17:09	EPA 3050B	1,6010C	MG
Cadmium, Total	4.8		mg/kg	0.44	0.03	1	10/18/13 10:30	10/19/13 17:09	EPA 3050B	1,6010C	MG
Chromium, Total	27		mg/kg	0.44	0.09	1	10/18/13 10:30	10/19/13 17:09	EPA 3050B	1,6010C	MG
Lead, Total	230		mg/kg	2.2	0.09	1	10/18/13 10:30	10/19/13 17:09	EPA 3050B	1,6010C	MG
Mercury, Total	0.22		mg/kg	0.08	0.02	1	10/23/13 10:31	10/23/13 14:04	EPA 7471B	1,7471B	МС
Selenium, Total	0.13	J	mg/kg	0.87	0.13	1	10/18/13 10:30	10/19/13 17:09	EPA 3050B	1,6010C	MG
Silver, Total	0.82		mg/kg	0.44	0.09	1	10/18/13 10:30	10/22/13 02:15	EPA 3050B	1,6010C	TT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-05

 Client ID:
 TP-06 (0-2)

 Sample Location:
 301 OHIO ST

Matrix: Soil
Percent Solids: 89%

Date Collected: 10/15/13 15:10

Date Received: 10/16/13

Field Prep: Not Specified

reitent Solids.	0970					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - West	horough I	ah									
Total Metals - West	Dorougiri	Lab									
Arsenic, Total	3.7		mg/kg	0.43	0.09	1	10/18/13 10:30) 10/19/13 17:12	EPA 3050B	1,6010C	MG
Barium, Total	37		mg/kg	0.43	0.13	1	10/18/13 10:30) 10/19/13 17:12	EPA 3050B	1,6010C	MG
Cadmium, Total	0.42	J	mg/kg	0.43	0.03	1	10/18/13 10:30) 10/19/13 17:12	EPA 3050B	1,6010C	MG
Chromium, Total	5.9		mg/kg	0.43	0.09	1	10/18/13 10:30	10/19/13 17:12	EPA 3050B	1,6010C	MG
Lead, Total	16		mg/kg	2.1	0.09	1	10/18/13 10:30) 10/19/13 17:12	EPA 3050B	1,6010C	MG
Mercury, Total	0.02	J	mg/kg	0.09	0.02	1	10/23/13 10:31	10/23/13 14:06	EPA 7471B	1,7471B	МС
Selenium, Total	0.14	J	mg/kg	0.85	0.13	1	10/18/13 10:30) 10/19/13 17:12	EPA 3050B	1,6010C	MG
Silver, Total	0.11	J	mg/kg	0.43	0.09	1	10/18/13 10:30) 10/19/13 17:12	EPA 3050B	1,6010C	MG



Project Name: Lab Number: 301 OHIO ST L1320788 **Project Number:** 0136-013-004 **Report Date:** 10/23/13

SAMPLE RESULTS

Lab ID: L1320788-06 Client ID: TP-07 (2-4) Sample Location: 301 OHIO ST

Matrix: Soil Percent Solids: 87% Date Collected: 10/15/13 15:35 Date Received: 10/16/13

Field Prep: Not Specified

Percent Solids:	87%					Dilution	Date	Date	Prep	Analytical	
Parameter	Result	Qualifier	Units	RL	MDL	Factor	Prepared	Analyzed	Method	Method	Analyst
Total Metals - West	borough L	_ab									
Arsenic, Total	2.4		mg/kg	0.45	0.09	1	10/18/13 10:30	0 10/19/13 17:16	EPA 3050B	1,6010C	MG
Barium, Total	140		mg/kg	0.45	0.13	1	10/18/13 10:30	0 10/19/13 17:16	EPA 3050B	1,6010C	MG
Cadmium, Total	0.29	J	mg/kg	0.45	0.03	1	10/18/13 10:30	0 10/19/13 17:16	EPA 3050B	1,6010C	MG
Chromium, Total	7.0		mg/kg	0.45	0.09	1	10/18/13 10:30	0 10/19/13 17:16	EPA 3050B	1,6010C	MG
Lead, Total	10		mg/kg	2.2	0.09	1	10/18/13 10:30	0 10/19/13 17:16	EPA 3050B	1,6010C	MG
Mercury, Total	ND		mg/kg	0.09	0.02	1	10/23/13 10:31	1 10/23/13 14:07	EPA 7471B	1,7471B	МС
Selenium, Total	1.8		mg/kg	0.89	0.13	1	10/18/13 10:30	0 10/19/13 17:16	EPA 3050B	1,6010C	MG
Silver, Total	0.12	J	mg/kg	0.45	0.09	1	10/18/13 10:30	0 10/19/13 17:16	EPA 3050B	1,6010C	MG



Project Name: Lab Number: 301 OHIO ST L1320788 **Project Number:** 0136-013-004 **Report Date:**

10/23/13

Method Blank Analysis Batch Quality Control

Parameter	Result Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westbore	ough Lab for sample	e(s): 01-06	Batch:	WG64	5024-1				
Arsenic, Total	ND	mg/kg	0.50	0.10	1	10/18/13 10:30	10/19/13 15:07	1,6010C	MG
Barium, Total	ND	mg/kg	0.50	0.15	1	10/18/13 10:30	10/19/13 15:07	1,6010C	MG
Cadmium, Total	ND	mg/kg	0.50	0.04	1	10/18/13 10:30	10/19/13 15:07	1,6010C	MG
Chromium, Total	ND	mg/kg	0.50	0.10	1	10/18/13 10:30	10/19/13 15:07	1,6010C	MG
Lead, Total	ND	mg/kg	2.5	0.10	1	10/18/13 10:30	10/19/13 15:07	1,6010C	MG
Selenium, Total	ND	mg/kg	1.0	0.15	1	10/18/13 10:30	10/19/13 15:07	1,6010C	MG
Silver, Total	ND	mg/kg	0.50	0.10	1	10/18/13 10:30	10/22/13 00:47	1,6010C	TT

Prep Information

Digestion Method: EPA 3050B

Parameter	Result Qua	alifier Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	
Total Metals - Wes	Batch:	: WG64	5987-1						
Mercury, Total	ND	mg/kg	0.08	0.02	1	10/23/13 10:31	10/23/13 13:42	2 1,7471B	MC

Prep Information

Digestion Method: EPA 7471B



Lab Control Sample Analysis Batch Quality Control

Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Report Date: 10/23/13

Parameter	LCS %Recovery	Qual	LCSD %Recover	ry Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated san	nple(s): 01-06	Batch: WC	G645024-2 S	SRM Lot Numbe	er: 0518-10-02			
Arsenic, Total	100		-		81-119	-		
Barium, Total	96		-		83-118	-		
Cadmium, Total	94		-		82-117	-		
Chromium, Total	101		-		80-119	-		
Lead, Total	95		-		80-120	-		
Selenium, Total	106		-		80-120	-		
Silver, Total	101		-		66-134	-		
Total Metals - Westborough Lab Associated san	nple(s): 01-06	Batch: WO	G645987-2 S	SRM Lot Number	er: 0518-10-02			
Mercury, Total	114		-		67-133	-		

Matrix Spike Analysis Batch Quality Control

Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number: L1320788

Report Date: 10/23/13

arameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery Qual	Recovery Limits	RPD Qual	RPD Limits
otal Metals - Westborough La	ab Associated	sample(s): 0	1-06 Q0	Batch ID: WG	645024-4	QC S	ample: L1320926-01	Client ID:	MS Sample	
Arsenic, Total	20.	11.8	38	153	Q	-	-	75-125	-	35
Barium, Total	90.	196	300	107		-	-	75-125	-	35
Cadmium, Total	4.4	5	10	112		-	-	75-125	-	35
Chromium, Total	4200	19.6	7000	14300	Q	-	-	75-125	-	35
Lead, Total	160	50	180	40	Q	-	-	75-125	-	35
Selenium, Total	0.92J	11.8	13	110		-	-	75-125	-	35
Silver, Total	7.3	29.4	32	84		-	-	75-125	-	35
otal Metals - Westborough La	ab Associated	sample(s): 0	1-06 Q0	Batch ID: WG	645987-4	QC S	ample: L1320782-04	Client ID:	MS Sample	
Mercury, Total	ND	0.225	0.28	124		-	-	70-130	-	35

Lab Duplicate Analysis Batch Quality Control

Project Name: 301 OHIO ST **Project Number:** 0136-013-004

Lab Number:

L1320788

Report Date:

10/23/13

Parameter N	lative Sample	Duplicate Sample	Units	RPD	Qual RPD	Limits
Total Metals - Westborough Lab Associated sample(s): 01-	-06 QC Batch ID:	WG645024-3 QC Sample:	L1320926-01	Client ID	: DUP Sample	
Arsenic, Total	20.	18	mg/kg	11		35
Barium, Total	90.	69	mg/kg	26		35
Cadmium, Total	4.4	4.1	mg/kg	7		35
Chromium, Total	4200	4600	mg/kg	9		35
Lead, Total	160	120	mg/kg	29		35
Selenium, Total	0.92J	0.78J	mg/kg	NC		35
otal Metals - Westborough Lab Associated sample(s): 01-	-06 QC Batch ID:	WG645024-3 QC Sample:	L1320926-01	Client ID	: DUP Sample	
Silver, Total	7.3	2.5	mg/kg	98	Q	35
otal Metals - Westborough Lab Associated sample(s): 01-	-06 QC Batch ID:	WG645987-3 QC Sample:	L1320782-04	Client ID	: DUP Sample	
Mercury, Total	ND	ND	mg/kg	NC		35



INORGANICS & MISCELLANEOUS



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-01
 Date Collected:
 10/15/13 11:45

 Client ID:
 TP-02 (1-3)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 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	83.0		%	0.100	NA	1	-	10/18/13 02:59	30,2540G	RT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-02
 Date Collected:
 10/15/13 14:15

 Client ID:
 TP-03 (1-3)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 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	70.2		%	0.100	NA	1	-	10/18/13 02:59	30,2540G	RT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-03
 Date Collected:
 10/15/13 14:30

 Client ID:
 TP-04 (1-3)
 Date Received:
 10/16/13

Sample Location: 301 OHIO ST 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	90.0		%	0.100	NA	1	-	10/18/13 02:59	30,2540G	RT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-04
 Date Collected:
 10/15/13 14:45

 Client ID:
 TP-05 (2-4)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 Field Prep:
 Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab									
Solids, Total	86.7		%	0.100	NA	1	-	10/18/13 02:59	30,2540G	RT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-05
 Date Collected:
 10/15/13 15:10

 Client ID:
 TP-06 (0-2)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 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	89.1		%	0.100	NA	1	_	10/18/13 02:59	30,2540G	RT



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

SAMPLE RESULTS

 Lab ID:
 L1320788-06
 Date Collected:
 10/15/13 15:35

 Client ID:
 TP-07 (2-4)
 Date Received:
 10/16/13

 Sample Location:
 301 OHIO ST
 Field Prep:
 Not Specified

Parameter	Result Q	lualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry	- Westborough Lab									
Solids, Total	86.9		%	0.100	NA	1	-	10/18/13 02:59	30,2540G	RT



Lab Duplicate Analysis
Batch Quality Control

Lab Number: L1320788 Report Date: 10/23/13

Parameter Native Sample Duplicate Sample Units **RPD** Qual **RPD Limits** General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG644956-1 QC Sample: L1320747-01 Client ID: DUP Sample Solids, Total 81.3 78.0 20 % 4



Project Name:

Project Number:

301 OHIO ST

0136-013-004

 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Sample Receipt and Container Information

Were project specific reporting limits specified?

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler

A Absent

Container Info	ormation			Temp			
Container ID	Container Type	Cooler	рΗ	deg C	Pres	Seal	Analysis(*)
L1320788-01A	Amber 120ml unpreserved	Α	N/A	2.5	Υ	Absent	NYTCL-8260(14)
L1320788-01B	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-01C	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-02A	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-02B	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-02C	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-03A	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-03B	Amber 120ml unpreserved	A	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-03C	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)
L1320788-04A	Amber 120ml unpreserved	Α	N/A	2.5	Υ	Absent	NYTCL-8260(14)



Project Name: 301 OHIO ST

Lab Number: L1320788 **Report Date:** 10/23/13

Project Number: 0136-013-004 **Report Date:** 10/23/13

Container Information Temp									
Container ID	Container Type	Cooler	рΗ	•	Pres	Seal	Analysis(*)		
L1320788-04B	Amber 120ml unpreserved	A	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		
L1320788-04C	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		
L1320788-05A	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		
L1320788-05B	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		
L1320788-05C	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		
L1320788-06A	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		
L1320788-06B	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		
L1320788-06C	Amber 120ml unpreserved	Α	N/A	2.5	Y	Absent	NYTCL-8270(14),AS- TI(180),BA-TI(180),AG- TI(180),CR-TI(180),TS(7),PB- TI(180),SE-TI(180),HG- T(28),CD-TI(180)		



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

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.

NI - Not Ignitable.

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.

- 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.

Footnotes

SRM

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

Terms

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

Data Qualifiers

- A Spectra identified as "Aldol Condensation Product".
- 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.
- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- 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.
- The lower value for the two columns has been reported due to obvious interference.

Report Format: DU Report with "J" Qualifiers



 Project Name:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

Data Qualifiers

- 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.
- 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:
 301 OHIO ST
 Lab Number:
 L1320788

 Project Number:
 0136-013-004
 Report Date:
 10/23/13

REFERENCES

Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

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.



Certificate/Approval Program Summary

Last revised October 1, 2013 - Westboro Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

Connecticut Department of Public Health Certificate/Lab ID: PH-0574. NELAP Accredited Solid Waste/Soil.

Drinking Water (Inorganic Parameters: Color, pH, Turbidity, Conductivity, Alkalinity, Chloride, Free Residual Chlorine, Fluoride, Calcium Hardness, Sulfate, Nitrate, Nitrite, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Nickel, Selenium, Silver, Sodium, Thallium, Zinc, Total Dissolved Solids, Total Organic Carbon, Total Cyanide, Perchlorate. Organic Parameters: Volatile Organics 524.2, Total Trihalomethanes 524.2, 1,2-Dibromo-3-chloropropane (DBCP) 504.1, Ethylene Dibromide (EDB) 504.1, 1,4-Dioxane (Mod 8270). Microbiology Parameters: Total Coliform-MF mEndo (SM9222B), Total Coliform - Colilert (SM9223, Enumeration and P/A), E. Coli. - Colilert (SM9223, Enumeration and P/A), HPC - Pour Plate (SM9215B), Fecal Coliform - MF m-FC (SM9222D), Fecal Coliform-EC Medium (SM 9221E).

Wastewater/Non-Potable Water (Inorganic Parameters: Color, pH, Conductivity, Acidity, Alkalinity, Chloride, Total Residual Chlorine, Fluoride, Total Hardness, Silica, Sulfate, Sulfide, Ammonia, Kjeldahl Nitrogen, Nitrate, Nitrite, O-Phosphate, Total Phosphorus, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Dissolved Solids, Total Suspended Solids (non-filterable), BOD, CBOD, COD, TOC, Total Cyanide, Phenolics, Foaming Agents (MBAS), Bromide, Oil and Grease. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables (Phenols), Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, Polynuclear Aromatic Hydrocarbons, Haloethers, Chlorinated Hydrocarbons, Volatile Organics, TPH (HEM/SGT), CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH. Microbiology Parameters: Total Coliform – MF mEndo (SM9222B), Total Coliform – MTF (SM9221B), E. Coli – Colilert (SM9223 Enumeration), HPC – Pour Plate (SM9215B), Fecal Coliform – MF m-FC (SM9222D), Fecal Coliform – A-1 Broth (SM9221E), Enterococcus - Enterolert.

Solid Waste/Soil (Inorganic Parameters: pH, Sulfide, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Tin, Vanadium, Zinc, Total Cyanide, Ignitability, Phenolics, Corrosivity, TCLP Leach (1311), SPLP Leach (1312 metals only), Reactivity. Organic Parameters: PCBs, PCBs in Oil, Organochlorine Pesticides, Technical Chlordane, Toxaphene, CT-Extractable Petroleum Hydrocarbons (ETPH), MA-EPH, MA-VPH, Dicamba, 2,4-D, 2,4,5-T, 2,4,5-TP(Silvex), Dalapon, Volatile Organics (SW 8260), Acid Extractables (Phenols) (SW 8270), Benzidines (SW 8270), Phthalates (SW 8270), Nitrosamines (SW 8270), Nitroaromatics & Cyclic Ketones (SW 8270), PAHs (SW 8270), Haloethers (SW 8270), Chlorinated Hydrocarbons (SW 8270).)

State of Illinois Certificate/Lab ID: 003155. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM2120B, 2320B, 2510B, 2540C, SM4500CN-CE, 4500F-C, 4500H-B, 4500NO3-F, 5310C, EPA 200.7, 200.8, 245.1, 300.0. Organic Parameters: EPA 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: SM2120B, 2310B, 2320B, 2340B, 2510B, 2540B, 2540C, 2540D, SM4500CL-E, 4500CN-E, 4500F-C, 4500H-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-E, 4500S-D, 4500SO3-B, 5210B, 5220D, 5310C, 5540C, EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1. Organic Parameters: EPA 608, 624, 625.)

Hazardous and Solid Waste (Inorganic Parameters: EPA 1010A, 1030, 1311, 1312, 6010C, 6020A, 7196A, 7470A, 7471B, 9012B, 9014, 9038, 9040C, 9045D, 9050A, 9065, 9251. Organic Parameters: 8011 (NPW only), 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8315A, 8330.)

Maine Department of Human Services Certificate/Lab ID: 2009024.

Drinking Water (Inorganic Parameters: SM9215B, 9222D, 9223B, EPA 180.1, 353.2, SM2120B, 2130B, 2320B, 2510C, 2540C, 4500Cl-D, 4500CN-C, 4500CN-E, 4500F-C, 4500H+B, 4500NO3-F, 5310C, EPA 200.7, EPA 200.8, 245.1, EPA 300.0. Organic Parameters: 504.1, 524.2.)

Wastewater/Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 8315A, 9010C, SM2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500Cl-E, 4500CN-C, 4500CN-E, 4500F-B, 4500F-C, 4500H+B, 4500Norg-C, 4500NH3-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500P-B, 4500S2-D, 4500SO3-B, 5540C, 5210B, 5220D, 5310C, 9010B, 9030B, 9040C, 7470A, 7196A, 2340B, EPA 200.7, 6010C, 200.8, 6020A, 245.1, 1311, 1312, 3005A, Enterolert, 9223B, 9222D. Organic Parameters: 608, 624, 625, 8011, 8081B, 8082A, 8330, 8151A, 8260C, 8270D, 3510C, 3630C, 5030B, ME-DRO, ME-GRO, MA-EPH, MA-VPH.)

Solid Waste/Soil (Inorganic Parameters: 9010B, 9012A, 9014, 9040B, 9045C, 6010C, 6020A, 7471B, 7196A, 9050A, 1010, 1030, 9065, 1311, 1312, 3005A, 3050B, 9038, 9251. Organic Parameters: ME-DRO, ME-GRO, MA-EPH, MA-VPH, 8260C, 8270D, 8330, 8151A, 8081B, 8082A, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5035.)

Massachusetts Department of Environmental Protection Certificate/Lab ID: M-MA086.

Drinking Water (Inorganic Parameters: (EPA 200.8 for: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl) (EPA 200.7 for: Ba,Be,Ca,Cd,Cr,Cu,Na,Ni) 245.1, (300.0 for: Nitrate-N, Fluoride, Sulfate); (EPA 353.2 for: Nitrate-N, Nitrite-N); (SM4500NO3-F for: Nitrate-N and Nitrite-N); 4500F-C, 4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, 2320B, SM2540C, SM4500H-B. Organic Parameters: (EPA 524.2 for: Trihalomethanes, Volatile Organics); (504.1 for: 1,2-Dibromoethane, 1,2-Dibromo-3-Chloropropane), EPA 332. Microbiology Parameters: SM9215B; ENZ. SUB. SM9223; ColilertQT SM9223B; MF-SM9222D.)

Non-Potable Water (Inorganic Parameters:, (EPA 200.8 for: AI,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,TI,Zn); (EPA 200.7 for: AI,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,TI,V,Zn); 245.1, SM4500H,B, EPA 120.1, SM2510B, 2540C, 2340B, 2320B, 4500CL-E, 4500F-BC, 426C, SM4500NH3-BH, (EPA 350.1 for: Ammonia-N), LACHAT 10-107-06-1-B for Ammonia-N, SM4500NO3-F, 353.2 for Nitrate-N, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, 4500P-B,E, 5220D, EPA 410.4, SM 5210B, 5310C, 4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

Organic Parameters: (EPA 624 for Volatile Halocarbons, Volatile Aromatics),(608 for: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan II, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs-Water), (EPA 625 for SVOC Acid Extractables and SVOC Base/Neutral Extractables), 600/4-81-045-PCB-Oil. Microbiology Parameters: (ColilertQT SM9223B; Enterolert-QT: SM9222D-MF.)

New Hampshire Department of Environmental Services Certificate/Lab ID: 200307. *NELAP Accredited. Drinking Water* (Inorganic Parameters: SM 9222B, 9223B, 9215B, EPA 200.7, 200.8, 300.0, SM4500CN-E, 4500H+B, 4500NO3-F, 2320B, 2510B, 2540C, 4500F-C, 5310C, 2120B, EPA 332.0. Organic Parameters: 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM9222D, 9221B, 9222B, 9221E-EC, EPA 3005A, 200.7, 200.8, 245.1, SW-846 6010C, 6020A, 7196A, 7470A, SM3500-CR-D, EPA 120.1, 300.0, 350.1, 350.2, 351.1, 353.2, 410.4, 420.1, 426C, 1664A, SW-846 9010B, 9010C, 9030, 9040B, 9040C, SM2120B, 2310B, 2320B, 2340B, 2540B, 2540D, 4500H+B, 4500CL-E, 4500CN-E, 4500NH3-H, 4500NO3-F, 4500NO2-B, 4500P-E, 4500-S2-D, 4500SO3-B, 5210B, 5220D, 2510B, 2540C, 4500F-C, 5310C, 5540C, LACHAT 10-204-00-1-A, LACHAT 10-107-06-2-D, 3060A. Organic Parameters: SW-846 3510C, 3630C, 5030B, 8260C, 8270D, 8330, EPA 624, 625, 608, SW-846 8082A, 8081B, 8015C, 8151A, 8330, 8270D-SIM.)

Solid & Chemical Materials (Inorganic Parameters: SW-846 6010C, 6020A, 7196A, 7471B, 1010, 1010A, 1030, 9010C, 9012B, 9014, 9030B, 9040C, 9045C, 9045D, 9050, 9065, 9251, 1311, 1312, 3005A, 3050B, 3060A. Organic Parameters: SW-846 3540C, 3546, 3050B, 3580A, 3620D, 3630C, 5030B, 5035, 8260C, 8270D, 8270D-SIM, 8330, 8151A, 8015B, 8015C, 8082A, 8081B.)

New Hampshire Department of Environmental Services <u>Certificate/Lab ID</u>: 2064. *NELAP Accredited. Drinking Water* (<u>Organic Parameters</u>: **EPA 524.2**: Di-isopropyl ether (DIPE), Ethyl-t-butyl ether (ETBE), Tert-amyl methyl ether (TAME)).

Non-Potable Water (Organic Parameters: EPA 8260C: 1,3,5-Trichlorobenzene. EPA 8015C(M): TPH.)

Solid & Chemical Materials (Organic Parameters: EPA 8260C: 1,3,5-Trichlorobenzene.)

New Jersey Department of Environmental Protection Certificate/Lab ID: MA935. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9222B, 9221E, 9223B, 9215B, 4500CN-CE, 4500NO3-F, 4500F-C, EPA 300.0, 200.7, 200.8, 245.1, 2540C, SM2120B, 2320B, 2510B, 5310C, SM4500H-B. Organic Parameters: EPA 332, 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: SM5210B, EPA 410.4, SM5220D, 4500Cl-E, EPA 300.0, SM2120B, 2340B, SM4500F-BC, EPA 200.7, 200.8, 351.1, LACHAT 10-107-06-2-D, EPA 353.2, SM4500NO3-F, 4500NO2-B, EPA 1664A, SM5310C, 4500-PE, EPA 420.1, SM4500P-B5+E, 2540B, 2540C, 2540D, EPA 120.1, SM2510B, 9222D, 9221B, 9221C, 9221E, 9222B, 9215B, 2310B, 2320B, 4500NH3-H, 4500-S D, 4500SO4-E, EPA 350.1, 350.2, SW-846 1312, 7470A, 5540C, SM4500H-B, 4500SO3-B, SM3500Cr-D, 4500CN-CE, EPA 245.1, SW-846 9040B, 9040C, 3005A, 3015, EPA 6010B, 6010C, 6020, 6020A, 7196A, 3060A, SW-846 9010C, 9030B. Organic Parameters: SW-846 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3510C, EPA 608, 624, 625, SW-846 3630C, 5030B, 5030C, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 1,4-Dioxane by NJ Modified 8270, 8015B, NJ EPH.)

Page 58 lid & Chemical Materials (Inorganic Parameters: SW-846, 6010B, 6010C, 6020, 6020A, 7196A, 3060A, 9030B, 1010, 1010A, 1030, 1311, 1312, 3005A, 3050B, 7471A, 7471B, 9010C, 9012B, 9014, 9038, 9040B, 9040C, 9045C, 9045D,

9050A, 9065, 9251. Organic Parameters: SW-846 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8330, 8260B, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 3540C, 3546, 3580A, 3620C, 3630C, 5030B, 5030C, 5035L, 5035H, NJ EPH.)

New York Department of Health Certificate/Lab ID: 11148. NELAP Accredited.

Drinking Water (Inorganic Parameters: SM9223B, 9222B, 9215B, EPA 200.8, 200.7, 245.1, SM5310C, EPA 332.0, SM2320B, EPA 300.0, SM2120B, 4500CN-E, 4500F-C, 4500NO3-F, 2540C, SM 2510B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: SM9221E, 9222D, 9221B, 9222B, 9215B, 5210B, 5310C, EPA 410.4, SM5220D, 2310B, 2320B, EPA 200.7, 300.0, SM4500CL-E, 4500F-C, SM15 426C, EPA 350.1, SM4500NH3-BH, EPA 351.1, LACHAT 10-107-06-2, EPA 353.2, SM4500-NO3-F, 4500-NO2-B, 4500P-E, 2340B, 2540C, 2540B, 2540D, EPA 200.8, EPA 6010C, 6020A, EPA 7196A, SM3500Cr-D, EPA 245.1, 7470A, SM2120B, 4500CN-CE, EPA 1664A, EPA 420.1, SM14 510C, EPA 120.1, SM2510B, SM4500S-D, SM5540C, EPA 8315A, 3005A, 9010C, 9030B. Organic Parameters: EPA 624, 8260C, 8270D, 8270D-SIM, 625, 608, 8081B, 8151A, 8330A, 8082A, EPA 3510C, 5030B, 5030C, 8015C, 8011.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, EPA 6010C, 6020A, 7196A, 7471B, 8315A, 9012B, 9014, 9065, 9050A, 9038, 9251, EPA 1311, 1312, 3005A, 3050B, 9010C, 9030B, 9040C, 9045D. Organic Parameters: EPA 8260C, 8270D, 8270D-SIM, 8015C, 8081B, 8151A, 8330A, 8082A, 3540C, 3546, 3580A, 5035A-H, 5035A-L.)

North Carolina Department of the Environment and Natural Resources Certificate/Lab ID: 666. (Inorganic Parameters: SM2310B, 2320B, 4500Cl-E, 4500Cn-E, 9012B, 9014, Lachat 10-204-00-1-X, 1010A, 1030, 4500NO3-F, 353.2, 4500P-E, 4500SO4-E, 300.0, 4500S-D, 5310B, 5310C, 6010C, 6020A, 200.7, 200.8, 3500Cr-B, 7196A, 245.1, 7470A, 7471B, 1311,1312. Organic Parameters: 608, 8081B, 8082A, 624, 8260B, 625, 8270D, 8151A, 8015C, 504.1, MA-EPH, MA-VPH.)

Drinking Water Program Certificate/Lab ID: 25700. (Inorganic Parameters: Chloride EPA 300.0. Organic Parameters: 524.2)

Pennsylvania Department of Environmental Protection Certificate/Lab ID: 68-03671. *NELAP Accredited.*Drinking Water (Inorganic Parameters: 200.7, 200.8, 300.0, 332.0, 2120B, 2320B, 2510B, 2540C, 4500-CN-CE, 4500F-C, 4500H+-B, 4500NO3-F, 5310C. Organic Parameters: EPA 524.2, 504.1)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1312, 3005A,3015, 3060A, 200.7, 200.8, 410.4, 1664A, SM2540D, 5210B, 5220D, 4500-P,BE, 245.1, 300.0, 350.1, 350.2, 351.1, 353.2, 420.1, 6010C, 6020A, 7196A, 7470A, 9030B, 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 3500Cr-D, 426C, 4500CN-CE, 4500Cl-E, 4500F-B, 4500F-C, 4500H+-B, 4500NH3-H, 4500NO2-B, 4500NO3-F, 4500S-D, 4500SO3-B, 5310BCD, 5540C, 9010C, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 625, 624, 608, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, 8015C, NJ-EPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 350.1, 1010, 1030, 1311, 1312, 3005A, 3050B, 3060A, 6010C, 6020A, 7196A, 7471B, 9010C, 9012B, 9014, 9040B, 9045D, 9050A, 9065, SM 4500NH3-BH, 9030B, 9038, 9251. Organic Parameters: 3540C, 3546, 3580A, 3620C, 3630C, 5035, 8015C, 8081B, 8082A, 8151A, 8260C, 8270D, 8270D-SIM, 8330, NJ-EPH.)

Rhode Island Department of Health Certificate/Lab ID: LAO00065. *NELAP Accredited via NJ-DEP*. Refer to MA-DEP Certificate for Potable and Non-Potable Water. Refer to NJ-DEP Certificate for Potable and Non-Potable Water.

Texas Commisson on Environmental Quality <u>Certificate/Lab ID</u>: T104704476. *NELAP Accredited. Non-Potable Water* (<u>Inorganic Parameters</u>: EPA 120.1, 1664, 200.7, 200.8, 245.1, 245.2, 300.0, 350.1, 351.1, 353.2, 410.4, 420.1, 6010, 6020, 7196, 7470, 9040, SM 2120B, 2310B, 2320B, 2510B, 2540B, 2540C, 2540D, 426C, 4500CL-E, 4500CN-E, 4500F-C, 4500H+B, 4500NH3-H, 4500NO2B, 4500P-E, 4500 S2⁻ D, 510C, 5210B, 5220D, 5310C, 5540C. Organic Parameters: EPA 608, 624, 625, 8081, 8082, 8151, 8260, 8270, 8330.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1311, 1312, 9012, 9014, 9040, 9045, 9050, 9065.)

Virginia Division of Consolidated Laboratory Services Certificate/Lab ID: 460195. *NELAP Accredited*. *Drinking Water* (Inorganic Parameters: EPA 200.7, 200.8, 300.0, 2510B, 2120B, 2540C, 4500CN-CE, 245.1, 2320B, 4500F-C, 4500NO3-F, 4500H+B, 5310C. Organic Parameters: EPA 504.1, 524.2.)

Non-Potable Water (Inorganic Parameters: EPA 120.1, 1664A, 200.7, 200.8, 245.1, 300.0, 350.1, 351.1, 351.2, 3005A, 3015, 1312, 6010B, 6010C, 3060A, 353.2, 420.1, 2340B, 6020, 6020A, SM4500S-D, SM4500-CN-CE, Lachat 10-204-00-12, 7196A, 7470A, 2310B, 2320B, 2510B, 2540B, 2540D, 3500Cr-D, 426C, 4500Cl-E, 4500F-B, 4500F-C,

4500NH3-H, 4500NO2-B, 4500NO3-F, 4500 SO3-B, 4500H-B, 4500PE, 510AC, 5210B, 5310B 5310C, 5540C, 9010Cm 9030B, 9040C. Organic Parameters: EPA 3510C, 3630C, 5030B, 8260B, 608, 624, 625, 8011, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8260C, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330,)

Solid & Hazardous Waste (Inorganic Parameters: EPA 1010A, 1030, 3060A, 3050B, 1311, 1312, 6010B, 6010C, 6020, 7196A, 7471A, 7471B, 6020A, 9010C, 9012B, 9030B, 9014, 9038, 9040C, 9045D, 9251, 9050A, 9065. Organic Parameters: EPA 5030B, 5035, 3540C, 3546, 3550B, 3580A, 3620C, 3630C, 6020A, 8260B, 8260C, 8015B, 8015C, 8081A, 8081B, 8082, 8082A, 8151A, 8270C, 8270D, 8270C-SIM, 8270D-SIM, 8330.)

Department of Defense, L-A-B Certificate/Lab ID: L2217.

Drinking Water (Inorganic Parameters: SM 4500H-B. Organic Parameters: EPA 524.2, 504.1.)

Non-Potable Water (Inorganic Parameters: EPA 200.7, 200.8, 6010C, 6020A, 245.1, 7470A, 9040B, 9010B, 180.1, 300.0, 332.0, 6860, 351.1, 353.2, 9060, 1664A, SM 4500CN-E, 4500H-B, 4500Norg-C, 4500NO3-F, 5310C, 2130B, 2320B, 2340B, 2540C, 5540C, 3005A, 3015, 9056, 7196A, 3500-Cr-D. Organic Parameters: EPA 8015C, 8151A, 8260C, 8270D, 8270D-SIM, 8330A, 8082A, 8081B, 3510C, 5030B, MassDEP EPH, MassDEP VPH.)

Solid & Hazardous Waste (Inorganic Parameters: EPA 200.7, 6010C, 6020A, 7471A, 6860, 1311, 1312, 3050B, 7196A, 9040B, 9045C, 9010C, 9012B, 9251, SM3500-CR-D, 4500CN-CE, 2540G, Organic Parameters: EPA 8015C, 8151A, 8260C, 8270D, 8270D-SIM, 8330A/B-prep, 8082A, 8081B, 3540C, 3546, 3580A, 5035A, MassDEP EPH, MassDEP VPH.)

The following analytes are not included in our current NELAP/TNI Scope of Accreditation:

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether. **EPA 8260B:** 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene. **EPA 8260 Non-potable water matrix:** Iodomethane (methyl iodide), Methyl methacrylate. **EPA 8260 Soil matrix:** Tert-amyl methyl ether (TAME), Diisopropyl ether (DIPE), Azobenzene. **EPA 8330A:** PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT. **EPA 8270C:** Methyl naphthalene, Dimethyl naphthalene, Total Methylnapthalenes, Total Dimethylnaphthalenes, 1,4-Diphenylhydrazine. **EPA 625:** 4-Chloroaniline, 4-Methylphenol. Total Phosphorus in a soil matrix, TKN in a soil matrix, NO2 in a soil matrix, NO3 in a soil matrix. **EPA 9071:** Total Petroleum Hydrocarbons, Oil & Grease.

APPENDIX C

PREVIOUS INVESTIGATION



RECEIVED

CC-P.6.-1 J.C.-2

JUN 2 1 1995

Buffalo Drilling Company, Inc. Job No.: 95-198 10440 Main Street, Clarence, NY 1403 P. V. M. Date: June 15, 1995

SITE INSPECTION REPORT

An environmental site inspection has been performed and this report has been prepared for the exclusive use of Magnano-Paladino, c/o 10 Ellicott Square Court Corporation and/or its designated agents. The purpose of this environmental site inspection was to identify and evaluate any actual and potential environmental concerns associated with the inspected properties. This report does not constitute a complete Phase I Environmental Site Assessment. The findings and recommendations presented in this report are exclusive to the client and the assessed properties, and are based solely on a visual inspection of the site. Written permission must be obtained from Buffalo Drilling Company, Inc., for use of this report, its findings, and recommendations by other parties, persons or firms.

assessed properties, and are based solel Written permission must be obtained from of this report, its findings, and recomm firms.	Buffalo Drilling Componer Too fee us
REPORT PREPARED FOR: - Name: - Street: - Municipality, State, Zip Code: - Client Contact: - Telephone Number: - P.O. No:	Magnano-Paladino c/o 10 Ellicott Square Court Corp. 210 Ellicott Square Building Buffalo, New York 14203 Paul Moretta (716) 854-0060 8432MP
<pre>INSPECTED PROPERTY INFORMATION: - Address: - Municipality: - County, State, Zip State: - Tax Account No.: - Parcel Size (acres): - Site Location Map:</pre>	282-301 Ohio Street Buffalo Erie, New York, 14204 N/A N/A Refer to Attachment #1
PRELIMINARY SITE INSPECTION SUMMAR	X:
ENVIRONMENTAL CONCERN(S): [X]	Identified [] Not Identified
FURTHER INVESTIGATION(S): [X]	Identified [] Not Recommended
CONCERNS LISTED BASED ON SITE INSP	ECTION:
[X] ASBESTOS [] RADON	[] LEAD [] WETLANDS
[] FLOODPLAINS () ARCHAEOLOG	GICAL/HISTORICAL SITES

STATEMENT OF PERFORMANCE

Buffalo Drilling Company, Inc. has performed a preliminary site inspection and subsurface investigation program on the properties. The listed environmental concerns are based solely on the results of the site inspection and include an examination of the properties for the presence/absence of suspected asbestos containing material, radon, lead based paint, lead in drinking water, and structural condition of the building(s).

Job No.: 95-198

Date: June 15, 1995

In addition, a limited subsurface investigation was also undertaken by BDC and included the advancement of six preliminary test borings on the properties (refer to Attachment #3). In general, subsurface conditions were found to consist of random fill layers that ranged in thickness from three to fifteen feet (i.e., boring B-2 and B-4, respectively). The fill consists of loose to very dense sands, gravels, brick fragments, cinders, slag, concrete, and silt materials. Below the fill materials, a stiff natural layer of clay and silt was encountered in all borings, except B-4, to completion depths. A silty sand layer was encountered in all borings, except B-4, interbedded in the silt and clay layer. This silty sand layer may be associated with the former meandering of the Buffalo River floodplain at these boring locations.

Groundwater was encountered during or at completion of drilling operations in all of the borings, except at boring B-6. The water level measurement at these boring locations was approximately 9.6 to 10.0 feet below ground surface.

Photoionization screening (PID) of the soil samples collected from the soil borings generally indicated that elevated levels of total ionizable compounds were recorded in the soils from borings B-1, B-2, and B-4 (refer to Attachment #3, Figure #2, and Table 1). Elevated PID readings were also recorded on the soil samples collected from boring B-3 (see below). A slight organic (i.e., topsoil or humus) odor was sensed in the soil samples from borings B-2 and B-4. No visual or olfactory evidence was sensed in the remaining soil samples from the above listed borings, except B-3, which would be considered to be environmentally significant.

THE FOLLOWING ENVIRONMENTAL CONCERN(S) AND RECOMMENDATION(S) ARE IDENTIFIED BASED ON THE SITE INSPECTION OF THE PROPERTIES:

1) Potential Residual Contamination: A soil boring advanced on the 301 Ohio Street property, boring 3-3, encountered olfactory evidence on the soil samples that are characterized as a petroleum hydrocarbon-type (i.e., gasoline) odor. An

Job No.: 95-198 Date: June 15, 1995

oily sheen was also observed on the soil samples from this boring location. Photoionization screening (PID) of the soil samples collected from boring B-3 generally indicated that elevated levels of total ionizable compounds were recorded. Based on the aforementioned results, petroleum hydrocarbon contamination is suspected at this boring location.

Recommendations: It is recommended that an additional investigation be conducted in the area of boring B-3 to determine the characteristics and extent of the potential contaminants.

2) <u>Suspected Asbestos Containing Materials (SACM):</u> SACM that were observed in poor condition, included the following:

282 Ohio Street:

- vinyl floor tiles, 12" x 12", gray, white, beige, black, and red, located in the first floor tavern, kitchen, and restaurant, and the second and third floor apartments (approximately five to ten percent of the inspected tiles are damaged).
- rolled linoleum floor covering, located in the second and third floor apartments (approximately five percent damaged).
- thermal pipe insulation (i.e., lagging) located in the basement (approximately five to ten percent damaged).

No representations are made for the presence/absence of SACM in the uninspected building at 301 Ohio Street (i.e., Bulkmatic Transport Company).

Recommendations: It is the understanding of BDC that this building is scheduled for demolition. Thus, it is recommended that the SACM be sampled and analyzed for the presence/absence of asbestos prior to the scheduled demolition. If these materials contain asbestos, it is recommended that they be abated (i.e., removed, encapsulated, renovated, etc.) to limit the release of asbestos fibers. It is also recommended that a trained and licensed contractor, familiar with New York State Department of Labor Industrial Code Rule 56, be retained to complete the abatement, if any.

- Job No.: 95-198 Date: June 15, 1995
- Material Storage: Six pails of suspected waste oil/grease were observed on the northern side of the Bulkmatic Transport Company building. Minor staining was also observed on the concrete surface in the vicinity of the pails.
 - Recommendations: It is recommended that the pails be characterized (i.e., sampled and analyzed) and properly disposed. It is also recommended that the staining be cleaned-up.
- 4) Past Usage: Based solely on a review of historic topographic maps available to BDC, the vacant parking lot appears to have previously been occupied by a large building and several railroad spur lines. The Bulkmatic site also appears to have been occupied by a former building (not the currently existing building) and a railroad spur line. No representations are made with respect to the past usage of the properties or potential environmental concerns associated with the former structures.

Buffalo Drilling Company, Inc. 10440 Main Street, Clarence, NY 14031

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1.0 HISTORICAL RECORDS/DATA REVIEW

At the request of the owner, this section was not completed for this site inspection report. This section of a complete Phase I Environmental Site Assessment includes the property history and available site information such as building department records, aerial photographs, fire insurance maps, directories, abstract of title, wetland and floodplain data, and site geology.

Buffalo Drilling Company, Inc. 10440 Main Street, Clarence, NY 14031 Job No.: 95-198 Date: June 15, 1995

2.0 PUBLIC DOMAIN INFORMATION SOURCES

At the request of the owner, this section was not completed for this site inspection report. This section of a complete Phase I Environmental Site Assessment includes data base searches and information provided by such agencies as the USEPA, the NYSDEC, county, and local government regulatory agencies.

Buffalo Drilling Company, Inc. 10440 Main Street, Clarence, NY 14031

3.0 SUMMARY OF SITE INSPECTION

Date of Inspection:

Inspector(s):
Ground Cover:

Weather Conditions:

Photographs:

May 18, 1995

Andrew J. Kucserik

Job No.: 95-198

Date: June 15, 1995

None

Sunny 45°F

N/A

3.1 CURRENT USES OF PROPERTY: [] Yes [X] No Observed Concern

The inspected properties currently consist of a restaurant/apartment complex known as the Harbor Inn located at 282 Ohio Street, a bulk flour transport service, tractor trailer repair facility (i.e., Bulkmatic Transport Company) located at 301 Ohio Street, and a vacant parking lot leased by Buffalo Structural Steel. The Harbor Inn has been located on this site for the past forty years. This building consists of eight apartments located on the second and third floors, presently unoccupied, and a first floor kitchen, restaurant, and tavern. As per the client's request, the interior of this building was inspected.

The Bulkmatic facility has reportedly occupied this site for the past three years and is used for the repair of tractor trailer trucks. An UST was reportedly recently removed from this site in May 1995. As per the client's request, the building on this property was not inspected.

The vacant parking lot was reportedly used by Marine Midland Bank as an employee parking lot. Currently, Buffalo Structural Steel used the lot for temporary parking of its tractor trailers.

3.2 PAST USES OF PROPERTY: [] Yes [X] No Observed Concern

Refer to Section 2.0. Based solely on a review of historic topographic maps available to BDC, the vacant parking lot appears to have previously been occupied by a large building and several railroad spur lines. The Bulkmatic site also appears to have been occupied by a former building (not the currently existing building) and a railroad spur line. No representations are made with respect to the past usage of the properties or potential environmental concerns associated with the former structures.

Buffalo Drilling Company, Inc. 10440 Main Street, Clarence, NY 14031 Date: June 15, 1995

3.3 EXTERIOR CONDITIONS:

3.3.1 Topography: [] Yes [X] No Observed Concern

The inspected properties are relatively level with respect to the adjacent roadways. According to the owner of the Harbor Inn site, the western portion of this site was previously occupied by residential buildings that have been demolished. The local topography on this site is slightly hummocky due to the presence of the fill materials associated with the former buildings.

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The Bulkmatic site is also relatively level, and is located adjacent to the Buffalo River. The southeastern portion of the site is slightly elevated with respect to the main parking lot area of the site and is grass covered. The vacant parking lot is level, and is also located adjacent to the Buffalo River.

3.3.2 Roads, Streets, Parking: [] Yes [X] No Observed Concern

Roadways and streets to the inspected properties and parking on the inspected properties were confirmed by a visual inspection of the properties.

3.3.3 Solid Waste Containers: Yes [X] No Observed Concern

3.3.4 Fill: [X] Yes [] No Observed Concern

In addition, a limited subsurface investigation was also undertaken by BDC and included the advancement of six preliminary test borings on the properties. In general, subsurface conditions were found to consist of random fill layers that ranged in thickness from three to fifteen feet (i.e., boring B-2 and B-4, respectively). The fill consists of loose to very dense sands, gravels, brick fragments, cinders, slag, concrete, and silt materials. Below the fill materials, a stiff natural layer of clay and silt was encountered in all borings, except B-4, to completion depths. A silty sand layer was encountered in all borings, except B-4, interbedded in the silt and clay layer. This silty sand layer may be associated with the former meandering of the Buffalo River floodplain at these boring locations.

Groundwater was encountered during or at completion of drilling operations in all of the borings, except at boring B-6. The water level measurement at these boring locations was approximately 9.6 to 10.0 feet below ground surface.

Photoionization screening (PID) of the subsurface samples generally indicated that elevated levels of organic vapors were recorded in the soils from borings B-1, B-2, B-3, and B-4 (refer to Attachment #3, Figure #3, and Table 1). Offactory evidence was sensed in the soil samples from boring B-3 that are characterized as a petroleum hydrocarbon-type (i.e., gasoline) odor. An oily sheen was also observed on the soil samples from the boring B-3 location. Based on the PID results, and the visual and olfactory evidence from boring location B-3, petroleum hydrocarbon contamination is suspected at this boring location.

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Date: June 15, 1995

A slight organic (i.e., topsoil or humus) odor was sensed in the soil samples from borings B-2 and B-4. No visual or olfactory evidence was sensed in the remaining soil samples from the borings which would be considered to be environmentally significant.

3.3.5 Debris/Dumping/Mounds: [] Yes [X] No Observed Concern

A mound of demolition debris was observed at the property located at 282 Ohio Street, presumably associated with the previous demolition of the former residential buildings. No staining, spillage, or discoloration were observed on the ground surface due to this mound.

3.3.6	Spillage/Pools:	[]	Yes	[X]	No	Observed	Concern
3.3.7	Stained Soil/Pavement:	[]	Yes	(X)	No	Observed	Concern
3.3.8	Stressed Vegetation:	[]	Yes	[X]	No.	Observed	Concern
3.3.9	Pits/Ponds/Lagoons:	[]	Yes	[X]	No	Observed	Concern

There are no surface water bodies on the inspected properties. Pits, ponds, and lagoons were not observed on the adjoining properties.

3.3.10 Septic Systems: [] Yes [X] No Observed Concern

According to the current owner of the structure located at 282 Ohio Street, the on-site building has been serviced by the municipal sewer and storm water system for at least the past 40 years.

3.3.11 Wells:

[] Yes [X] No Observed Concern

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Potable, domestic, irrigation, dry, injection, monitoring, and/or abandoned wells for water or other uses were not observed.

3.4 INSPECTED BUILDING CONDITION:

3.4.1 Number:

One

Description:

Masonry and wood frame

Stories:

Three

Approximate Age:

60 years None

Ancillary Structures:

The building at 301 Ohio Street was not inspected.

3.4.2 Structural:

[] Yes [X] No Observed Concern

3.4.3 Suspected Asbestos:

[X] Yes [

[] No Observed Concern

Suspected Asbestos Containing Materials (SACM) that were observed in poor condition, included the following:

282 Ohio Street:

- vinyl floor tiles, 12" x 12", gray, white, beige, black, and red, located in the first floor tavern, kitchen, and restaurant, and the second and third floor apartments (approximately five to ten percent of the inspected tiles are damaged).
- rolled linoleum floor covering, located in the second and third floor apartments (approximately five percent damaged).
- thermal pipe insulation (i.e., lagging) located in the basement (approximately five to ten percent damaged).

No representations are made for the presence/absence of SACM in the uninspected building at 301 Ohio Street (i.e., Bulkmatic).

Recommendations: It is the understanding of BDC that this building is scheduled for demolition. Thus, it is recommended that the SACM be sampled and analyzed for the presence/absence of asbestos prior to the scheduled demolition. If these materials contain asbestos, it is recommended that they be abated (i.e., removed, encapsulated, renovated, etc.) to limit the release of asbestos fibers. It is also recommended that a

trained and licensed contractor, familiar with New York State Department of Labor Industrial Code Rule 56, be retained to complete the abatement, if any.

3.4.4 Lead-Based Paint: [] Yes [X] No Observed Concern

The building located at 282 Ohio Street is reportedly scheduled for demolition.

3,4,5 Lead in Drinking Water: [] Yes [X] No Observed Concern

The building located at 282 Ohio Street is reportedly scheduled for demolition.

3.4.6 Radon Accumulation Spaces: [] Yes [X] No Observed Concern

The building located at 282 Ohio Street is reportedly scheduled for demolition.

- 3.5 UTILITIES:
- 3.5.1 Transformers/PCB's:

[] Yes [X] No Observed Concern

Job No.: 95-198

Date: June 15, 1995

A utility pole with three pole-mounted electrical transformers was observed on the eastern side of the building located at 301 Ohio Street. No staining, spillage, discoloration or markings/labels were observed on the transformer units or the ground surface beneath the units during the site inspection.

3.5.2 Floor Drains/Sump Pits: [] Yes [X] No Observed Concern

A floor drain was observed in the basement of the building located at 282 Ohio Street. No staining, spillage, or discoloration were observed on the concrete or water surface of the floor drain.

- 3.5.3 Services:
 - a. Potable Water:
 - b. Sanitary Sewer and Date Installed:
 - c. Storm Sewer:
 - d. Building Cooling:
 Type of Unit(s):
 - Fueled by:
 - e. Building Heating:
 - Type of Unit(s):
 - Fueled by:

[] Yes [X] No Observed Concern City of Buffalo

City of Buffalo City of Buffalo

N/A No N/A

Yes

Furnace / forced air

Natural gas

Buffalo Drilling Company, Inc. 10440 Main Street, Clarence, NY	14031	Job No.: 95-198 Date: June 15, 1995
3.5.4 Wastewater Discharges:	None	
3.5.6 Air Emissions:	None	
3.6 OPERATIONS/EQUIPMENT: 3.6.1 Storage Tanks:	[] Yes [X]	No Observed Concern
No USTs/ASTs were observed previously stated, a UST wa lot located at 301 Ohio S this location be BDC indic granular fill was encour recorded during the PID sca boring; however, no visual association with the PID robserved on the properties vacant parking lot.	s recently remotreet. A soil ated that at latered. Elevanning of the soor olfactory eventurys. No e	oved from the parking boring advanced at east fifteen feet of ated readings were oil samples from this vidence was sensed in vidence of tanks was
3.6.2 Materials Storage/Drums: a. Substance: b. Type/No. of Containers: c. Storage Conditions:	Waste grea	on plastic pails
Six pails were observed on building. Minor staining surface in the vicinity of the pails be characterized properly disposed. It is be cleaned-up.	was also obser the pails. It (i.e., sample	rved on the concrete is recommended that ed and analyzed) and
3.6.3 Materials Use:	[] Yes (X)	No Observed Concern
No concerns were observed f	or the property	v located at 282 Ohio
3.6.4 Spillage/Staining/Pools:	(X) Yes []	No Observed Concern
Refer to Section 3.6.2.		
3.6.5 Facility Equipment:	[] Yes [X]	No Observed Concern
No concerns were observed f	or the property	located at 282 Ohio

Street.

Buffalo Drilling Company, Inc.

Job No.: 95-198 10440 Main Street, Clarence, NY 14031 Date: June 15, 1995

4.0 INTERVIEWS

4.1 Name: Edward Malloy Title: None

> Relationship to Property: [X] Owner [] User [] Occupant

Property: 282 Ohio Street Date of Interview: May 18, 1995

ENVIRONMENTAL CONCERNS(S): [] Identified [X] Not Identified

Mr. Malloy indicated that he has no knowledge of past or current environmental concerns associated with the inspected property. Mr. Malloy provided access to the building located on this property.

According to Mr. Malloy, he has been the owner of this property for the past forty years. Furthermore, the adjacent residential buildings were demolished at an unknown date. According to Mr. Malloy, the demolition debris was placed into the former basements of these buildings.

Mr. Malloy stated that no USTs or ASTs existed or currently exist on the property.

END OF SECTION

CERTIFICATION and SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

This Environmental Site Inspection Report is certified to be prepared in accordance with sound environmental investigatory practices.

Job No.: 95-198

Date: June 15, 1995

Report Preparer:

Andrew J. Esecsails

Andrew J. Kucserik, C.P.G.

Senior Geologist

Report Reviewer:

James S. Barron, P.E.

President

END OF SECTION

Job No.: 95-198 Date: June 15, 1995

ACRONYMS/ABBREVIATIONS

- Aboveground Storage tank - American Society for Testing and Materials ASTM

- Buffalo Drilling Company, Inc. BDC - Barron Consulting Engineers, P.C. BCE

CERCLA - Comprehensive Environmental Response, Compensation and

Liability Act

CERCLIS - Comprehensive Environmental Response, Compensation and

Liability Information System

EPA - (U.S.) Environmental Protection Agency

EPCRA - Emergency Planning and Community Right to Know Act **ECDEP** - Erie County Department of Environment and Planning

- Erie County Department of Health ECDOH

- Erie County Sewer District ECSD ECWA - Erie County Water Authority

- Emergency Response and Notification System ERNS

- Freedom of Information Act - Freedom of Information Law FOIA FOIL - Large Quantity Generator LQG

LUST - Leaking Underground Storage Tanks MSDS - Material Data Safety Sheets

N/A - Not Available, Not Applicable - Not Reviewed, Not Researched N/R

- National Pollution Discharge Elimination System NPDES

- National Priorities List NPL

- New York State Department of Environmental Conservation NYSDEC

NYSDOH - New York State Department of Health - New York State Department of Labor NYSDOL

Occupational Safety and Health Administration OSHA

PBS Petroleum Bulk Storage - Polychlorinated Biphenyl(s) PCB(s)

RCRA - Resource Conservation and Recovery Act SACM - Suspected Asbestos Containing Materials

- Superfund Amendments and Reauthorization Act of 1986 SARA

- Soil Conservation Service (by County) SÇS

SPDES - State Pollution Discharge Elimination System

SQG - Small Quantity Generator

- Treatment, Storage and Disposal Facility TSDF USDA - United States Department of Agriculture

- United States Geological Survey USGS

- Underground Storage Tanks UST

USEPA - United States Environmental Protection Agency Buffalo Drilling Company, Inc. Job No.: 95-198 10440 Main Street, Clarence, NY 14031 Date: June 15, 1995

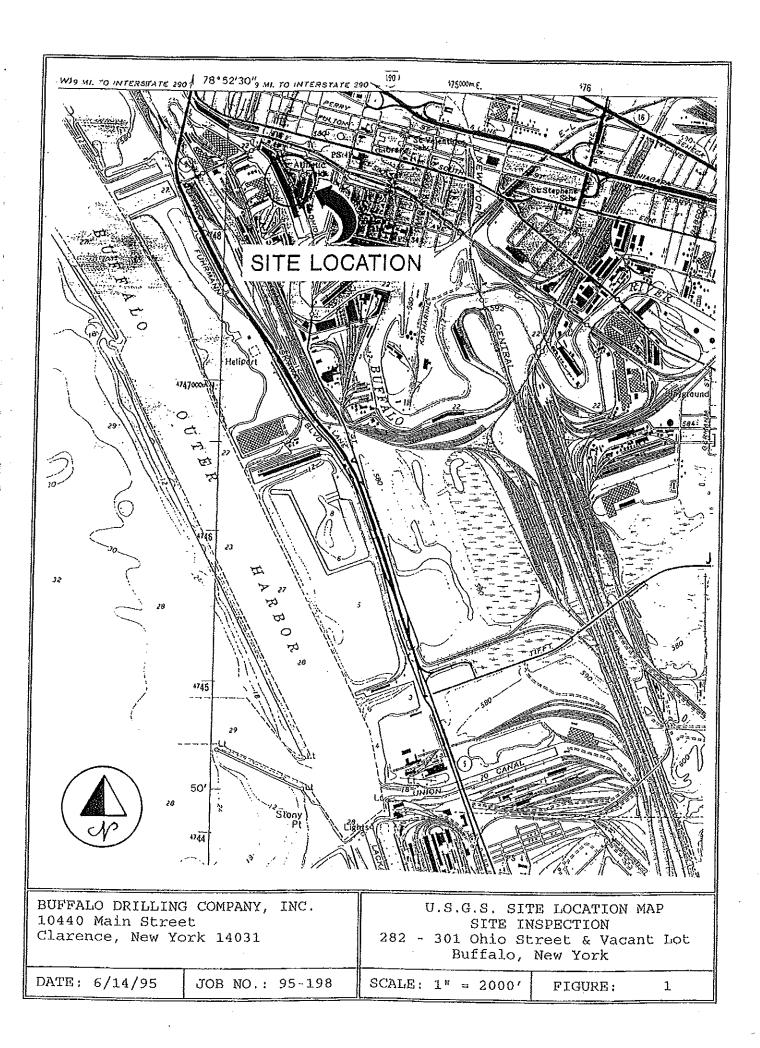
ATTACHMENT #1 MAPS, FIGURES, AND OWNERSHIP DOCUMENTATION

Date or I.D. No. Description

Figure 1

Site Location map

END OF ATTACHMENT #1



Job No.: 95-198 Date: June 15, 1995

ATTACHMENT #2 REGULATORY DOCUMENTATION

Date or I.D. No. Description

Refer to Section 2.0.

END OF ATTACHMENT #2

Job No.: 95-198 Date: June 15, 1995

ATTACHMENT #3 SITE INSPECTION AND PHOTOGRAPHIC DOCUMENTATION

Date or I.D. No.	Description
June 15, 1995	Preliminary Subsurface Investigation Report, 282 - 301 Ohio Street, Buffalo, New York
Table 1	Photoionization Detector (PID) Summary of Organic Vapor Screening Results

END OF ATTACHMENT #3

BUFFALO DRILLING COMPANY



10440 MAIN STREET CLARENCE, NEW YORK 14031 (716) 759-7821 FAX (716) 759-7823

June 15, 1995

JOB NO: 95-198

Magnano - Paladino 210 Ellicott Square Building Buffalo, New York 14203-2545

ATTN: Mr. Paul Moretta

RE:

Preliminary Subsurface Exploration Report for 282 - 301 Ohio Street, Buffalo, New York

Gentlemen:

This report presents findings of the preliminary subsurface investigation program for the above referenced project. The project site is illustrated in Figure No. 1, entitled "Boring Location Plan," which includes: approximate locations of six test borings drilled by Buffalo Drilling Company, Inc. (BDC) on May 23 and 24, 1995; and additional site details.

EXPLORATION METHODS

A truck mounted Diedrich D-50 rotary drill rig was used to drill the test borings to depths of approximately 15 feet below ground surface using 4-1/4 inch inside diameter (ID), continuous flight hollow stem augers. Soil samples were recovered by driving a standard split-spoon sampler (2 foot long by 1-3/8 inch inside diameter) 24 inches using a 140 pound hammer falling 30 inches each blow (ASTM D1586). The number of blows for 12 inches of penetration is defined as the Standard Penetration Test (SPT) N-value.

Retrieved soil samples were initially classified and logged in the field by the driller and a portion of each soil sample was placed and sealed in a glass jar. The boring logs, included as Appendix A, were prepared based on the field log and a second visual classification of the retained soil samples in the laboratory by a B.S. degreed geologist.

Classification of soil samples, as noted on the logs, is based on the Unified Soil Classification System. Refer to Appendix B entitled "Geotechnical Reference Standards" for an explanation of the terminology used for soil descriptions.

SUBSURFACE CONDITIONS

The site is addressed as 282 - 301 Ohio Street, located in Buffalo, New York. Currently the site is occupied by a restaurant and a commercial facility. In general, subsurface conditions consist of an upper random fill layer underlain by naturally deposited clay, and silty sands.

Granular and cohesive fill materials, generally extending to depths of three to nine feet below ground surface, were encountered at all test boring locations. It is noted that the fill depth at test boring location B-4 extended the full length drilled of 15 feet below ground surface. The slightly to moderately plastic, medium stiff cohesive fill is composed of a silt and clay intermixed with varying amounts of sand, gravel, and brick. The granular fill consisted of a loose to very dense mixture of sand, and gravel with lesser amounts of silt, brick,

cinders, rubble, concrete, and slag. Moisture contents of the fill units ranged from moist to saturated.

Several of the borings were extended into a unit of naturally deposited stiff to very stiff silty clay, intermixed with trace amounts of sand and organic matter (roots). Plasticities and moisture contents of this unit were noted as moderately plastic and moist, respectively. This unit extended the full length drilled in boring location B-6 only.

A wet silty sand was encountered underlying the silty clay or fill material in most of the boring locations. This loose to medium dense granular unit extended to an approximate depth of ten feet below ground surface.

Samples retrieved below the silty sand consisted of medium stiff to hard silty clay, which extended the full length drilled. Moisture contents throughout the cohesive unit were noted as moist.

Groundwater was encountered at several boring locations approximately ten feet below ground surface. Note that groundwater measurements were taken at the completion of drilling efforts and may not represent the actual static groundwater Lastly, it is noted that fluctuations in groundwater level may occur due to factors other than those present during field operations.

Thank you for the opportunity to assist on this project. Please call at your earliest convenience, if questions should arise.

Very truly yours, BUFFALO DRILLING COMPANY, INC.

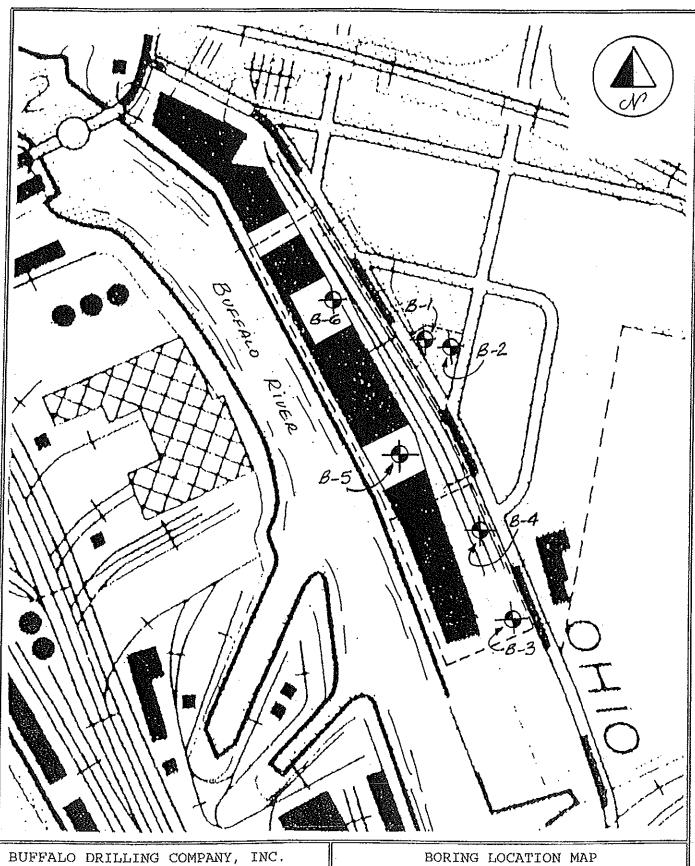
Michele M. Patterson

James S. Barron, P.E.

President

Michele M. Patterson

Geologist



BUFFALO DRILLING COMPANY, INC. 10440 Main Street Clarence, New York 14031

SITE INSPECTION
282 - 301 Ohio Street & Vacant Lot
Buffalo, New York

DATE: 6/14/95

JOB NO.: 95-198

SCALE: 1" = 250'

FIGURE:

4

APPENDIX A

TEST BORING LOGS

TEST BORING NO: 8-1

PROJECT: Ohio Street, Buffalo, New York

J08 NO: 95-198

DRILLER: D. Robinson

TYPE OF DAILL RIG: Diedrich D50

SAMPLING METHOD: ASTM D1586 SIZE AND TYPE OF BIT: 4 1/4" ID auger DATE STARTED: 5/24/95 COMPLETED: 5/24/95

SURFACE ELEV (FT): O GROUNDWATER DEPTH (FT): No water at completion

ELEY. OEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AMO FIELD TEST DATA	SOIL AND ROCK DESCRIPTION	REMARKS	BLOW/ .5 FT.	N VALUE	XREC (RGD)
F°	38/12	Grey, dense f/c Sand, some Gravel, some Silt, little	S-1: 0-2'	8-9-29-67	38	40
	11/12	Brick, moist (FILL) grade: med. dense, little Silt, tr. Brick	S-2: 2-4'	10-6-5-6	11	10
-5	5/12	Brown, med, stiff Clay, some Silt, tr. f/c Sand, mod. plastic, moist (FILL)	S-3: 4-6'	2-3-2-3	5	40
	7/12	grade: grey, and Silt, little f/m Sand	S-4: 6-8'	2-3-4-4	7	30 .
- 10	13/12	grade: stiff, tr. Brick Brown, med. dense f/c SAND and Silt, wet (SM)	S-5: 8-10 '	5-6-7-6	13	50
-	39/12	Brown, v. stiff CLAY, some Silt, tr. f/c Sand, mod. plastic, moist (CL)	S-6: 10-12'	6-10-19-27	29	50
-	75/12		S-7: 13∺15 '	17-21-54-30	75	70
l 15			•			
	-					
		T T T T T T T T T T T T T T T T T T T			A. P. Parisment	

1. Bottom of hole 15.0 feet.

🛌 BUFFALO DRILLING CO., INC. 🛓

TEST BORING NO: B-2

PROJECT: Ohio Street, Buffalo, New York

JOB NO: 95-198

DRILLER: D. Robinson

TYPE OF DAILL AIG: Diedrich D50

SAMPLING METHOD: ASTM D1586 SIZE AND TYPE OF BIT: 4 1/4" ID auger DATE STARTED: 5/23/95 COMPLETED: 5/23/95

SURFACE ELEV (FT): O GROUNDWATER DEPTH (FT): No water at completion

DK. grey, loose f/c Sand, S-1; 0-2' 4-4-4-4 8 little Cinders, little Silt, little Gravel, little Rubble, tr. Brick, moist (FILL) S-2; 2-4' 4-6-8-9 14grade: med. dense, tr. Slag Srown, v. stiff CLAY and Silt tr. f/c Sand, mod. plastic, moist (CL)grade: stiff, tr. Organic matter (Roots) S-5; 8-10' 3-4-5-6 8	60 40 50 40
tr. Brick, moist (FILL)grade: med. dense, tr. Slag Brown, V. stiff CLAY and Silt tr. f/c Sand, mod. plastic, moist (CL)grade: stiff, tr. Organic matter (Roots) S-2: 2-4' 4-6-8-9 14 5-7-8-9 15	50 40
Slag S-3: 4-6' Brown, v. stiff CLAY and Silt tr. f/c Sand, mod. plastic, moist (CL)grade: stiff, tr. Organic matter (Roots)	40 .
moist (CL) S-4:6-8' 5-7-8-9 15grade: stiff, tr. Organic matter (Roots)	
	60
Grey, loose f. SAND and Silt.	•••
19/12 tr. Clay, wet (SM) S-6: 10-12' 5-8-11-16 19 Brown, v. stiff CLAY, some	20
Silt, tr. f/c Sand, mod. plastic, moist (CL)grade: hard S-7: 13-15' 8-16-20-26 36	90
	-

1. Bottom of hole 15.0 feet.

BUFFALO DRILLING CO., INC.

TEST BORING NO: B-3

PROJECT: Ohio Street, Buffalo, New York

JOB NO: 95-198

DRILLER: D. Robinson

TYPE OF DRILL RIG: Diedrich D50

SAMPLING METHOD: ASTM D1586 SIZE AND TYPE OF BIT: 4 1/4" ID auger

DATE STARTED: 5/23/95

COMPLETED: 5/23/95

SURFACE ELEV (FT): 0 GROUNDWATER DEPTH (FT): 10' at completion

DEPTH AND	SOIL SYMBOLS AMPLER SYMBOLS FIELD TEST DATA	SOIL AND ROCK DESCRIPTION	REMARKS	BLOW/ .5 FT.	N VALUE	ХЯЕС (ЯОО)
	142/12 -	Grey, v. dense f/c Sand, little Gravel, little Slag, tr. Brick, tr. Cinders, wet (FILL)	S-1: 0-2'	1-46-96	100+	10
 	13/12	grade: some Gravel, some Silt, tr. Slag	S-2: 4-6 '	12-7-6-4	13	20
	4/12	Ok. grey, med. stiff Silt, some f/c Sand, little Clay, tr. Gravel, sl. plastic, wet	S-3: 6-8 '	3-2-2-3	4	30 ·
*	5/12	(FILL) Grey, med. stiff SILT, some	S-4: 8-10'	5-3-2-7	5	60
10 		Clay, tr. f/c Sand, mod. plastic, moist (ML) Brown, stiff CLAY, some Silt, tr. f/c Sand, mod. plastic,	S-5: 10-12'	5~6~5 ~10	11	80
- 15	28/12	moist (CL)grade: v. stiff, tr. Gravel	S-6: 13-15	9-11-17-21	28	80
,	1					
					7 1 2 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	
·					-	

- 1. Oil sheen noted in sample S-2 and S-3.
- 2. Bottom of hole 15.0 feet.

_ BUFFALO DRILLING CO., INC. _

TEST BOAING NO: B-4

PROJECT: Ohio Street, Buffalo, New York

JOB NO: 95-198

DRILLER: D. Robinson TYPE OF DRILL RIG: Diedrich D50

SAMPLING METHOD: ASTM D1586 SIZE AND TYPE OF BIT: 4 1/4" ID auger DATE STARTED: 5/23/95 COMPLETED: 5/23/95 SURFACE ELEV (FT): 0 GROUNDWATER DEPTH (FT): 10' at completion

ELEV. DEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TESY DATA	SOIL AND ROCK DESCRIPTION	REMARKS	BLOW/ .5 FT,	N VALUE	XAEC (AGD)
_°	14/12	Brown-grey, med. dense f/c Sand and Gravel, little Silt,	S-1: 0-2'	9-7-7-6	id	20
-	7/12	tr. Concrete, tr. Brick, moist (FILL) grade: loose, wet	S-2: 2-4'	3~4-3-6	7	10
- -5	B/12	Same as S−2	S-3: 4-6'	5-5-3-4	8	30
- -	92/12	grade: densa	S−4: 6~8 '	8-16-16-17	32	10
	16/12	grade: med. dense, saturated	S-5: 8-10'	35-10-6-6	16	40
- 10	13/12	Same as S−5	S-6; 10-12'	6-6-7-8	13	60
	¶39/12	grade: dense	S-7: 13-15'	13-17-22-30	39	10
L 15						
					The state of the s	

1. Bottom fo hole 15.0 feet.

BUFFALO DRILLING CO., INC.

TEST BORING NO: 8-5

PROJECT: Ohio Street, Buffalo, New York

JOB NO: 95-198

ORILLER: O. Robinson

TYPE OF DAILL AIG: Diedrich D50

SAMPLING METHOD: ASTM D1586 SIZE AND TYPE OF BIT: 4 1/4" ID auger

DATE STARTED: 5/24/95 COMPLETED: 5/24/95
SURFACE ELEV (FT): 0 GROUNDWATER DEPTH (FT): 10.0' at completion

ELEY. OEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL AND ROCK DESCRIPTION	REMARKS	BLOW/ .6 FT.	AN''NE N	%REC (ROO)
F.º	68/12 Ū	Asphalt Grey, V. dense f/c Sand and	S-1: 0-2'	27-58-30-20	88	10
-	13/12	Gravel, tr. Silt, saturated (FILL) grade: med. dense	s-2: 2-4'	10-8-5-7	13	20
- -5	N 6/12	grade: loose, tr. Brick	S-3; 4-6'	2-3-3-3	6	10
-	10/12	Grey, stiff CLAY and Silt, tr. f/c Sand, mod. plastic,	S-4: 6-8 '	9-5-5-5	10	50
<u> </u>	7/12	moist (CL) Brown, loose f/c SAND and Silt, saturated (SM)	S-5: 8-10'	3-3-4-4	7	60
- so -	26/12	Brown, v. stiff CLAY, some Silt, tr. f/c Sand, mod. plastic, moist (CL)	S-6: 10-12'	8-12-14-17	26	70
	55/12	grade: hard	S-7: 13-15	12-17-38-37	55	90
L 15						
			·	and the state of t	- California and American	
					en anderson de la constitución d	
				Appar	nh palising and a second a second and a second a second and a second a	
				il in the second		

1. Bottom of hole 15.0 feet.

BUFFALO DRILLING CO., INC.

TEST BORING NO: 8-6

PROJECT: Ohio Street, Buffalo, New York

JOB NO: 95-198

DRILLER: D. Robinson TYPE OF DRILL RIG: Diedrich D50

SAMPLING METHOD: ASTM D1586 SIZE AND TYPE OF BIT: 4 1/4" ID auger

DATE STARTED: 5/24/95 COMPLETED: 5/24/95

SURFACE ELEV (FT): 0 GROUNDWATER DEPTH (FT): No water at completion

ELEY. CEPTH	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	SOIL AND ROCK DESCRIPTION	REMARKS	BLOW/ .5 FT.	N YALUE	XAEC (RQD)
F°	64/12	Grey, dense f/c Sand and Gravel, little Brick, tr.	S-1: 0-2'	20-52-12-11	64	50
-	16/12	Slag, tr. Silt, wet (FILL) grade: med. dense, some Silt, little Gravel	S-2: 2-4'	10-8-7-8	15	40
- -5	4/12	tr. Brick Gray, med. stiff CLAY and Silt, tr. f/c Sand, mod.	S-3: 4-6'	1-2-2-3	4	30
<u>-</u>	M9/15	plastic, moist (CL)grade: stiff	S-4: 6-8 '	3-4-5-6	9	60 ·
-	9/12	grade: brown, some Silt	S-5: 8-10 '	7-5-4-6	9	80
- 10	14/12	Same as S−5	S-6; 10-12°	4-5-9-10	14	90
ļ.	30/12	grade: hard	S-7: 13-15'	8-15-14-19	30	80
L 15						
					70 to 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
				· · · · · · · · · · · · · · · · · · ·	-	
				77079 (100 m)		
		a de la companya de l				
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1. Bottom of hole 15.0 feet.

🛓 BUFFALO DRILLIÑG CO., INC. 💂

APPENDIX B

GEOTECHNICAL REFERENCE STANDARDS

GEOTECHNICAL REFERENCE STANDARDS SUMMARY OF LOGGING TECHNYOTES

TERMINOLOGY USED FOR SOIL DESCRIPTION FOR Blows Relative Relative Number of Blows Consistency Soil ft., R. Density Relative Per ft., R. Goodstency Soil ft., R. Density Relative Relative Soil Consistency Description of Cohesive Soil 10 Loose Heading Soil Consistency Description of Cohesive Soil 10 Loose Heading Soil Consistency Description of Cohesive Soil 10 Loose Heading Heading Head Heading Soil 10 Loose Heading	TENTINGLOS USED FOR SOIL DESCRIPTION TRENINGLOS USED FOR SOIL SOURCE TRENINGLOS USED FOR SOIL MANAITY AND SCIENCE SOIL MANAITY TRENINGLOS USED FOR SOIL MANAITY AND SCIENCE SOIL SUIL MANAITY TRENINGLOS USED FOR SCIENCE SOIL MANAITY AND SCIENCE SOIL SOIL MANAITY TRENINGLOS USED FOR SCIENCE SOIL MANAITY AND SCIENCE SOIL SOIL MANAITY TRENINGLOS USED FOR SCIENCE SOIL MANAITY AND SCIENCE SOIL SOIL MANAITY TRENINGLOS USED FOR SCIENCE SOIL MANAITY AND SCIENCE SOIL SOIL MANAITY TRENINGLOS USED FOR SCIENCE SOIL MANAITY AND SCIENCE SOIL SOIL MANAITY TRENINGLOS USED FOR SCIENCE	RZHARXS		4-		-	***		Denotes exact	depth of	recovery and	documentation	of drilling	afforta.		102	Dought ton and	clackification	are based on	visual inspec-	_	operations		The stratum	Lince shows on	are besed upon		represent pre-	clec subsurface	conditions.	Water level	readings have	Dogg mode to		_		_	logs. Fluct-	_	סכפהג קחפ נס	_	than those	Prosect at the	
TERRIPORON USED FOR SOIL DESCRIPTION TERRIPORON USED FOR SOIL DESCRIPTION For Slowe Relative Per fit, N. Ponality Loose Coose Relative Per fit, N. Ponality Loose Coose Relative Per fit, N. Ponality Loose The Coose Coo	Page	and the same from the same and the same and the same times and the same times and the same times and the same in	 and the second state of the second	Grain Sizo	ì			ateva	Coargo + these than an	fetained on No. 10 at the	Medium - passing No. 18 stave	rotained on No. 40 slove	Fine - passing No. 40 alove, receiped on No. 100 alove,	0.074 mm to 0.004 mm	umoller than 0.005 mm		Planticity		ite - A 1/8 inch thread cannot be	Fulled of any water content,	ŧ		1	return time is required to		to reach plantic limit. Thread	con be re-relled several times	limit.			Crystallinity of rexture	Dense - Crystal				Very Pine Crystalline - Crystals	Parely discernible with the naked		Crystalline - Crystells or mading	wire -up to 1/8 inch diameter.	,	Createdly Crystalline	The range of the rach	
TERRINOLOGY TERRINOLOGY TERRINOLOGY TO Slowe Relative Number of Blow 2 10	Parity Parity Paracription of Granular Soil TERRINGOOOO	KETION	DESCRIPCION	ive soil	***************************************		- Charles					# 1		Silt -	Clay -				•				Flasta		Plastic -	1	tevol. Eer level.		DESCRIPTION			od w/ thumb	ed with fingernail	ed coally with knife;	teched with tingerpall	scratch with Kalfe	PITUS OTO DEFEN				ee of absorbency.		17 45 45 44 447	The state of the s
r of Blowe Relative for Blowe Relative for Slowe Relative for No Boader 10 Loose 10	RODS) RECOVERY Benefity Peacription of Granular Stands Bundber of Slows Relative	SOIL AND ROCK DESCR	THRMINOLOGY USED FOR SOLL	Consistency Description of Cohes.	1										Abbreviations used	Line In Soll	שמושור בומהפתווכסבוסט	~ £100	- nedium		" fine to medium	fine to coarne	•	U		y, any to the touch, o. Soil usually above ordered:	e touch. Soil may be below groundwar	ly moil is below groundwater lovel.	TERMINOLOGY USED FOR ROCK	:	Hardboss	Soft or Plantic -		ſ	4	hord			Volde	TOPERSON A LANGE TO THE TANK THE TENDET	only thin walls separate the factor			
	(NOD) Recovery- The langth of Ample (NOD) Recovery- The langth of Ample (Sealt to total (Wided by Ampressed of Green. ROD) ROD) ROD) ROD) ROD) ROD) ROD) ROD ROD			y Description of Granular Soil										1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Proportions Canada Assets	Spanic Classification		1-0		.				Molatur	TOTAL TOTAL POST OF THE PROPERTY OF THE PROPER	ı		١		Bedding		Less than 0.02 ft.	0.2 TO 0.5 AT	0,5 40 7.0 fc.	1.0 to 2.0 ft.	Over 2.0 ft.				. Smaller than a pinhead.	Pinhead aize to 1/4 inch.	core may be described as hone	1/4 lock to the diameter of t	

SOIL CLASSIFICATION CHART (Unified Soil Classification System)

Classification System)	GRAPH LETTER TYPICAL DESCRIPTIONS	GW Well-graded	ooo GP Poorly-graded gravels, gravel-sand mixtures,	GM Silty gravels, gravel-sand-silt mixtures	diffig GC Clayey gravels, gravel-sand-clay mixtures	SW Well-graded sands, gravelly sands, little or	SP Poorly-graded sands, gravelly sands, little or	SM Silty sands, silt-sand mixtures	SC Clayey sands, sand-clay mixtures	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayer silts with slight plasticity	CL gravely clays, sandy clays, silty clays, lean	OL Organic silts and organic silty clays of low	MH Inorganic silts micaceous or diatomaceous	CH Inorganic clays of high plasticity, fat clays	OH Organic clays of medium to high plasticity,	Teat, humus, swamp soils with or	
	SNO	Clean Gravels (little or no	0% fines) rger	Gravels with '	fines of	Š	arger	Sand with appreciable	amounts of fines	LTS AND CLAYS	plasticity id Limit < 50%			AND CLAY asticíty	н 1	Organic Soils	ellaneous Fill
111111111111111111111111111111111111111	ISIAID MORNE	GRAVELS	Acte than be to the trian be tri	sieve	More than 50% of material	SANDS	of so chan be the coarse fraction is	Sieve	The state of the s	SETIS	Low plants	Soirs Less than 50% of material		Sills	ιώτη	Highly	Miscel

TABLE NO. 1 PHOTOIONIZATION DETECTOR SUMMARY OF ORGANIC VAPOR SCREENING

CLIENT: Magnano - Paladino SAMPLES REC'D BY: BDC

PROJECT: 282-301 Ohio St., Buffalo, NY SAMPLE METHOD: ASTM D1586

JOB NO: 95-198 TEST DATE: 5/26/95

TOTAL IONIZABLES PRESENT

		1	1					
SAMPL	E I.D.	DEPTH (ft.)	PID READING (ppm)					
Backg	round	in air	0.0					
B-1	S-1	0-2	10.9					
	S-2	2-4	15.2					
	S-3	4-6	13,2					
	S-4	6-8	5.2					
	S-5	8-10	8.8					
	S-6	10-12	8.8					
	S-7	13-15	5,2					
	-							
B-2	S-1	0-2	7.2					
	S-2	2-4	5.2					
	S-3	4-6	4.7					
	S-4	6-8	10.0 (a)					
	S-5	8-10	4.2					
	S-6	10-12	0.0					
	S-7	13-15	0.0					
7								

SAMPLE	I.D.	DEPTH (ft.)	PID READING (ppm)	
B-3	B-3 S-1		28.0	
(€ S-2			
	S-3	0-2	104 (b) (c)	
	S-4	2-4	95 (c)	
	S-5	4-6	31.7 (c)	
	S-6	б-8	14.6.	
	S-7	8-10	12.0	
B-4	S-1	0-2	15.0 (a)	
	S-2	2-4	25.0	
	S-3	4-6	15.0	
	S-4	6-8	7.0	
	S-5	8-10	11.3	
	S-6	10-12	14.0	
	S-7	13-15	13.2	
Backgro	und	in air	0.0	

NOTES:

- (a) Slight organic (topsoil) odor.
- (b) Gasoline odor
- (c) Oily sheen on sample

TABLE NO. 1 PHOTOIONIZATION DETECTOR SUMMARY OF ORGANIC VAPOR SCREENING

CLIENT: Magnano - Paladino SAMPLES REC'D BY: BDC

PROJECT: 282-301 Ohio St., Buffalo, NY SAMPLE METHOD: ASTM D1586

JOB NO: 95-198 TEST DATE: 5/26/95

TOTAL IONIZABLES PRESENT

SAMPLE 1	C.D.	DEPTH (ft.)	PID READING (ppm)
Background		in air	0.0
B-5 S	3-1	0-2	3.4
S	3-2	2-4	0.0
S-3 S-4 S-5		4-6	0.0
		6-8	0.0
		8-10	2.3
S	-6	10-12	2.3
S-7		13-15	3.5
B-6 S	-1	0-2	0.0
S	-2	2-4	0.0
ន	-3	4-6	0.0
S	4	6-8	7.1
S	-5	8-10	0.0
S	-6	10-12	0.0
S	-7	14-16	0.0

SAMPLE	I.D.	DE (f	PTH t.)	PID READING (ppm)
	·			
			1	
	[
Backgrou	ind	in	air	0.0

NOTES:

- 1. Screening of the headspace of samples containers was done using a Photovac Inc. (Microtip HL-200) hand held air monitor/photoionization detector (PID) equipped with a 10.6 eV bulb.
- 2. The PID was calibrated, prior to sample screening using isobutylene in air at equivalent concentration of 56.2 ppm benzene in air.
- 3. The detected concentration in sample headspace does not represent actual concentration in soil but rather a relative measure of total ionizables present with an ionization potential less than 10.6 eV.
- 4. Soil samples were allowed to acclimate to room temperature (22 deg. C) prior to headspace screening. Readings were obtained by inserting the sample line into the sample container through a hole in the lid.

BCP Application – Section VIII

CONTACT LIST INFORMATION

BROWNFIELDS SITE CONTACT LIST



BCP Application – Section VIII Contact List Information 399 Ohio Street Site

Erie County Contacts:

Honorable Mark Poloncarz Erie County Executive 95 Franklin Street Buffalo, NY 14202

Commissioner Maria R. Whyte Erie Co. Environment & Plan. 95 Franklin Street Buffalo, NY 14202

Mr. Robert Graber Erie County Legislature Clerk 25 Delaware Avenue Buffalo, NY 14202

Commissioner Gale Burstein Erie Co. Health Dept. 95 Franklin Street, Room 931 Buffalo, NY 14202

Mr. John J. LaFalce ECIDA 143 Genesee Street Buffalo, NY 14203 Mr. Timothy R. Hogues District 1 Erie County Legislator 609 Ridge Road Lackawanna, NY 14218

Mr. Paul Kranz Erie Co. Environment & Plan. 95 Franklin Street Buffalo, NY 14202

Mr. Christopher Pawenski Erie Co. Environment & Planning 95 Franklin Street Buffalo, NY 14202

Commissioner Daniel Neaverth, Jr. Erie County Local Emergency 45 Elm Street Buffalo, NY 14203

City of Buffalo Contacts:

Byron Brown, Mayor City of Buffalo 65 Niagara Square Buffalo, NY 14219 David A. Franczyk, Councilman City of Buffalo 1315 City Hall Buffalo, NY 14219

0136-013-011 1



BCP Application – Section VIII Contact List Information 399 Ohio Street Site

City of Buffalo Contacts (cont.):

James A. Morrell, Chairman City of Buffalo Planning Board 901 City Hall Buffalo, NY 14219

Supplier of Potable Water:

Buffalo Water Authority 281 Exchange Street Buffalo, NY 14204

Local News Media:

Buffalo News ATTN: Ms. Aaron Besecker 1 News Plaza Buffalo, NY 14240

WIVB - Ch. 4 ATTN: Ms. Lisa Fullone 2077 Elmwood Avenue Buffalo, NY 14207

Alternate Press ATTN: Mr. Joe Schmidbauer P.O. Box 729, Washington Station Buffalo, NY 14205

WBEN News Radio 930 Entercom Radio of Buffalo 500 Corporate Pkwy, Ste 200 Buffalo, NY 14226 WGRZ TV - Ch. 2 ATTN: Ms. Maria Sisti 259 Delaware Avenue Buffalo, NY 14202

WKBW News Channel 7 ATTN: Ms. Melanie Pritchard 7 Broadcast Plaza Buffalo, NY 14202

Business First ATTN: Anne Marie Franczyk 465 Main Street Buffalo, NY 14203-1793

WNED, Environmental News Desk ATTN: Mr. Michael Desmond P.O. Box 1263, Horizons Plaza Buffalo, NY 14240

0136-013-011 2



BCP Application – Section VIII Contact List Information 399 Ohio Street Site

Nearby Schools:

Todd Miklas, Principal Lorraine Elementary School 425 South Park Avenue Buffalo, NY 14204

Other Interested Parties:

WNY Director Citizens Env. Coalition 543 Franklin Street Buffalo, NY 14202-1109

Document Repository:

Mary Jean Jakubowski, Deputy Director Buffalo & Erie County Public Library 1 Lafayette Square Buffalo, NY 14203



0136-013-011 3



Attachment 5

BCP Application - Section VIII Contact List Information 399 Ohio Street Site Brownfield Cleanup Program Application

	Adjacent Pro	Property Owner		
No.	Street	Property Type	Property Use	Mailing Address
			î	City of Buffalo
122	I:-: C4	Montole 1	Dd.	Dept. of Parks and Recreation
122	Louisiana St	Municipal	Park	511 City Hall
				Buffalo, NY 14202
				4216 Group LLC
49	Mackinaw St	Industrial	Vacant	295 Main Street
			, acam	Buffalo, NY 14203
				4216 Group LLC
53	Mackinaw St	Commercial	Truck Terminal	295 Main Street
	174CHIMW OC	Commercial	Truck Terminar	Buffalo, NY 14203
		Industrial	Vacant	Seneca Erie Gaming Corp.
5	Miami St			310 Fourth Street
, and the second	111111111111111111111111111111111111111		, acuit	Niagara Falls, NY 14303
				Newark Niagara, LLC
55	Chicago St	Industrial	Manufacturing	617 Main Street
33	Chicago St		Manufacturing	Buffalo, NY 14203
				4216 Group LLC
11	Chiana Ca	C	D D:14:	-
11	Chicago St	Commercial	Row Building	295 Main Street
			 	Buffalo, NY 14203
=4	61: 0.	T 1 1	7.7	4216 Group LLC
71	Chicago St	Industrial	Vacant	295 Main Street
				Buffalo, NY 14203
				4216 Group LLC
73	Chicago St	Industrial	Vacant	295 Main Street
				Buffalo, NY 14203
				4216 Group LLC
75	Chicago St	Industrial	Vacant	295 Main Street
				Buffalo, NY 14203
				Buffalo River Fest Park, LLC
215	Ohio St	Municipal	Park	93 Leddy Street
				Buffalo, NY 14210
		Municipal	Park	Buffalo River Fest Park, LLC
235	Ohio St			93 Leddy Street
				Buffalo, NY 14211
	Ohio St	Commercial	Vacant	1029 Group, LLC
286				210 Ellicott Sq Bldg
				Buffalo, NY 14203
300	Ohio St	Commercial	Mini-mart	4216 Group LLC
				295 Main Street
				Buffalo, NY 14203
	Ohio St	Commercial	Scholastic/Athletic	Buffalo Scholastic Rowing Association
301				120 West Tupper Street
				Buffalo, NY 14201
	Main St	Industrial		4216 Group LLC
326			Vacant	295 Main Street
320				Buffalo, NY 14203
		Industrial		4216 Group LLC
328	Ohio St		Vacant	295 Main Street
540			v acant	Buffalo, NY 14203
340	Ohio St	Industrial	+	4216 Group LLC
			Vacant	295 Main Street
				Buffalo, NY 14203
345	Ohio St	Industrial	Vacant	4216 Group LLC
				295 Main Street
				Buffalo, NY 14203
420	Ohio St	Commercial	7/	NYSDEC
			Vacant	138 Louisiana Street
				Buffalo, NY 14204
421	Ohio St	Commercial		NYSDEC
			Vacant	128 South Street
				Olean, NY 14760

BCP Application – Section VIII

DOCUMENT REPOSITORY

DOCUMENT REPOSITORY CONFIRMATION LETTER





February 18, 2014

Mary Jean Jakubowski Deputy Director Buffalo & Erie County Public Library 1 Lafayette Square Buffalo, NY 14203

Re: Document Repository for Brownfield Cleanup Program

399 Ohio Street Site Buffalo, New York

Dear Ms. Jakubowski:

As we discussed, thank you for agreeing to the Buffalo & Erie County Public Library acting as the document repository for the above-referenced Site. In the future, we will be sending various documents relating to the Site that should be made available for public review upon request.

Please contact me if you have questions or require additional information.

Sincerely,

TurnKey Environmental Restoration, LLC

Nathan T. Munley Sr. Project Scientist

File: 0136-013-011

BCP Application – Section IX

LAND USE FACTORS

ADJACENT LAND USES AND DEVELOPMENT PATTERNS
NEARBY LAND USE / ZONING
COMPREHENSIVE LAND USE PLANS
GROUNDWATER VULNERABILITY ASSESSMENT
SITE GEOGRAPHY / GEOLOGY
EXISTING LAND USE MAP 2-2A
PROPOSED LAND USE MAP 4-1C

BUFFALO BROWNFIELD OPPORTUNITY AREA – BUFFALO RIVER CORRIDOR:
BOA POTENTIALLY BROWNFIELD SITES SLIDE
BOA EXISTING LAND USE SLIDE
FIGURE 10; CULTURAL RESOURCES
FIGURE 11; ENVIRONMENTAL JUSTICE AREA

FIGURE 12; NATURAL RESOURCE MAP FIGURE 13; WETLAND & FLOODPLAIN MAP FIGURE 14; SOIL MAP



BCP Application – Section IX Land Use Factors 399 Ohio Street Site

LAND USE FACTORS

INTRODUCTION

The following provides a brief summary of the Site:

- The Site is located within a highly developed mixed use industrial and commercial area of the City of Buffalo, Erie County, New York.
- The Site includes a single story garage building on the southern end of the parcel, with the remainder of the Site vacant.
- The planned future use of the Site (Mixed commercial residential) is consistent with the local zoning plan (see Figure 6).
- In accordance with §27-1415(3)(p), there are no environmental justice concerns associated with this project. The Site is located within a NYSDEC Potential Environmental Justice (EJ) Area (see Figure 11). However, EJ concerns are not applicable to this project as "the proposed use [is not] expected to cause or increase a disproportionate burden on the community in which the site is located."
- There are no State or Federal land use designations related to the property.
- Population in Erie county has increased by 42 (<0.001%) over the period of April 2010 July 2012 (per US Census Bureau).
- The Site has access to municipal utilities including: natural-gas, municipal sewer, electric and public water.
- There are no known Institutional Controls (ICs) for the Site.

COMPREHENSIVE PLANS

Currently, the City of Buffalo is in the process of updating the City's building and zoning ordinances into the Buffalo Development Framework, including the draft Buffalo Green Code. The framework is based on the Comprehensive Plan (2006), Local Waterfront Redevelopment Plan (LWRP; 2007), and the City of Buffalo Brownfield Opportunity Areas (BOAs). Currently the draft Buffalo Green Code (2011) is partially available for review, and the Buffalo Development Framework is expected to be released for public review and



BCP Application – Section IX Land Use Factors 399 Ohio Street Site

comment in February 2014. Review of the current plans being incorporated into the Framework as related to the Site are discussed below.

The Site is located within Sub-Area 3 of the City of Buffalo LWRP. The existing LWRP identifies the Site in an area proposed for mixed-use commercial. The City of Buffalo's LWRP maps identifying the Existing Land Use (Map 2-2A) and Proposed Land Use (Map 4-1C) are included in Attachment 7 for reference.

The Site is located within the Buffalo River Corridor BOA. The Buffalo River Corridor BOA is currently in the Step 2 phase, which will nominate approximately 980 acres of property and 40 potential brownfield sites. The 399 Ohio Street Site is identified within the Buffalo River Corridor BOA boundary. City of Buffalo - Buffalo River Corridor BOA presentation slides showing the site identified within the BOA boundary and presenting the BOA surrounding land use are included in Attachment 7 for reference.

While the Buffalo Green Code (2011) is still considered "draft", the project area is planned as a transition from predominantly commercial/industrial zoned area to an "Urban Core" area. Urban Core areas as described in the Buffalo Green Code are a mixed use of residential, commercial and light industrial areas, either within or on the edge of the downtown urban area. Planned reuse of the site as a residential development is consistent with current and contemplated future zoning, the draft Buffalo Green Code, as well as recently announced planned developments occurring along Ohio Street and the Buffalo River corridor.

NATURAL AND CULTURAL RESOURCES

- Per New York States Historical Preservation Office, two (2) National Register listed historical sites are located within 0.5 miles of the subject Site (see Figure 11), including:
 - E & B Holmes Machinery Company Building, addressed at 59 Chicago Street (08NR00597).
 - Edward M. Cotter Fire Boat (97NR01143).
- According to the NYSDEC's Environmental Resource Mapper (ERM) there are important plant habitats, and endangered species listed for the area encompassing the Site (see Figure 10), including:



BCP Application – Section IX Land Use Factors 399 Ohio Street Site

- Golden Dock Rumex fueginus, listed as endangered rare plant species under NYS Protection Status.
- Midland Clubtail *Gomphus fraternus*, listed as a rare animal species under NYS Protection Status.
- American Burying Beetle *Nicrophorus americanus*, listed as an endangered rare animal species under NYS Protection Status.
- There are no State wetlands or floodplains located on Site. The Federal Emergency Management Agency (FEMA) 100-year floodplain is identified across the western portion of the Site, associated with the Buffalo River, which is located along the western boundary of the Site (see Figures 12 and 13).
- A Significant Coastal Fish and Wildlife Habitat is identified for the Outer Harbor, located approximately 0.5 miles west of the Site (see Figure 12).
- The nearest NYSDEC regulated freshwater wetland (BU-3) is located approximately 0.6 mile to the northwest of the site.

ADJACENT LAND USE

The Site is located in a historically heavy industrial, commercial, and residential area of the City of Buffalo, Erie County, New York. The Site is bound by recreational property (River Fest Park) with commercial/industrial properties beyond to the north, the Buffalo Scholastic Rowing Association boathouse to the to the south, Ohio Street with commercial, residential, and vacant property beyond to the east, and the Buffalo River to the west with industrial and commercial beyond (see Figure 5).

Land use surrounding the Site includes industrial, commercial, residential, recreational, and vacant (see Figure 6). Residential properties are located approximately 0.2-miles to the southeast of the Site across Ohio Street. Adjacent property owners are identified on Figure 7.

BCP Application – Section IX Land Use Factors 399 Ohio Street Site

POTENTIAL VULNERABILITY OF GROUNDWATER TO CONTAMINATION

Select polycyclic aromatic hydrocarbons (PAHs) were detected on-Site above their respective 6NYCRR Part 375 Commercial Use Soil Cleanup Objectives (SCOs). Heavy metals, including arsenic, cadmium, and lead, were also detected above 6NYCRR Part 375 Commercial Use SCOs. Groundwater quality will be evaluated during the Remedial Investigation.

Currently, there are no known deed restrictions on the use of groundwater at the Site. Municipal water (Buffalo Water Authority) is available to the Site and all surrounding properties. The municipal water is supplied by the Buffalo Water Authority, and is derived from Lake Erie and the Niagara River.

Groundwater Flow

Based on the proximity to the Buffalo River and Lake Erie, groundwater likely flows in a western direction.

Recommendations

Further work is required to investigate groundwater quality. Wells to assess groundwater flow patterns and water quality will be advanced during the Remedial Investigation.

REGIONAL GEOGRAPHY AND GEOLOGY/HYDROGEOLOGY

The Site is located within the Erie-Ontario lake plain physiographic province, which is typified by little topographic relief and gentle slope toward Lake Erie, except in the immediate vicinity of major drainage ways (USDA, 1978). The surficial geology of the Lake Erie Plain consists of a thin glacial till (if present), glaciolacustrine deposits, recent alluvium, and the soils derived from these deposits.

Surface soils within the City are characterized as urban land with level to gently sloping land in which 80 percent or more of the soil surface is covered by asphalt, concrete, buildings, or



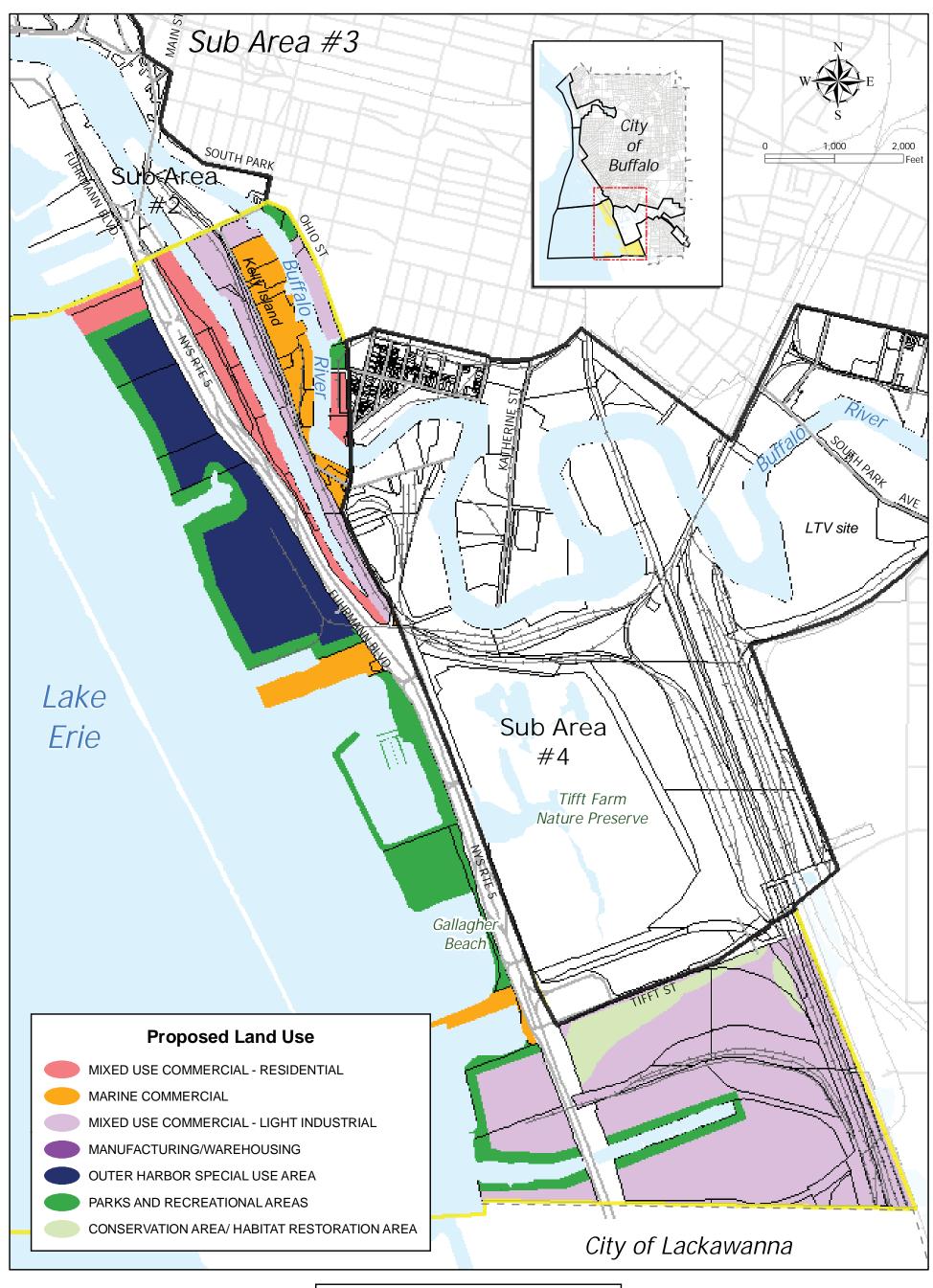
BCP Application – Section IX Land Use Factors 399 Ohio Street Site

other impervious structures (USDA, 1978) typical of an urban environment (see Figure 12). The Site is primarily level at grade, with one office and maintenance building located in the southern portion of the BCP Site. The remainder of the site is covered by concrete or asphalt.

Based on the bedrock geologic map of Erie County (Buehler and Tesmer, 1963), the Site is situated over Onondaga Formation of the Middle Devonian Series. The Onondaga Formation is comprised of a varying texture from coarse to very finely crystalline with a dark gray to tan color and chert and fossils within. The unit has an approximated thickness of 110 to 160 feet.

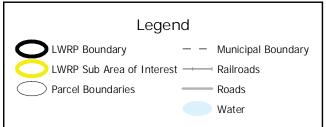
MAP 4-1 C

CITY OF BUFFALO LWRP PROPOSED LAND USE



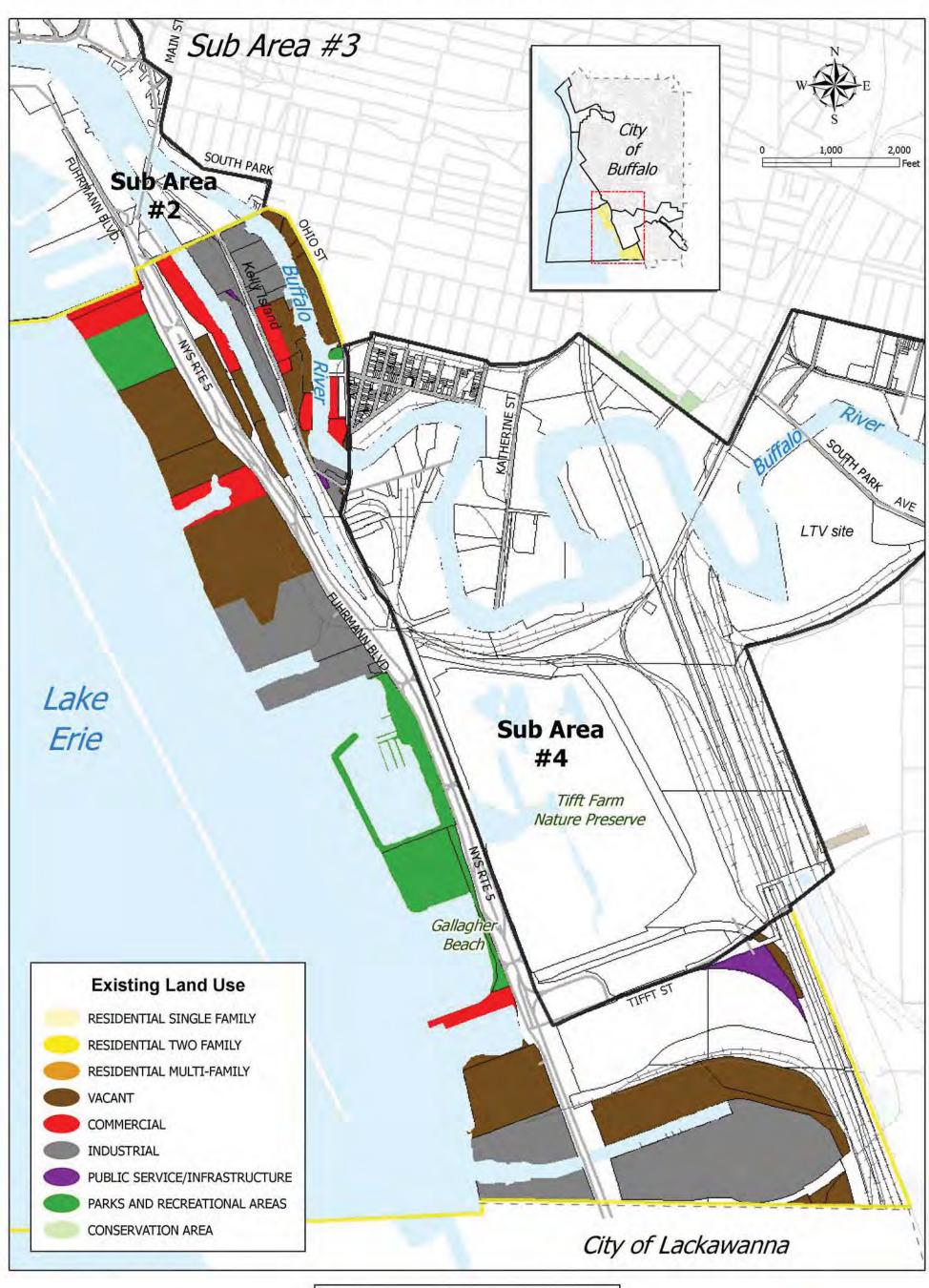
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DATA SOURCES: CITY OF BUFFALO



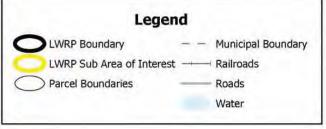


CITY OF BUFFALO LWRP EXISTING LAND USE



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DATA SOURCES: CITY OF BUFFALO





WD Project #274710-LWRP January 29, 2004

Brownfield Sites



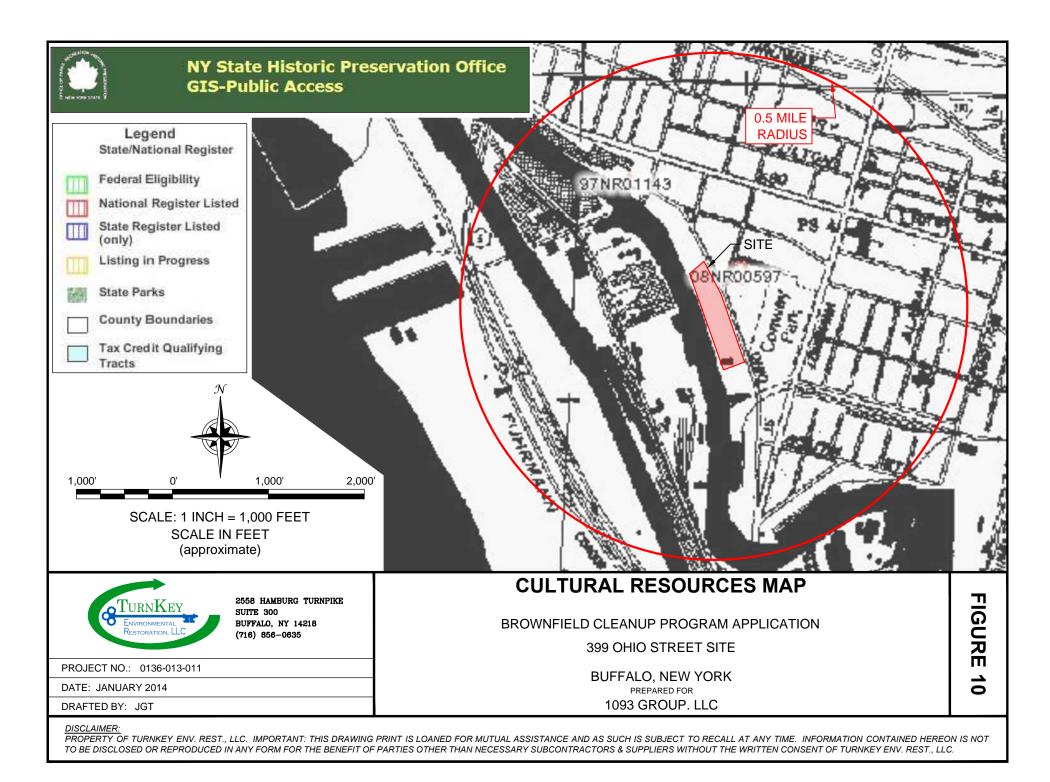
- 60 "brownfield" parcels account for 41% of the total BOA area (325 acres)
- 90% of identified brownfields are being actively used
- As nearly all parcels along the river are potential brownfields, remediation strategies will need to be considered during redevelopment

Existing Land Use



- The pattern of land use classification reflects a predominantly industrial past along the river front with pockets of residential development to the north.
- 34% of the area is classified industrial and 20% classified as vacant

- Transportation uses account for 9% of the area, including several large rail yards
- Parks and open space account for 5% of the area



County Boundary



Waterbodies

For questions about this map contact: New York State Department of **Environmental Conservation** Office of Environmental Justice 625 Broadway, 14th Floor Albany, New York 12233-1500 (518) 402-8556 ei@gw.dec.state.ny.us

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NYSDEC does not quarantee the accuracy. completeness, or timeliness of the information shown and shall not be liable for any loss or injury resulting from reliance

Data Source for Potential Environmental U.S. Census Bureau, 2000 U.S. Census

3,000'





6,000

SCALE: 1 INCH = 3.000 FEET SCALE IN FEET (approximate)



2558 HAMBURG TURNPIKE SUITE 300 BUFFALO, NY 14218 (716) 856-0635

Potential Environmental Justice Areas in the City of Buffalo (south detail) and

Town of West Seneca, Erie County, New York

Perry St

Swan St

PROJECT NO.: 0136-013-011

DATE: JANUARY 2014

DRAFTED BY: JGT

POTENTIAL ENVIRONMENTAL JUSTICE AREAS

BUFFALC

BROWNFIELD CLEANUP PROGRAM APPLICATION 399 OHIO STREET SITE

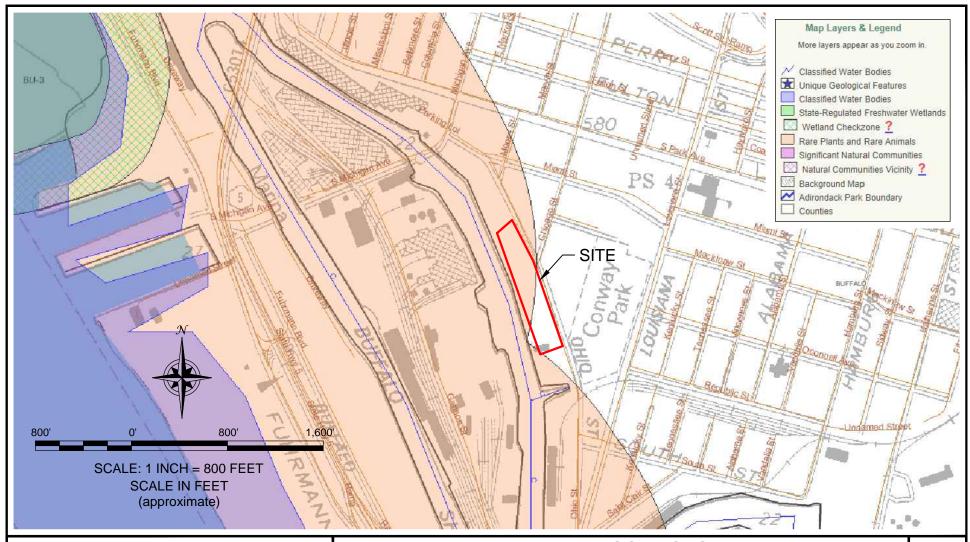
> **BUFFALO. NEW YORK** PREPARED FOR

1093 GROUP, LLC

FIGURE

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DATE: JANUARY 2014

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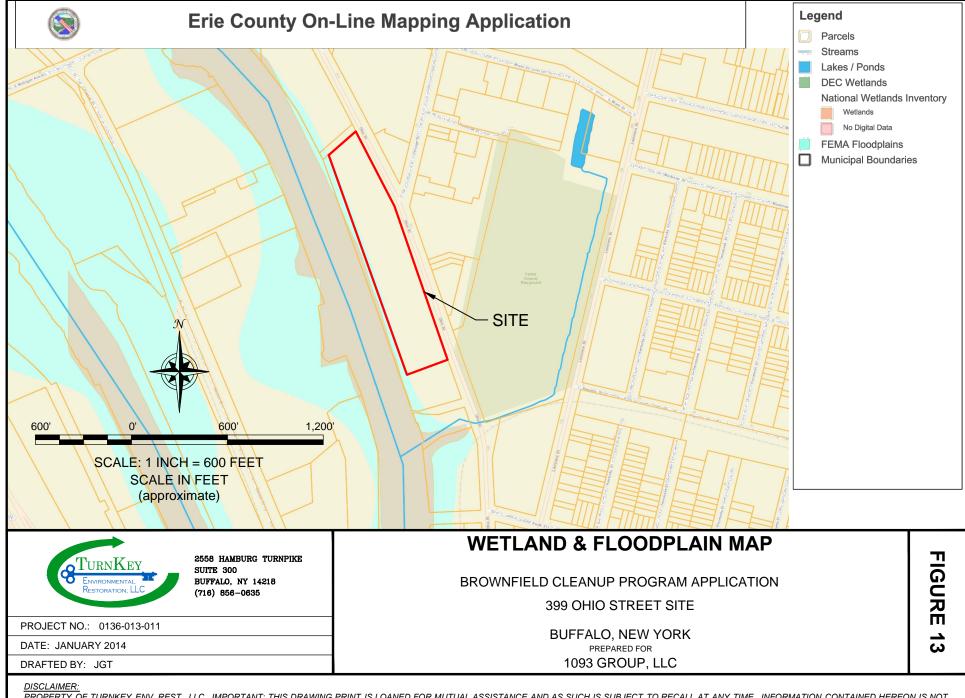
NATURAL RESOURCES MAP

BROWNFIELD CLEANUP PROGRAM APPLICATION
399 OHIO STREET SITE

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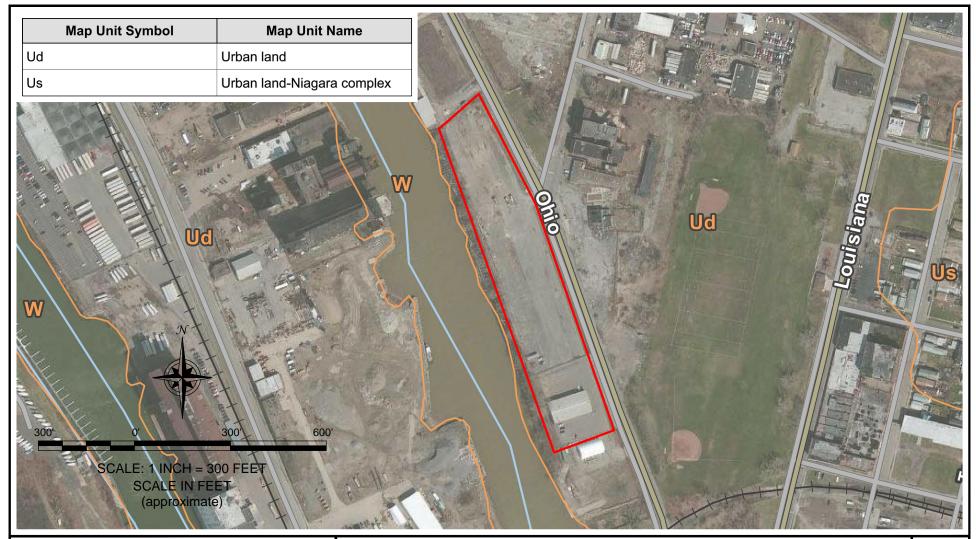
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DRAFTED BY: JGT

SOIL MAP

BROWNFIELD CLEANUP PROGRAM APPLICATION
399 OHIO STREET SITE

BUFFALO, NEW YORK
PREPARED FOR
1093 GROUP, LLC

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