

ATTACHMENT 05

PREVIOUS ENVIRONMENTAL INVESTIGATION

LCS INC. SUPPLEMENTAL PHASE II ENVIRONMENTAL SITE ASSESSMENT, LIMITED FOCUSED SUBSURFACE SOIL & INVESTIGATION, 300 OHIO STREET, BUFFALO, NEW YORK, NYSDEC SPILL NUMBER 0904777. PREPARED FOR THE NYSDEC, SEPTEMBER 2010.

LCS INC. PHASE II ENVIRONMENTAL SITE ASSESSMENT, LIMITED FOCUSED SUBSURFACE SOIL & INVESTIGATION, 300 OHIO STREET, BUFFALO, NEW YORK, NYSDEC SPILL NUMBER 0904777. PREPARED FOR THE NYSDEC, MAY 2010.

Attachment 5

Previous Environmental Investigations 300 Ohio Street Site Brownfield Cleanup Program Application

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

September 2010 – Supplemental Phase II Environmental Site Assessment, Limited Focused Subsurface Soil & Investigation

LCS Inc. (LCS) conducted a limited site investigation of a portion of the subject property, and the findings are summarized below. Note that the initial May 2010 investigation results were incorporated into the findings of the September 2010 report.

- Visual and olfactory evidence of impacted soil/fill was noted in multiple soil boring locations by field personnel. Elevated photoionization detector (PID) readings for volatile organic compounds (VOCs) were detected in multiple locations across the site, with readings as high as 1,897 ppm being detected.
- Petroleum-impacted soil exceeding NYSDEC Part 375 Industrial SCOs and NYSDEC CP-51 SSCOs for volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs) were detected at multiple soil boring locations across the site.
- Elevated PID readings were noted in 280 out of 301 soil sample locations.

The former Petroleum Sales and Services, Inc site is listed on the NYSDEC Petroleum Bulk Storage Record (PBS No. 9-383511) as containing at least 12 underground storage tanks (USTs) and one above-ground storage tank (AST). City of Buffalo Municipal records indicate that several of the tanks have been replaced due to former leaking USTs.

This portion of the Site is also listed on the NYSDEC Spills Database including at least 12 spill events between 1988 and 2010.

Facility Information

Site No.: 9-383511

Status: Active

Expiration Date: 08/17/2007

Site Type: PBS

Site Name: SAM'S TRUCK STOP #110

Address: 300 OHIO ST

Locality: BUFFALO

State: NY

Zipcode: 14204

County: Erie

Owner(s) Information

Owner: PETROLEUM SALES & SERVICE

300 OHIO ST . BUFFALO, NY. 14204

Mail Contact: PETROLEUM SALES & SERVICE

300 OHIO ST . BUFFALO, NY. 14204

Tank Information

13 Tanks Found

Tank No	Tank Location	Status	Capacity (Gal.)
1	Underground	In Service	10000
10	Underground	In Service	6000
11	Underground	Closed - Removed	12000
12	Underground	Closed - In Place	20000
13	Aboveground - in contact with soil	Closed - Removed	1000
2	Underground	In Service	3000
3	Underground	In Service	6000
4	Underground	Closed - Removed	11000
5	Underground	Closed - Removed	2000
6	Underground	In Service	11000
7	Underground	Closed - In Place	20000
8	Underground	In Service	10000
9	Underground	In Service	10000



Spill Incidents Database Search Results

Record Count: 13 Rows: 1 to 13

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	Spill Number	Date Spill Reported	Spill Name	County	City/Town	Address
1.	8804555	08/25/1988	PETROLEUM SALES	Erie	BUFFALO	300 OHIO STREET
2.	9009917	12/12/1990	OIL IN NFG EXCAVATION	Erie	BUFFALO	300 OHIO STREET
3.	9104400	07/24/1991	PETROLEUM SALES & SERVICE	Erie	BUFFALO	300 OHIO STREET
4.	9110763	01/16/1992	PETROLEUM SALES & SERVICE	Erie	BUFFALO	300 OHIO STREET
5.	9302663	05/27/1993	SAM'S TRUCK STOP	Erie	BUFFALO	300 OHIO STREET
6.	9302840	05/27/1993	SAM'S TRUCK STOP	Erie	BUFFALO	300 OHIO STREET
7.	9510010	11/11/1995	SAM'S TRUCK STOP	Erie	BUFFALO	300 OHIO STREET
8.	9610492	11/15/1996	PETRO USA	Erie	BUFFALO	300 OHIO STREET
9.	9709878	11/24/1997	SAM'S TRUCK STOP	Erie	BUFFALO	300 OHIO STREET
10.	9800568	04/14/1998	PETROLEUM SALES & SERVICE	Erie	BUFFALO	300 OHIO STREET
11.	9805444	07/31/1998	PETROLEUM SALES AND SERVI	Erie	BUFFALO	300 OHIO STREET
12.	0904777	07/24/2009	FORMER SAM'S TRUCK STOP	Erie	BUFFALO	300 OHIO STREET
13.	0911296	01/15/2010	ROADSIDE	Erie	BUFFALO	300 OHIO STREET

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MARYLAND

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OHIO

September 17, 2010 - Revised

Mr. Eric Warren
Russo Development, Inc.
535 East Main Street
Springville, New York 14141

**Re: Supplemental Phase II Environmental Site Assessment
Limited and Focused Subsurface Soil & Investigation
300 Ohio Street
Buffalo, New York
LCS Project #10B667.22
NYSDEC Spill Number 0904777**

Dear Mr. Warren:

Background

At your request, Lender Consulting Services, Inc. (LCS) documented site investigation activities completed on March 31 through April 2, 2010 at 300 Ohio Street, Buffalo, New York (See Figure 1). The results of that investigation are summarized in LCS' Phase II Environmental Site Assessment Report dated May 7, 2010.

Subsequently, at your request, LCS documented additional site investigation activities completed on July 26 and July 27, 2010. All test boring locations and soil sampling was completed at the direction of the New York State Department of Environmental Conservation (NYSDEC) and/or their contractors.

For the ease of the reader, the results of the field activities summarized in LCS' Phase II Environmental Site Assessment Report dated May 7, 2010, have been included within this report.

Site Description

The subject property was historically utilized as a gasoline and diesel filling station and petroleum distribution operation. Multiple gasoline, diesel, #2 heating oil and kerosene underground storage tanks (USTs) are currently or were historically located on the subjected property. Five inoperative pump islands are currently located west and south of the subject structure. The topography of the site is generally level at grade. The Buffalo River is located approximately 250 feet from the subject property; although, does not border the subject property. The subject property is located in a primarily industrial setting.

Introduction

The purpose of this intrusive study was to better assess the environmental quality of on-site soils in accessible locations of the subject property. Soil samples were collected for stratigraphic characterization and field monitoring. Select soil samples were submitted for laboratory analysis to supplement field observations.

The following is a summary of the methods and results of the investigation.

Methods of Investigation

Soil

Soil samples were collected on March 31 through April 2, July 26 and July 27, 2010 with a track-mounted percussion and hydraulically driven drive system equipped with an approximate 2-inch diameter, approximate 48-inch long macro-core sampler. Soil samples were collected within each borehole continuously from the ground surface until a depth of between approximately eight and 16 feet below the ground surface (ft. bgs). Any downhole equipment was decontaminated with an Alconox and tap water wash and tap water rinse between boreholes. The cutting shoes were decontaminated in a similar manner between collection of each sample.

The physical characteristics of all soil samples were classified using the Unified Soil Classification System (USCS) (Visual-Manual Method) and placed in separate sealable containers to allow any vapors to accumulate in the headspace. After several minutes, the container was opened slightly and total volatile organic compound (VOC) concentrations in air within the sample container were measured using a photoionization detector (PID). (The PID is designed to detect VOCs, such as those associated with petroleum.) Based on the field observations and/or screening results, soils were selected for analysis (see below).

Sample Analysis

Following labeling of the laboratory-supplied sample containers, selected samples were placed on ice. The samples were then submitted, under standard chain-of-custody, to a New York State Department of Health (NYSDOH) approved laboratory for analysis in accordance with the United States Environmental Protection agency (USEPA) SW-846 Methods as summarized below.

The following table summarizes the specific analytical testing performed and their respective sample locations.

Sample Location	Analytical Testing Performed
BH1 (8-10 ft. bgs)	VOCs (STARS List), SVOCs (STARS List)
BH10 (0-2 ft. bgs)	
BH11 (4-8 ft. bgs)	
BH13 (4-8 ft. bgs)	
BH15 (0-2 ft. bgs)	
BH18 (0-4 ft. bgs)	
BH19 (2-4 ft. bgs)	
BH21 (6-8 ft. bgs)	
BH23 (6-8 ft. bgs)	
BH24 (2-4 ft. bgs)	
BH25 (0-4 ft. bgs)	
BH26 (8-10 ft. bgs)	
BH27 (8-10 ft. bgs)	
BH28 (6-8 ft. bgs)	
BH29 (10-12 ft. bgs)	
BH30 (8-12 ft. bgs)	
BH31 (8-10 ft. bgs)	
BH34 (6-8 ft. bgs)	
BH37 (0-4 ft. bgs)	
BH38 (6-8 ft. bgs)	
BH40 (8-10 ft. bgs)	
BH41 (4-8 ft. bgs)	
BH42 (2-4 ft. bgs)	
BH43 (2-4 ft. bgs)	
BH44 (2-4 ft. bgs)	
BH45 (4-6 ft. bgs)	
BH46 (8-10 ft. bgs)	
BH47 (2-4 ft. bgs)	
BH48 (4-6 ft. bgs)	
BH50 (4-6 ft. bgs)	
BH51 (2-4 ft. bgs)	
BH52 (0-4 ft. bgs)	
BH53 (4-6 ft. bgs)	
BH54 (4-8 ft. bgs)	
BH55 (4-8 ft. bgs)	
BH56 (8-10 ft. bgs)	
BH58 (0-4 ft. bgs)	
BH59 (8-10 ft. bgs)	
BH60 (8-10 ft. bgs)	
BH61 (0-2 ft. bgs)	
BH62 (4-8 ft. bgs)	
BH63 (4-8 ft. bgs)	
BH64 (4-8 ft. bgs)	
BH65 (2-4 ft. bgs)	
BH66 (4-8 ft. bgs)	

ft. bgs = feet below ground surface

VOCs (STARS List+ 10 TICs) = Spill Technology and Remediation Series

volatile organic compounds + 10 Tentatively Identified Compounds via USEPA Test Method 8260

SVOCs (STARS List + 20 TICs) = Spill Technology and Remediation Series

semi-volatile organic compounds + 20 Tentatively Identified Compound via USEPA Test Method 8270

Results of Field Investigation

Sixty-six boreholes (BH1 through BH35 and BH37 through BH66) were completed in accessible areas of the subject property proximate to the environmental concerns. Test boring BH36 was not completed due to its proximity to two natural gas utility lines. (See Figure 2.) A total of 301 soil samples were collected for geologic description. Fill material consisting of asphalt, brick, gravel, clay, sand and silt was noted within all of the test borings with the exception of BH26, BH31, BH40 through BH42, BH52, BH55, BH57, BH62 and BH66 to a maximum depth of approximately eight ft. bgs. Generally, the native soils encountered consisted of varying mixtures of gravel, sand, silt and clay to the bottom of the test borings. Apparent groundwater was encountered in BH1, BH4, BH7, BH12, BH18, BH20, BH25, BH29 through BH34, BH37, BH56 and BH58 between approximately four and 12 ft. bgs. Equipment refusal was encountered within test boring BH7, BH49, BH61 and BH65 between approximately two and eight ft. bgs. The cause of the equipment refusal could not be determined; however, is suspected to be due to urban fill materials on-site.

PID measurements were above total ambient air background VOC measurements (i.e., 0.0 parts per million, ppm) in 280 of the 301 soil samples collected. These elevated concentrations ranged from 0.1 parts per million (ppm) to 1,897 ppm (BH11, ~2-4 ft. bgs). Petroleum-type odors were detected in soil samples collected from test borings BH1, BH11, BH12, BH15, BH18, BH19, BH23 through BH29, BH31, BH37, BH38, BH41, BH45, BH51 through BH56, and BH58 through BH63 between approximately the ground surface and 16 ft. bgs. Petroleum-type staining was observed in soil samples collected from test borings BH38, BH41, BH53, BH62 and BH63 between approximately two and eight ft. bgs. In LCS' experience, the PID measurements and field observations (i.e., odors/staining) suggest petroleum-type impact located west, south and east of the subject structure.

Refer to the attached subsurface logs for soil classification for each sample interval, field observations and PID measurements.

Investigation Analytical Results

The soil samples collected and analyzed detected the following analytes. The respective concentrations as well as applicable regulatory guidance values are also listed for comparison. Analytes not detected are not shown.

VOCs by USEPA SW-846 Method 8260 (STARS List)

Sample ID	BH1	BH10	BH11	BH13	BH18	BH19	BH21	BH23	BH24	BH25	TAGM	Part 375
Date Sampled	3/31/10	3/31/10	3/31/10	3/31/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	Recommended Soil Cleanup Objectives	(Unrestricted) Soil Cleanup Objectives
Sample Depth	8-10 ft. bgs	0-2 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	0-4 ft. bgs	2-4 ft. bgs	6-8 ft. bgs	6-8 ft. bgs	2-4 ft. bgs	0-4 ft. bgs	ug/kg	ug/kg
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzene	<34	10 J	900 J	<22	<1,700	750	2,000	<41,000	<1,900	<740	80	60
Toluene	<34	19	<2,100	<22	<1,700	400 J	700 J	<41,000	<1,900	<740	1,500	700
Ethylbenzene	<34	140	2,000 J	22	<1,700	960	5,300	<41,000	<1,900	<740	5,500	1,000
m,p-Xylene	<34	68	4,900	110	<1,700	1,500	3,200	<41,000	<1,900	<740	1,200*	260*
o-Xylene	<34	7 J	1,000 J	27	<1,700	400 J	<780	<41,000	<1,900	<740	1,200*	260*
Isopropylbenzene	<34	92	<2,100	<22	<1,700	4,900	3,000	<41,000	<1,900	<740	2,300	NL
n-Propylbenzene	<34	230	2,000 J	22	<1,700	3,300	2,400	<41,000	2,000 J	400 J	3,700	3,900
1,3,5-Trimethylbenzene	<34	360	3,500	69	<1,700	2,900	3,300	<41,000	900 J	<740	3,300	8,400
1,2,4-Trimethylbenzene	<34	450	12,000	240	<1,700	2,600	1,200	<41,000	1,000 J	700 J	10,000	3,600
tert-Butyl Benzene	<34	<18	<2,100	<22	<1,700	<780	<410	<41,000	<1,900	<740	10,000	11,000
sec-Butyl Benzene	<34	50	<2,100	<22	<1,700	600 J	700 J	<41,000	<1,900	<740	10,000	5,900
4-Isopropyltoluene	<34	51	<2,100	<22	<1,700	500 J	500 J	<41,000	<1,900	<740	10,000	NL
n-Butylbenzene	<34	130	1,000 J	<22	<1,700	1,500	<410	<41,000	1,000 J	<740	10,000	12,000
Naphthalene	<34	210	2,900	36	2,300	2,800	3,300	<41,000	2,100	920	13,000	12,000

VOCs by USEPA SW-846 Method 8260 (STARS List)

Sample ID	BH26	BH27	BH28	BH29	BH30	BH31	BH34	BH37	BH38	BH40	BH41	BH42	TAGM	Part 375
Date Sampled	4/1/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	Recommended Soil Cleanup Objectives	(Unrestricted) Soil Cleanup Objectives
Sample Depth	8-10 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	10-12 ft. bgs	8-12 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	0-4 ft. bgs	6-8 ft. bgs	8-10 ft. bgs	4-8 ft. bgs	2-4 ft. bgs	ug/kg	ug/kg
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	80	60
Toluene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	1,500	700
Ethylbenzene	<710	2,000 J	<1,800	<36,000	<750	<770	<700	3,700	<860	<780	<1,900	<390	5,500	1,000
m,p-Xylene	<710	2,400	<1,800	<36,000	<750	1,300	<700	4,700	<860	<780	<1,900	<390	1,200*	260*
o-Xylene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	1,200*	260*
Isopropylbenzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	1,000 J	<860	<780	<1,900	<390	2,300	NL
n-Propylbenzene	<710	2,000 J	1,000 J	<36,000	<750	<770	400 J	1,800	<860	<780	<1,900	<390	3,700	3,900
1,3,5-Trimethylbenzene	<710	2,400	<1,800	<36,000	<750	<770	<700	3,000	<860	<780	<1,900	<390	3,300	8,400
1,2,4-Trimethylbenzene	<710	4,600	<1,800	<36,000	<750	1,200	<700	13,000	<860	<780	1,900	<390	10,000	3,600
sec-Butylbenzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	10,000	11,000
tert-Butyl Benzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	10,000	5,900
4-Isopropyltoluene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	10,000	NL
n-Butylbenzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	10,000	12,000
Naphthalene	<710	1,000 J	3,100	<36,000	<750	<770	<700	4,500	<860	<780	<1,900	1,800	13,000	12,000

ug/kg = micrograms per kilogram

ft. bgs = feet below ground surface

* = Based on the sum of the Total Xylenes.

J = Analyte detected below quantitation limits.

STARS = Spill Technology and Remediation Series

TAGM Recommended Soil Cleanup Objectives = Division Technical and Administrative Guidance Memorandum

(TAGM 4046); Determination of Soil Cleanup Objectives and Cleanup Levels and addendum (August, 2001)

Underlined = Analyte that is detected above the TAGM Recommended Soil Cleanup Objectives.

* = Analyte that is detected above the Part 375 (Unrestricted) Soil Cleanup Objectives.

VOCs by USEPA SW-346 Method 8260 (STARS List)

Sample ID	BH43	BH44	BH45	BH46	BH47	BH48	BH50	BH51	BH52	BH53	BH54	BH55	TAGM	Part 375
Date Sampled	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	Recommended Soil	(Unrestricted) Soil
Sample Depth	2-4 ft. bgs	2-4 ft. bgs	4-6 ft. bgs	8-10 ft. bgs	2-4 ft. bgs	4-6 ft. bgs	4-6 ft. bgs	2-4 ft. bgs	0-4 ft. bgs	4-6 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	Cleanup Objectives	Cleanup Objectives
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	64	<3,400	7,500	14,000	<1,800	80	60
Toluene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	<36	<3,400	<3,800	43,000	<1,800	1,500	700
Ethylbenzene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	280	<3,400	32,000	52,000	5,100	5,500	1,000
m,p-Xylene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	110	<3,400	58,000	170,000	<1,800	1,200*	260*
o-Xylene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	45	<3,400	13,000	66,000	<1,800	1,200*	260*
Isopropylbenzene	<3.5	<370	7,100	<2,200	<3.6	<370	<330	200	<3,400	21,000	41,000	5,100	2,300	NL
n-Propylbenzene	<3.5	<370	7,600	<2,200	<3.6	<370	<330	200	<3,400	20,000	39,000	6,900	3,700	3,900
1,3,5-Trimethylbenzene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	120	16,000	20,000	51,000	<1,800	3,300	8,400
1,2,4-Trimethylbenzene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	130	43,000	70,000	150,000	<1,800	10,000	3,600
sec-Butylbenzene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	<36	<3,400	<3,800	<9,200	<1,800	10,000	11,000
tert-Butylbenzene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	<36	<3,400	<3,800	<9,200	<1,800	10,000	5,900
4-Isopropyltoluene	<3.5	<370	<4,700	<2,200	<3.6	<370	<330	<36	<3,400	<3,800	<9,200	<1,800	10,000	NL
n-Butylbenzene	<3.5	<370	6,000	<2,200	<3.6	<370	<330	56	<3,400	11,000	10,000	4,600	10,000	12,000
Naphthalene	18	<370	<4,700	<2,200	<3.6	<370	<330	92	<3,400	8,400	<9,200	<1,800	13,000	12,000

VOCs by USEPA SW-346 Method 8260 (STARS List)

Sample ID	BH56	BH58	BH59	BH60	BH61	BH62	BH63	BH64	BH65	BH66	TAGM	Part 375
Date Sampled	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	Recommended Soil	(Unrestricted) Soil
Sample Depth	8-10 ft. bgs	0-4 ft. bgs	8-10 ft. bgs	8-10 ft. bgs	0-2 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	2-4 ft. bgs	6-8 ft. bgs	Cleanup Objectives	Cleanup Objectives
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzene	<40	<7,400	<3,700	<35	<3,300	<400	<410	<49	<340	<36	80	60
Toluene	<40	<7,400	<3,700	<35	<3,300	<400	510	<49	<340	<36	1,500	700
Ethylbenzene	<40	<7,400	<3,700	<35	<3,300	<400	<410	<49	<340	<36	5,500	1,000
m,p-Xylene	60	12,000	<3,700	<35	<3,300	<400	710	<49	<340	<36	1,200*	260*
o-Xylene	49	13,000	<3,700	<35	<3,300	<400	530	<49	<340	<36	1,200*	260*
Isopropylbenzene	71	7,600	<3,700	35	<3,300	970	2,200	<49	<340	<36	2,300	NL
n-Propylbenzene	73	<7,400	<3,700	<35	<3,300	1,100	5,100	<49	<340	<36	3,700	3,900
1,3,5-Trimethylbenzene	130	170,000	<3,700	<35	<3,300	<400	610	<49	<340	<36	3,300	8,400
1,2,4-Trimethylbenzene	220	38,000	<3,700	<35	<3,300	<400	570	<49	<340	<36	10,000	3,600
sec-Butylbenzene	45	<7,400	<3,700	<35	<3,300	1,200	2,100	<49	<340	<36	10,000	11,000
tert-Butylbenzene	<40	<7,400	<3,700	<35	<3,300	<400	<410	<49	<340	<36	10,000	5,900
4-Isopropyltoluene	50	<7,400	<3,700	<35	<3,300	<400	<410	<49	<340	<36	10,000	NL
n-Butylbenzene	58	<7,400	<3,700	<35	<3,300	1,600	4,500	<49	<340	<36	10,000	12,000
Naphthalene	<40	15,000	<3,700	<35	3,800	<400	<410	620	<340	<36	13,000	12,000

ug/kg = micrograms per kilogram
ft. bgs = feet below ground surface
* = Based on the sum of the Total Xylenes.

J = Analyte detected below quantitation limits

STARS = Soil Technology and Remediation Series

TAGM Recommended Soil Cleanup Objectives = Division Technical and Administrative Guidance Memorandum

(TAGM 4046): Determination of Soil Cleanup Objectives and Cleanup Levels and Addendum (August, 2001)

Underlined = Analyte that is detected above the TAGM Recommended Soil Cleanup Objectives.

= Analyte that is detected above the Part 375 (Unrestricted) Soil Cleanup Objectives.

SVOCs by USEPA SW-846 Method 8270 (STARS list)

Sample ID	BH1	BH10	BH11	BH13	BH15	BH18	BH19	BH21	BH23	BH24	BH25	TAGM Recommended Soil Cleanup Objectives ug/kg	Part 375 (Unrestricted) Soil Cleanup Objectives ug/kg
Date Sampled	3/31/10	3/31/10	3/31/10	3/31/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10		
Sample Depth	8-10 ft. bgs	0-2 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	0-2 ft. bgs	0-4 ft. bgs	2-4 ft. bgs	6-8 ft. bgs	6-8 ft. bgs	2-4 ft. bgs	0-4 ft. bgs		
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg		
Acenaphthene	<3,700	<40,000	<460	<4,900	<37,000	<41,000	<43,000	<450	<460	<42,000	<810	50,000*	20,000
Fluorene	<3,700	<40,000	200 J	<4,900	<37,000	<41,000	8,000 J	<450	<460	8,000 J	<810	50,000*	30,000
Phenanthrene	<3,700	<40,000	630	<4,900	10,000 J	20,000 J	30,000 J	<450	870	40,000 J	5,000	50,000*	100,000
Anthracene	<3,700	<40,000	100 J	<4,900	<37,000	<41,000	9,000 J	<450	<460	10,000 J	<810	50,000*	100,000
Fluoranthene	<3,700	<40,000	730	<4,900	5,000 J	8,000 J	40,000 J	<450	100 J	40,000 J	890	50,000*	100,000
Pyrene	<3,700	<40,000	550	<4,900	6,000 J	8,000 J	30,000 J	<450	100 J	30,000 J	860	50,000*	1,000
Benz(a)anthracene	<3,700	<40,000	300 J	<4,900	<37,000	5,000 J	20,000 J	<450	<460	20,000 J	300 J	224 or MDL	1,000
Chrysene	<3,700	<40,000	300 J	<4,900	<37,000	6,000 J	20,000 J	<450	<460	10,000 J	300 J	400	1,000
Benz(b)fluoranthene	<3,700	<40,000	300 J	<4,900	<37,000	<41,000	10,000 J	<450	<460	8,000 J	<810	220 or MDL	1,000
Benz(k)fluoranthene	<3,700	4,000 J	300 J	<4,900	<37,000	7,000 J	10,000 J	<450	<460	10,000 J	<810	220 or MDL	800
Benz(a)pyrene	800 J	4,000 J	200 J	<4,900	<37,000	5,000 J	20,000 J	1,900	<460	10,000 J	<810	61 or MDL	1,000
Indeno(1,2,3-cd)pyrene	<3,700	4,000 J	<460	<4,900	<37,000	<41,000	<43,000	<450	<460	<42,000	<810	3,200	500
Benz(g,h,i)perylene	<3,700	5,000 J	<460	<4,900	<37,000	<41,000	10,000 J	<450	<460	<42,000	<810	50,000*	100,000

SVOCs by USEPA SW-846 Method 8270 (STARS list)

Sample ID	BH26	BH27	BH28	BH29	BH30	BH31	BH34	BH37	BH38	BH40	BH41	BH42	TAGM Recommended Soil Cleanup Objectives ug/kg	Part 375 (Unrestricted) Soil Cleanup Objectives ug/kg
Date Sampled	4/1/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10		
Sample Depth	8-10 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	10-12 ft. bgs	8-12 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	0-4 ft. bgs	6-8 ft. bgs	8-10 ft. bgs	4-8 ft. bgs	2-4 ft. bgs		
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg		
Acenaphthene	<390	<400	<3,900	<390	<410	900 J	<380	<3,600	<4,700	<4,300	<41,000	200,000 J	50,000*	20,000
Fluorene	<390	<400	14,000	70 J	<410	9,400 J	60 J	1,000 J	600 J	10,000 J	30,000 J	1,900,000 J	50,000*	30,000
Phenanthrene	60 J	<400	<3,900	<390	<410	2,000 J	70 J	<3,600	<4,700	<4,300	20,000 J	660,000	50,000*	100,000
Anthracene	<390	90 J	<3,900	<390	300 J	12,000	<380	700 J	3,000 J	10,000 J	91,000	2,600,000	50,000*	100,000
Fluoranthene	<390	40 J	<3,900	<390	200 J	10,000	<380	1,000 J	2,000 J	10,000 J	84,000	2,200,000	50,000*	100,000
Pyrene	<390	<400	3,000 J	<390	100 J	5,400	<380	<3,600	3,000 J	<4,300	53,000	1,100,000	224 or MDL	1,000
Benz(a)anthracene	<390	<400	<3,900	<390	100 J	5,100	<380	<3,600	3,000 J	<4,300	72,000	1,300,000	400	1,000
Chrysene	<390	<400	<3,900	<390	100 J	5,100	<380	<3,600	3,000 J	<4,300	98,000	970,000	220 or MDL	1,000
Benz(b)fluoranthene	<390	<400	<3,900	<390	90 J	4,000 J	<380	<3,600	3,000 J	<4,300	95,000	1,900,000	220 or MDL	800
Benz(k)fluoranthene	<390	<400	<3,900	<390	90 J	3,000 J	<380	<3,600	2,000 J	<4,300	120,000	1,800,000	61 or MDL	1,000
Benz(a)pyrene	<390	<400	<3,900	<390	100 J	5,000	<380	<3,600	2,000 J	<4,300	81,000	1,000,000	3,200	500
Indeno(1,2,3-cd)pyrene	<390	<400	<3,900	<390	<410	3,000 J	<380	<3,600	2,000 J	<4,300	100,000	1,200,000	50,000*	100,000
Benz(g,h,i)perylene	<390	<400	<3,900	<390	<410	4,000 J	<380	<3,600	2,000 J	<4,300	100,000	1,200,000	50,000*	100,000

ug/kg = micrograms per kilogram
ft. bgs = feet below ground surface

J = Analyte detected below quantitation limits

STARS = Spill Technology and Remediation Series

* = Total SVOCs must be ≤ 500,000ug/kg, and individual non-carcinogenic SVOCs must be ≤ 50,000ug/kg
TAGM Recommended Soil Cleanup Objectives = Division Technical and Administrative Guidance Memorandum (TAGM 4046): Determination of Soil Cleanup Objectives and Cleanup Levels and addendum (August, 2001)
B = This analyte was also detected within the laboratory's method blank and may be the result of laboratory contamination.

Underlined = Analyte that is detected above the TAGM Recommended Soil Cleanup Objectives.
= Analyte that is detected above the Part 375 (Unrestricted) Soil Cleanup Objectives.

SVOCs by USEPA SW-846 Method 8270 (STARS List)

Sample ID	BH43	BH44	BH45	BH46	BH47	BH48	BH50	BH51	BH52	BH53	BH54	BH55	TAGM	Part 375
Date Sampled	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	7/26/10	Recommended Soil Cleanup Objectives	(Unrestricted) Soil Cleanup Objectives
Sample Depth	2-4 ft. bgs	2-4 ft. bgs	4-6 ft. bgs	8-10 ft. bgs	2-4 ft. bgs	4-6 ft. bgs	4-6 ft. bgs	2-4 ft. bgs	0-4 ft. bgs	4-6 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	ug/kg	ug/kg
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Acenaphthene	<3,800	<4,100	<5,100	<480	<4,000	<4,100	<3,700	<400	<3,700	<420	<5,100	<3,900	50,000*	20,000
Fluorene	<3,800	<4,100	<5,100	<480	<4,000	<4,100	<3,700	<400	<3,700	<420	<5,100	<3,900	50,000*	30,000
Phenanthrene	<3,800	5,200	16,000	<480	<4,000	8,000	<3,700	<400	15,000	1,400	<5,100	5,900	50,000*	100,000
Anthracene	<3,800	<4,100	<5,100	<480	<4,000	<4,100	<3,700	<400	<3,700	<420	<5,100	<3,900	50,000*	100,000
Fluoranthene	<3,800	6,100	16,000	<480	5,100	7,400	<3,700	<400	17,000	<420	<5,100	<3,900	50,000*	100,000
Pyrene	<3,800	5,900	15,000	<480	4,900	6,300	<3,700	<400	16,000	<420	<5,100	<3,900	50,000*	100,000
Benzo(a)anthracene	<3,800	<4,100	6,000	<480	<4,000	<4,100	<3,700	<400	8,300	<420	<5,100	<3,900	224 or MDL	1,000
Chrysene	<3,800	<4,100	6,800	<480	<4,000	<4,100	<3,700	<400	7,300	<420	<5,100	<3,900	400	1,000
Benzo(b)fluoranthene	<3,800	<4,100	<5,100	<480	<4,000	<4,100	<3,700	<400	6,300	<420	<5,100	<3,900	220 or MDL	1,000
Benzo(k)fluoranthene	<3,800	<4,100	7,700	<480	<4,000	<4,100	<3,700	<400	6,200	<420	<5,100	<3,900	220 or MDL	800
Benzo(a)pyrene	<3,800	<4,100	5,700	<480	<4,000	<4,100	<3,700	<400	6,300	<420	<5,100	<3,900	61 or MDL	1,000
Indeno(1,2,3-cd)pyrene	<3,800	<4,100	<5,100	<480	<4,000	<4,100	<3,700	<400	<3,700	<420	<5,100	<3,900	3,200	500
Benzo(g,h,i)perylene	<3,800	<4,100	<5,100	<480	<4,000	<4,100	<3,700	<400	<3,700	<420	<5,100	<3,900	50,000*	100,000

SVOCs by USEPA SW-846 Method 8270 (STARS List)

Sample ID	BH56	BH58	BH59	BH60	BH61	BH62	BH63	BH64	BH65	BH66	TAGM	Part 375
Date Sampled	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	7/27/10	Recommended Soil Cleanup Objectives	(Unrestricted) Soil Cleanup Objectives
Sample Depth	8-10 ft. bgs	0-4 ft. bgs	8-10 ft. bgs	8-10 ft. bgs	0-2 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	2-4 ft. bgs	6-8 ft. bgs	ug/kg	ug/kg
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Acenaphthene	<440	<4,100	<410	<380	<3,700	<4,400	<4,500	<5,400	<3,800	<4,000	50,000*	20,000
Fluorene	<440	<4,100	<410	<380	<3,700	4,600	<4,500	<5,400	<3,800	<4,000	50,000*	30,000
Phenanthrene	<440	13,000	<410	<380	<3,700	13,000	16,000	6,800	<3,800	<4,000	50,000*	100,000
Anthracene	<440	<4,100	<410	<380	<3,700	<4,400	<4,500	<5,400	<3,800	<4,000	50,000*	100,000
Fluoranthene	<440	<4,100	<410	<380	<3,700	5,200	20,000	7,900	<3,800	<4,000	50,000*	100,000
Pyrene	<440	<4,100	<410	<380	<3,700	4,900	17,000	7,100	<3,800	<4,000	50,000*	100,000
Benzo(a)anthracene	<440	<4,100	<410	<380	<3,700	<4,400	9,000	<5,400	<3,800	<4,000	224 or MDL	1,000
Chrysene	<440	<4,100	<410	<380	<3,700	<4,400	8,500	<5,400	<3,800	<4,000	400	1,000
Benzo(b)fluoranthene	<440	<4,100	<410	<380	<3,700	<4,400	7,400	<5,400	<3,800	<4,000	220 or MDL	1,000
Benzo(k)fluoranthene	<440	<4,100	<410	<380	<3,700	<4,400	7,900	<5,400	<3,800	<4,000	220 or MDL	800
Benzo(a)pyrene	<440	<4,100	<410	<380	<3,700	<4,400	8,200	<5,400	<3,800	<4,000	61 or MDL	1,000
Indeno(1,2,3-cd)pyrene	<440	<4,100	<410	<380	<3,700	<4,400	<4,500	<5,400	<3,800	<4,000	3,200	500
Benzo(g,h,i)perylene	<440	<4,100	<410	<380	<3,700	<4,400	<4,500	<5,400	<3,800	<4,000	50,000*	100,000

ug/kg = micrograms per kilogram
ft. bgs = feet below ground surface

J = Analyte detected below quantitation limits

STARS = Spill Technology and Remediation Series

* = Total SVOCs must be ≤ 500,000ug/kg, and individual non-carcinogenic SVOCs must be ≤ 50,000ug/kg

TAGM Recommended Soil Cleanup Objectives = Division Technical and Administrative Guidance Memorandum (TAGM 4046): Determination of Soil Cleanup Objectives and Cleanup Levels and addendum (August, 2001)

B = This analyte was also detected within the laboratory's method blank and may be the result of laboratory contamination.

Undetected = Analyte that is detected above the TAGM Recommended Soil Cleanup Objectives.

Undetected = Analyte that is detected above the Part 375 (Unrestricted) Soil Cleanup Objectives.

Conclusions

The purpose of this intrusive study was to better assess the environmental quality of on-site soils in accessible locations of the subject property proximate to the historic pump islands and the current and historic USTs. All test boring locations and soil sampling was completed at the direction of the New York State Department of Environmental Conservation (NYSDEC) and/or their contractors.

The following tables summarize the field observations and the laboratory results.

Sample ID	Depth of Refusal	Depth of Groundwater	Highest PID Reading		Petroleum-Type Odors	Petroleum-Type Staining	Free Product	Analytes Detected Above Regulatory Criteria
	ft. bgs	ft. bgs	ppm	ft. bgs	ft. bgs	ft. bgs	ft. bgs	
BH1	None	12	1,541	8-10	8-10	None	None	Yes
BH2	None	None	1.7	0-4	None	None	None	NA
BH3	None	None	0.4	0-2	None	None	None	NA
BH4	None	8	None	None	None	None	None	NA
BH5	None	None	0.6	2-4	None	None	None	NA
BH6	None	None	3.5	0-4	None	None	None	NA
BH7	8	4	2.9	2-4	None	None	None	NA
BH8	None	None	1.8	0-4	None	None	None	NA
BH9	None	None	3.2	0-2	None	None	None	NA
BH10	None	None	35.1	0-2	None	None	None	Yes
BH11	None	None	1,897	4-8	1-11	None	None	Yes
BH12	None	8	583	8-12	3-4	None	None	NA
BH13	None	None	13.2	4-8	None	None	None	No**
BH14	None	None	1.5	8-10	None	None	None	NA
BH15	None	None	52.3	0.4-2	0-5	None	None	No**
BH16	None	None	2.7	10-12	None	None	None	NA
BH17	None	None	1.8	2-4	None	None	None	NA
BH18	None	8	527	0.4-4	3-10	None	None	Yes
BH19	None	None	923	2-4	1-10	None	None	Yes
BH20	None	9	2.8	8-10	None	None	None	NA
BH21	None	None	21.3	6-8	None	None	None	Yes
BH22	None	None	6.8	6-8	None	None	None	NA
BH23	None	None	303	6-8	3-8	None	None	No**
BH24	None	None	616	2-4	3-5.5	None	None	No**
BH25	None	8	157	0.4-4	0-10	None	None	Yes
BH26	None	None	175	8-10	8-10	None	None	No
BH27	None	None	998	8-10	2-12	None	None	Yes
BH28	None	None	523	6-8	1-8	None	None	No**
BH29	None	8	>999	10-12	8-12	None	None	No**
BH30	None	11	26	8-12	None	None	None	Yes
BH31	None	8	663	8-10	8-11	None	None	Yes
BH32	None	9	6	4-8	None	None	None	NA
BH33	None	10	3	0.4-12	None	None	None	NA
BH34	None	8	22.5	6-8	None	None	None	No
BH35	None	None	5	4-8	None	None	None	NA
BH36	*	*	*	*	*	*	*	*
BH37	None	10	>999	0.4-8, 12-16	0.4-16	None	None	Yes
BH38	None	None	>999	4-8	6-8	6-8	None	Yes
BH39	None	None	8	0-4	None	None	None	No**
BH40	None	None	27	0-4	None	None	None	No**
BH41	None	None	392	4-8	4-8	4-8	None	Yes
BH42	None	None	10	2-4	None	None	None	Yes

NA = not analyzed

* = test boring was not completed due to proximity to natural gas utility lines

** = elevated laboratory method detection limit

Sample ID	Depth of Refusal	Depth of Groundwater	Highest PID Reading		Petroleum-Type Odors	Petroleum-Type Staining	Free Product	Analytes Detected Above Regulatory Criteria
	ft. bgs	ft. bgs	ppm	ft. bgs	ft. bgs	ft. bgs	ft. bgs	
BH43	None	None	6	2-4	None	None	None	No**
BH44	None	None	40	2-4	None	None	None	No**
BH45	None	None	810	4-6	4-7	None	None	Yes
BH46	None	None	172	8-10	None	None	None	No**
BH47	None	None	6	2-4	None	None	None	No**
BH48	None	None	2	0-8, 10-12	None	None	None	No**
BH49	4	None	1	0-4	None	None	None	NA
BH50	None	None	1	0-6	None	None	None	No**
BH51	None	None	339	2-4	2-8	None	None	No
BH52	None	None	>999	0-4	0-8	None	None	Yes
BH53	None	None	>999	0-8	2-10	2-8	None	Yes
BH54	None	None	>999	2-8	2-8	None	None	Yes
BH55	None	None	668	4-8	4-10	None	None	No**
BH56	None	12	>999	8-10	8-12	None	None	No
BH57	NR	NR	NR	NR	NR	NR	NR	NR
BH58	None	8	>999	0-4	1-10	None	None	Yes
BH59	None	None	448	8-10	1-10	None	None	No**
BH60	None	None	336	8-10	8-12	None	None	No
BH61	2	None	672	0-2	0.4-2	None	None	No**
BH62	None	None	>999	0-2, 4-8	4-8	4-8	None	No**
BH63	None	None	>999	4-8	4-8	4-8	None	Yes
BH64	None	None	9	0-2	None	None	None	No**
BH65	7	None	25	2-4	None	None	None	No**
BH66	None	None	2	4-12	None	None	None	No**

NA = not analyzed

NR = no recovery

* = test boring was not completed due to proximity to natural gas utility lines

** = elevated laboratory method detection limit

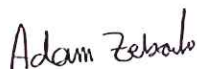
Based on the analytical results, analytes were detected at concentrations above TAGM Recommended Soil Cleanup Objectives and Part 375 (Unrestricted) Soil Cleanup Objectives in soil samples collected from west, south and east of the subject structure. Analytes were not detected at concentrations above TAGM Recommended Soil Cleanup Objectives or Part 375 (Unrestricted) Soil Cleanup Objectives in soil samples collected from test borings BH15, BH23, BH28, BH29, BH40, BH46, BH55, BH59, BH61 and BH62. Based on the field observations (i.e. elevated PID readings, odors, staining) analytes may be present in soil samples collected from those test borings; however, were not detected due to elevated laboratory method detection limits.

Recommendations

Contaminated soil and groundwater (if any) should be remediated in accordance with the requirements of the NYSDEC. Similarly, non compliant UST systems should be properly abandoned (i.e., closed-in-place or excavated and removed).

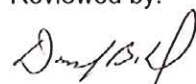
Thank you for allowing LCS to service your environmental needs. If you have any questions or require additional information, please do not hesitate to call our office.

Sincerely,



Adam Zebrowski
Environmental Analyst

Reviewed by:



Douglas B. Reid
Sr. VP, Environmental Services
Sr. Environmental Scientist

SITE LOCATION MAP

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USGS Buffalo, New York, United States 01 Jul 1995

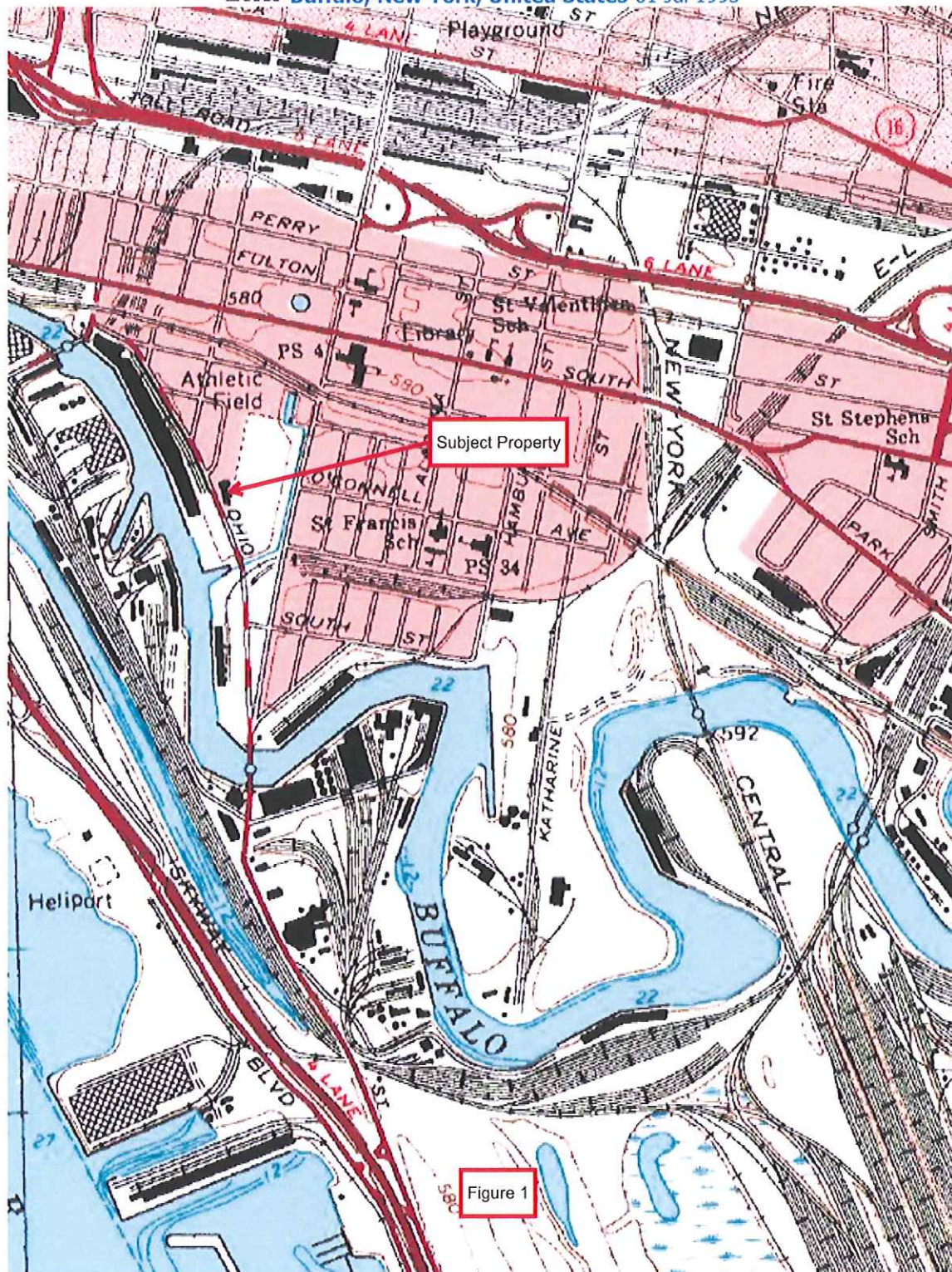


Figure 1

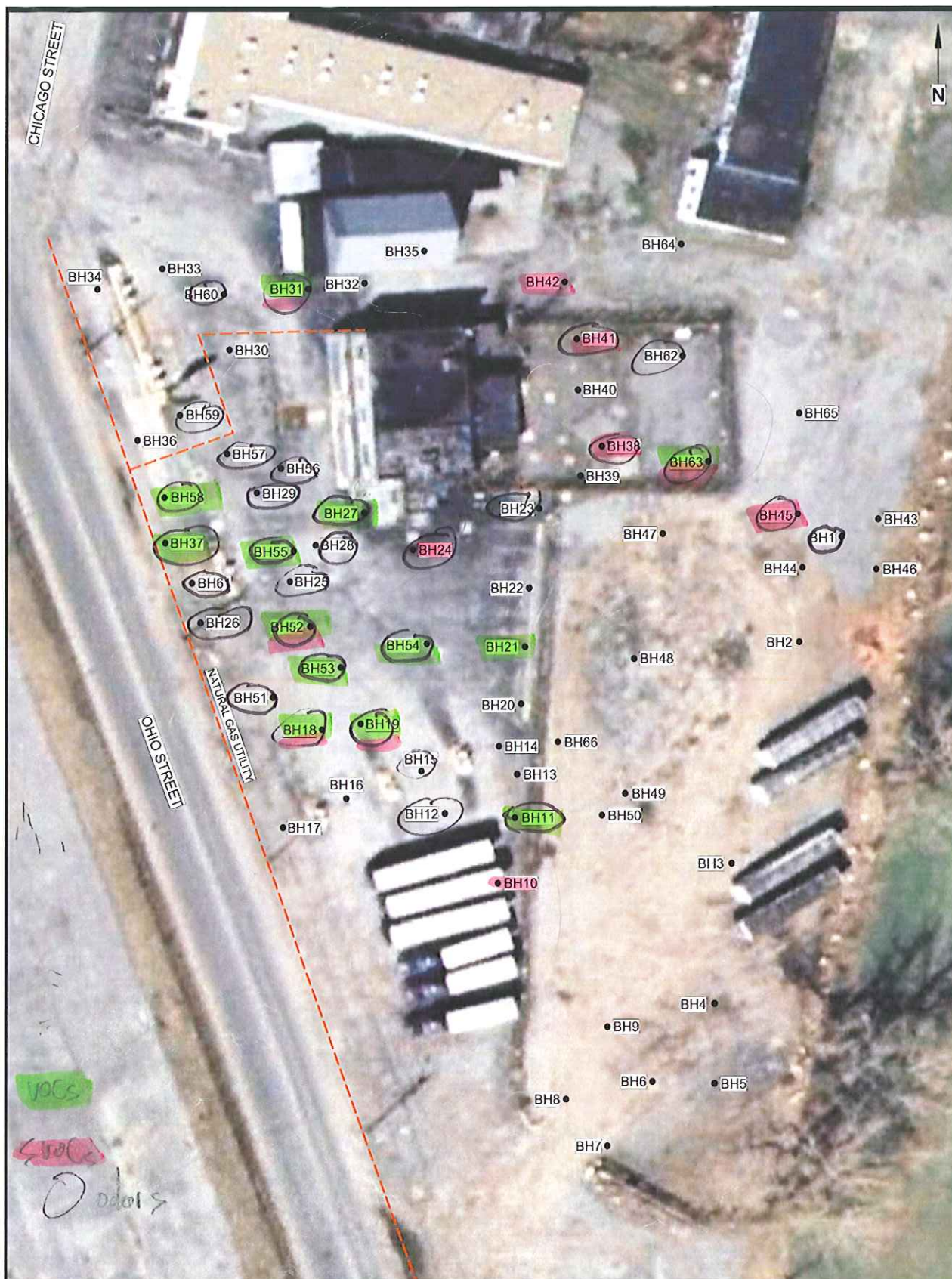
m 200 400 600
yds 200 400 600


Image courtesy of the U.S. Geological Survey

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SUBSURFACE INVESTIGATION MAP



	FIGURE 2 - SITE INVESTIGATION PLAN	
	300 OHIO STREET BUFFALO, NEW YORK	
	Drawn by: AKZ	Checked by: DBR
	Not to Scale	LCS Project # 10B667.22



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Offices

BUFFALO
NEW YORK

May 7, 2010

ROCHESTER
NEW YORK

Mr. Eric Warren
Russo Development, Inc.
535 East Main Street
Springville, New York 14141

SYRACUSE
NEW YORK

**Re: Phase II Environmental Site Assessment
Limited and Focused Subsurface Soil & Investigation
300 Ohio Street
Buffalo, New York
LCS Project #10B667.22
NYSDEC Spill Number 0904777**

ALBANY
NEW YORK

Dear Mr. Warren:

NEW YORK CITY
NEW YORK

Background

At your request, Lender Consulting Services, Inc. (LCS) documented site investigation activities and prepared a summary report to present the results of the limited and focused subsurface investigation, completed at the above-referenced subject property (See Figure 1). All test boring locations and soil sampling was completed at the direction of the New York State Department of Environmental Conservation (NYSDEC) and/or their contractors.

**VALLEY
COTTAGE**
NEW YORK

HARRISBURG
PENNSYLVANIA

Site Description

The subject property was historically utilized as a gasoline and diesel filling station and petroleum distribution operation. Multiple gasoline, diesel, #2 heating oil and kerosene underground storage tanks (USTs) are currently or were historically located on the subjected property. Five inoperative pump islands are currently located west and south of the subject structure. The topography of the site is generally level at grade. The Buffalo River is located approximately 250 feet from the subject property; although, does not border the subject property. The subject property is located in a primarily industrial setting.

PITTSBURGH
PENNSYLVANIA

ALTOONA
PENNSYLVANIA

Introduction

The purpose of this intrusive study was to better assess the environmental quality of on-site soils in accessible locations of the subject property. Soil samples were collected for stratigraphic characterization and field monitoring. Select soil samples were submitted for laboratory analysis to supplement field observations.

BALTIMORE
MARYLAND

The following is a summary of the methods and results of the investigation.

SALISBURY
MARYLAND

CLEVELAND
OHIO

Methods of Investigation

Soil

Soil samples were collected on March 31 through April 2, 2010, with a track-mounted percussion and hydraulically driven drive system equipped with an approximate 2-inch diameter, approximate 48-inch long macro-core sampler. Soil samples were collected within each borehole continuously from the ground surface until a depth of between approximately eight and 16 feet below the ground surface (ft. bgs). Any downhole equipment was decontaminated with an Alconox and tap water wash and tap water rinse between boreholes. The cutting shoes were decontaminated in a similar manner between collection of each sample.

The physical characteristics of all soil samples were classified using the Unified Soil Classification System (USCS) (Visual-Manual Method) and placed in separate sealable containers to allow any vapors to accumulate in the headspace. After several minutes, the container was opened slightly and total volatile organic compound (VOC) concentrations in air within the sample container were measured using a photoionization detector (PID). (The PID is designed to detect VOCs, such as those associated with petroleum.) Based on the field observations and/or screening results, soils were selected for analysis (see below).

Sample Analysis

Following labeling of the laboratory-supplied sample containers, selected samples were placed on ice. The samples were then submitted, under standard chain-of-custody, to a New York State Department of Health (NYSDOH) approved laboratory for analysis in accordance with the United States Environmental Protection agency (USEPA) SW-846 Methods as summarized below.

The following table summarizes the specific analytical testing performed and their respective sample locations.

Sample Location	Analytical Testing Performed
BH1 (8-10 ft. bgs)	VOCs (STARS List), SVOCs (STARS List)
BH10 (0-2 ft. bgs)	
BH11 (4-8 ft. bgs)	
BH13 (4-8 ft. bgs)	
BH15 (0-2 ft. bgs)	
BH18 (0-4 ft. bgs)	
BH19 (2-4 ft. bgs)	
BH21 (6-8 ft. bgs)	
BH23 (6-8 ft. bgs)	
BH24 (2-4 ft. bgs)	
BH25 (0-4 ft. bgs)	
BH26 (8-10 ft. bgs)	
BH27 (8-10 ft. bgs)	
BH28 (6-8 ft. bgs)	
BH29 (10-12 ft. bgs)	
BH30 (8-12 ft. bgs)	
BH31 (8-10 ft. bgs)	
BH34 (6-8 ft. bgs)	
BH37 (0-4 ft. bgs)	
BH38 (6-8 ft. bgs)	
BH40 (8-10 ft. bgs)	
BH41 (4-8 ft. bgs)	
BH42 (2-4 ft. bgs)	

ft. bgs = feet below ground surface

VOCs (STARS List+ 10 TICs) = Spill Technology and Remediation Series

volatile organic compounds + 10 Tentatively Identified Compounds via USEPA Test Method 8260

SVOCs (STARS List + 20 TICs) = Spill Technology and Remediation Series

semi-volatile organic compounds + 20 Tentatively Identified Compound via USEPA Test Method 8270

Results of Field Investigation

Forty-one boreholes (BH1 through BH35 and BH37 through BH42) were completed in accessible areas of the subject property proximate to the environmental concerns. Test boring BH36 was not completed due to its proximity to two natural gas utility lines. (See Figure 2.) A total of 197 soil samples were collected for geologic description. Fill material consisting of asphalt, brick, gravel, clay, sand and silt was noted within all of the test borings with the exception of BH26, BH31 and BH40 through BH42 to a maximum depth of approximately eight ft. bgs. Generally, the native soils encountered consisted of varying mixtures of gravel, sand, silt and clay to the bottom of the test borings. Apparent groundwater was encountered in BH1, BH4, BH7, BH12, BH18, BH20, BH25, BH29 through BH34 and BH37 between approximately four and 12 ft. bgs. Equipment refusal was encountered within test boring BH7 at approximately eight ft. bgs. The cause of the equipment refusal could not be determined.

PID measurements were above total ambient air background VOC measurements (i.e., 0.0 parts per million, ppm) in 184 of the 197 soil samples collected. These elevated concentrations ranged from 0.1 parts per million (ppm) to 1,897 ppm (BH11, ~2-4 ft. bgs). Petroleum-type odors were detected in soil samples collected from test borings BH1, BH11, BH12, BH15, BH18, BH19, BH23 through BH29, BH31, BH37, BH38 and BH41 between approximately the ground surface and 16 ft. bgs. Petroleum-type staining was observed in soil samples collected from test borings BH38 and BH41 between approximately four and eight ft. bgs. In LCS' experience, the PID measurements and field observations (i.e., odors/staining) suggest VOC impact located west, south and east of the subject structure.

Refer to the attached subsurface logs for soil classification for each sample interval, field observations and PID measurements.

Investigation Analytical Results

The soil samples collected and analyzed detected the following analytes. The respective concentrations as well as applicable regulatory guidance values are also listed for comparison. Analytes not detected are not shown.

VOCs by USEPA SW-846 Method 8260 (STARS List)

Sample ID	BH1	BH10	BH11	BH13	BH15	BH18	BH19	BH21	BH23	BH24	BH25	TAGM
Date Sampled	3/31/10	3/31/10	3/31/10	3/31/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	Recommended Soil Cleanup Objectives
Sample Depth	8-10 ft. bgs	0-2 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	0-2 ft. bgs	0-4 ft. bgs	2-4 ft. bgs	6-8 ft. bgs	6-8 ft. bgs	2-4 ft. bgs	0-4 ft. bgs	Recommended Soil Cleanup Objectives
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzene	<34	10 J	900 J	<22	<1,700	750	2,000	1,200	<41,000	<1,900	<740	80
Toluene	<34	19	<2,100	<22	<1,700	400 J	700 J	<410	<41,000	<1,900	<740	1,500
Ethylbenzene	<34	140	2,000 J	22	<1,700	960	5,300	2,200	<41,000	<1,900	<740	5,500
m,p-Xylene	<34	68	4,900	110	<1,700	1,500	3,200	1,900	<41,000	<1,900	<740	1,200*
o-Xylene	<34	7 J	1,000 J	27	<1,700	400 J	<780	200 J	<41,000	<1,900	<740	1,200*
Isopropylbenzene	<34	92	<2,100	<22	<1,700	4,800	3,000	400 J	<41,000	<1,900	<740	2,300
n-Propylbenzene	<34	230	2,000 J	22	<1,700	3,300	2,400	300 J	<41,000	2,000 J	400 J	3,700
1,3,5-Trimethylbenzene	<34	360	3,500	69	<1,700	2,900	3,300	200 J	<41,000	900 J	<740	3,300
1,2,4-Trimethylbenzene	<34	450	12,000	240	<1,700	2,800	1,200	630	<41,000	1,000 J	700 J	10,000
sec-Butylbenzene	<34	50	<2,100	<22	<1,700	600 J	700 J	<410	<41,000	<1,900	<740	10,000
4-Isopropyltoluene	<34	51	<2,100	<22	<1,700	500 J	500 J	<410	<41,000	<1,900	<740	10,000
n-Butylbenzene	<34	130	1,000 J	<22	<1,700	1,500	1,400	<410	<41,000	1,000 J	<740	10,000
Naphthalene	<34	210	2,900	36	2,300	2,800	3,300	580	<41,000	2,100	920	13,000

VOCs by USEPA SW-846 Method 8260 (STARS List)

Sample ID	BH26	BH27	BH28	BH29	BH30	BH31	BH34	BH37	BH38	BH40	BH41	BH42	TAGM
Date Sampled	4/1/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	Recommended Soil Cleanup Objectives
Sample Depth	8-10 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	10-12 ft. bgs	8-12 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	0-4 ft. bgs	6-8 ft. bgs	8-10 ft. bgs	4-8 ft. bgs	2-4 ft. bgs	Recommended Soil Cleanup Objectives
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Benzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	80
Toluene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	1,500
Ethylbenzene	<710	2,400	<1,800	<36,000	<750	<770	<700	3,700	<860	<780	<1,900	<390	5,500
m,p-Xylene	<710	2,400	<1,800	<36,000	<750	1,300	<700	4,700	<860	<780	<1,900	<390	1,200*
o-Xylene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	1,200*
Isopropylbenzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	1,000 J	<860	<780	<1,900	<390	2,300
n-Propylbenzene	<710	<1,800	1,000 J	<36,000	<750	<770	400 J	1,800	<860	<780	1,000 J	<390	3,700
1,3,5-Trimethylbenzene	<710	2,400	<1,800	<36,000	<750	400 J	<700	3,000	<860	<780	<1,900	<390	3,300
1,2,4-Trimethylbenzene	<710	4,600	<1,800	<36,000	<750	1,200	<700	13,000	<860	<780	1,900	<390	10,000
tert-Butyl Benzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	10,000
4-Isopropyltoluene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	10,000
n-Butylbenzene	<710	<1,800	<1,800	<36,000	<750	<770	<700	<1,700	<860	<780	<1,900	<390	10,000
Naphthalene	<710	1,000 J	3,100	<36,000	<750	<770	<700	4,500	<860	<780	<1,900	1,800	13,000

ug/kg = micrograms per kilogram

ft. bgs = feet below ground surface

* = Based on the sum of the Total Xylenes.

J = Analyte detected below quantitation limits.

STARS = Site Technology and Remediation System

TAGM = State Technical and Administrative Guidance Memorandum

(TAGM 4046): Determination of Soil Cleanup Objectives and Cleanup Levels and addendum (August, 2001)

= Analyte that is detected above the TAGM Recommended Soil Cleanup Objectives.

SVOCs by USEPA SW-846 Method 8270 (STARS list)

Sample ID	BH1	BH10	BH11	BH13	BH15	BH18	BH19	BH21	BH23	BH24	BH25	TAGM
Date Sampled	3/31/10	3/31/10	3/31/10	3/31/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	4/1/10	Recommended Soil Cleanup Objectives
Sample Depth	8-10 ft. bgs	0-2 ft. bgs	4-8 ft. bgs	4-8 ft. bgs	0-2 ft. bgs	0-4 ft. bgs	2-4 ft. bgs	6-8 ft. bgs	6-8 ft. bgs	2-4 ft. bgs	0-4 ft. bgs	ug/kg
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Acenaphthene	<3,700	<40,000	<460	<4,900	<37,000	<41,000	<43,000	<450	<460	<42,000	<810	50,000*
Fluorene	<3,700	<40,000	200 J	<4,900	<37,000	<41,000	8,000 J	<450	<460	8,000 J	<810	50,000*
Phenanthrene	<3,700	<40,000	630	<4,900	10,000 J	20,000 J	30,000 J	<450	870	40,000 J	5,000	50,000*
Anthracene	<3,700	<40,000	100 J	<4,900	<37,000	<41,000	9,000 J	<450	<460	10,000 J	<810	50,000*
Fluoranthene	<3,700	<40,000	730	<4,900	5,000 J	8,000 J	40,000 J	<450	100 J	40,000 J	890	50,000*
Pyrene	<3,700	<40,000	550	<4,900	6,000 J	8,000 J	30,000 J	<450	100 J	30,000 J	860	50,000*
Benzo(a)anthracene	<3,700	<40,000	300 J	<4,900	<37,000	6,000 J	20,000 J	<450	<460	20,000 J	300 J	224 or MDL
Chrysene	<3,700	<40,000	300 J	<4,900	<37,000	<41,000	10,000 J	<450	<460	8,000 J	<810	220 or MDL
Benzo(b)fluoranthene	<3,700	<40,000	300 J	<4,900	<37,000	7,000 J	10,000 J	<450	<460	10,000 J	<810	220 or MDL
Benzo(k)fluoranthene	<3,700	4,000 J	300 J	<4,900	<37,000	5,000 J	20,000 J	1,900	<460	10,000 J	<810	61 or MDL
Benzo(a)pyrene	800 J	4,000 J	200 J	<4,900	<37,000	5,000 J	20,000 J	<450	<460	<42,000	<810	3,200
Indeno(1,2,3-cd)pyrene	<3,700	4,000 J	<460	<4,900	<37,000	<41,000	<43,000	<450	<460	<42,000	<810	50,000*
Benzo(g,h,i)perylene	<3,700	5,000 J	<460	<4,900	<37,000	<41,000	10,000 J	<450	<460	<42,000	<810	50,000*

SVOCs by USEPA SW-846 Method 8270 (STARS list)

Sample ID	BH26	BH27	BH28	BH29	BH30	BH31	BH34	BH37	BH38	BH40	BH41	BH42	TAGM
Date Sampled	4/1/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	4/2/10	Recommended Soil Cleanup Objectives
Sample Depth	8-10 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	10-12 ft. bgs	8-12 ft. bgs	8-10 ft. bgs	6-8 ft. bgs	0-4 ft. bgs	6-8 ft. bgs	8-10 ft. bgs	4-8 ft. bgs	2-4 ft. bgs	ug/kg
Units	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
Acenaphthene	<390	<400	<3,900	<390	<410	900 J	<380	<3,600	<4,700	<4,300	<41,000	200,000 J	50,000*
Fluorene	<390	<400	<3,900	<390	<410	800 J	<380	<3,600	<4,700	<4,300	7,000 J	200,000 J	50,000*
Phenanthrene	60 J	<400	14,000	70 J	300 J	9,400	60 J	1,000 J	600 J	10,000 J	30,000 J	1,900,000	50,000*
Anthracene	<390	90 J	<3,900	<390	<410	2,000 J	70 J	<3,600	<4,700	10,000 J	20,000 J	660,000	50,000*
Fluoranthene	<390	40 J	<3,900	<390	300 J	12,000	<380	700 J	3,000 J	10,000 J	91,000	2,600,000	50,000*
Pyrene	<390	<400	3,000 J	<390	200 J	10,000	<380	1,000 J	2,000 J	10,000 J	84,000	2,200,000	50,000*
Benzo(a)anthracene	<390	<400	<3,900	<390	100 J	5,400	<380	<3,600	3,000 J	<4,300	53,000	1,100,000	224 or MDL
Chrysene	<390	<400	<3,900	<390	100 J	5,100	<380	<3,600	3,000 J	<4,300	72,000	1,300,000	400
Benzo(b)fluoranthene	<390	<400	<3,900	<390	90 J	4,000 J	<380	<3,600	3,000 J	<4,300	98,000	970,000	220 or MDL
Benzo(k)fluoranthene	<390	<400	<3,900	<390	90 J	3,000 J	<380	<3,600	2,000 J	<4,300	95,000	1,900,000	220 or MDL
Benzo(a)pyrene	<390	<400	<3,900	<390	100 J	5,000	<380	<3,600	2,000 J	<4,300	120,000	1,800,000	61 or MDL
Indeno(1,2,3-cd)pyrene	<390	<400	<3,900	<390	<410	3,000 J	<380	<3,600	2,000 J	<4,300	81,000	1,000,000	3,200
Benzo(g,h,i)perylene	<390	<400	<3,900	<390	<410	4,000 J	<380	<3,600	2,000 J	<4,300	100,000	1,200,000	50,000*

ug/kg = micrograms per kilogram
ft. bgs = feet below ground surface

J = Analyte detected below quantitation limits

STARS = Soil Technology and Remediation Series

* = Total SVOCs must be ≤ 500,000ug/kg, and Individual non-carcinogenic SVOCs must be ≤ 50,000ug/kg
TAGM Recommended Soil Cleanup Objectives = Division Technical and Administrative Guidance Memorandum (TAGM 4046); Determination of Soil Cleanup Objectives and Cleanup Levels and addendum (August, 2001)

B = This analyte was also detected within the laboratory's method blank and may be the result of laboratory contamination.
= Analyte that is detected above the TAGM Recommended Soil Cleanup Objective.

Conclusions

The purpose of this intrusive study was to better assess the environmental quality of on-site soils in accessible locations of the subject property proximate to the historic pump islands and the current and historic USTs. All test boring locations and soil sampling was completed at the direction of the New York State Department of Environmental Conservation (NYSDEC) and/or their contractors.

The following table summarizes the field observations and the laboratory results.

Sample ID	Depth of Refusal	Depth of Groundwater	Highest PID Reading		Petroleum-Type Odors	Petroleum-Type Staining	Free Product	Analytes Detected Above Regulatory Criteria
	ft. bgs	ft. bgs	ppm	ft. bgs	ft. bgs	ft. bgs	ft. bgs	
BH1	None	12	1,541	8-10	8-10	None	None	Yes
BH2	None	None	1.7	0-4	None	None	None	NA
BH3	None	None	0.4	0-2	None	None	None	NA
BH4	None	8	None	None	None	None	None	NA
BH5	None	None	0.6	2-4	None	None	None	NA
BH6	None	None	3.5	0-4	None	None	None	NA
BH7	8	4	2.9	2-4	None	None	None	NA
BH8	None	None	1.8	0-4	None	None	None	NA
BH9	None	None	3.2	0-2	None	None	None	NA
BH10	None	None	35.1	0-2	None	None	None	Yes
BH11	None	None	1,897	4-8	1-11	None	None	Yes
BH12	None	8	583	8-12	3-4	None	None	NA
BH13	None	None	13.2	4-8	None	None	None	No**
BH14	None	None	1.5	8-10	None	None	None	NA
BH15	None	None	52.3	0.4-2	0-5	None	None	No**
BH16	None	None	2.7	10-12	None	None	None	NA
BH17	None	None	1.8	2-4	None	None	None	NA
BH18	None	8	527	0.4-4	3-10	None	None	Yes
BH19	None	None	923	2-4	1-10	None	None	Yes
BH20	None	9	2.8	8-10	None	None	None	NA
BH21	None	None	21.3	6-8	None	None	None	Yes
BH22	None	None	6.8	6-8	None	None	None	NA
BH23	None	None	303	6-8	3-8	None	None	NA
BH24	None	None	616	2-4	3-5.5	None	None	No**
BH25	None	8	157	0.4-4	0-10	None	None	Yes
BH26	None	None	175	8-10	8-10	None	None	No
BH27	None	None	998	8-10	2-12	None	None	Yes
BH28	None	None	523	6-8	1-8	None	None	No**
BH29	None	8	>999	10-12	8-12	None	None	No**
BH30	None	11	26	8-12	None	None	None	Yes
BH31	None	8	663	8-10	8-11	None	None	Yes
BH32	None	9	6	4-8	None	None	None	NA
BH33	None	10	3	0.4-12	None	None	None	NA
BH34	None	8	22.5	6-8	None	None	None	No
BH35	None	None	5	4-8	None	None	None	NA
BH36	*	*	*	*	*	None	*	*
BH37	None	10	>999	0.4-8, 12-16	0.4-16	None	None	Yes
BH38	None	None	>999	4-8	6-8	6-8	None	Yes
BH39	None	None	8	0-4	None	None	None	No**
BH40	None	None	27	0-4	None	None	None	No**
BH41	None	None	392	4-8	4-8	4-8	None	Yes
BH42	None	None	10	2-4	None	None	None	Yes

NA = not analyzed

* = test boring was not completed due to proximity to natural gas utility lines

** = elevated laboratory method detection limit

Based on the analytical results, analytes were detected at concentrations above TAGM Recommended Soil Cleanup Objectives in soil samples collected from west, south and east of the subject structure. Analytes were not detected at concentrations above TAGM Recommended Soil Cleanup Objectives in soil samples collected from test borings BH15, BH23, BH28, BH29 and BH40. Based on the field observations (i.e. elevated PID readings, odors, staining) analytes may be present in soil samples collected from those test borings; however, were not detected due to elevated laboratory method detection limits.

Recommendations

Contaminated soil and groundwater (if any) should be remediated in accordance with the requirements of the NYSDEC. Similarly, non compliant UST systems should be properly abandoned (i.e., closed-in-place or excavated and removed).

Thank you for allowing LCS to service your environmental needs. If you have any questions or require additional information, please do not hesitate to call our office.

Sincerely,



Adam Zebrowski
Environmental Analyst

Reviewed by:



Douglas B. Reid
Sr. VP, Environmental Services
Sr. Environmental Scientist

SITE LOCATION MAP

[Send To Printer](#)[Back To MSR Maps](#)[Change to 11x17 Print Size](#)[Show Grid Lines](#)[Change to Landscape](#)

USGS Buffalo, New York, United States 01 Jul 1995



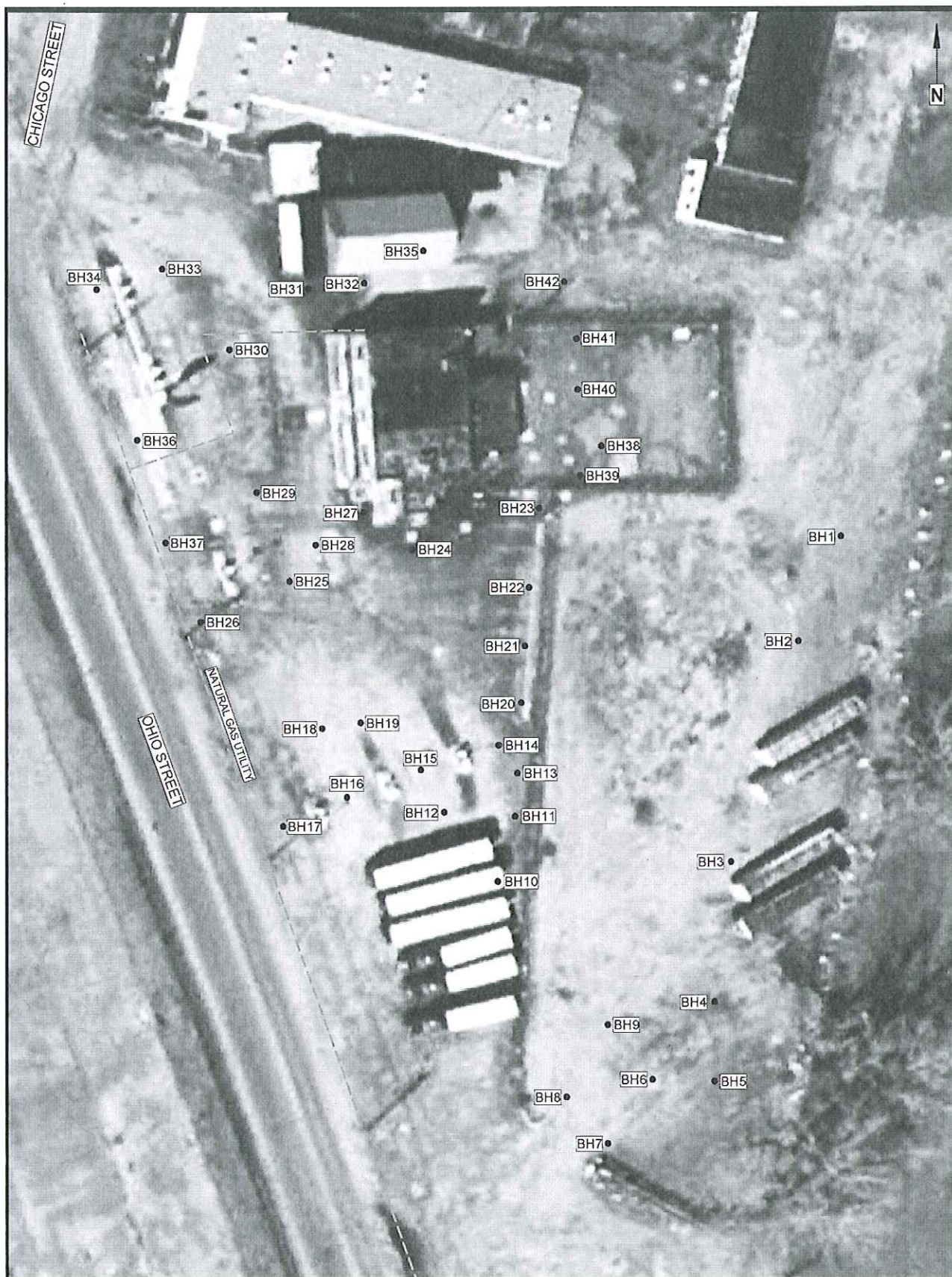
m 200 400 600
yds 200' 400' 600'

Image courtesy of the U.S. Geological Survey

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SUBSURFACE INVESTIGATION MAP



LCS INC.

FIGURE 2 - SITE INVESTIGATION PLAN

300 OHIO STREET
BUFFALO, NEW YORK

Drawn by: AKZ

Checked by: DBR

Not to Scale

LCS Project # 10B667.22

SUBSURFACE LOGS



SUBSURFACE LOG

[illegible]

Suspect petroleum-type odors @ 8-10 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH2
DATE STARTED:	3/31/2010	DATE COMPLETED:	3/31/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	N/A	AFTER COMPLETION:	NA
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~6 ft. bgs
No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

**LCS Inc.**

SUBSURFACE LOG

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22
CLIENT: Russo Development, Inc. BORING/WELL No. BH3
DATE STARTED: 3/31/2010 DATE COMPLETED: 3/31/2010 RECORDED BY: AZ
GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA
WEATHER: 45°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.
DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA

Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
1	0.4	0-2	U	-	-	20	0-6ft: Blackish-gray gravely silt (low plasticity, moist) 6-9ft: Brown clay (medium plasticity, soft, moist) 9-12ft: Brownish-orange silty clay (low plasticity, stiff, moist)
2	0.1	2-4	U	-	-	20	
3	0.0	4-6	U	-	-	18	
4	0.0	6-8	U	-	-	18	
5	0.0	8-10	U	-	-	18	
6	0.0	10-12	U	-	-	18	

NOTES NA = Not Applicable

Fill to ~6 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

[illegible]

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH5
DATE STARTED:	3/31/2010	DATE COMPLETED:	3/31/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES	NA = Not Applicable	Fill to ~5 ft. bgs
	ft. bgs = feet below ground surface	No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH6
DATE STARTED:	3/31/2010	DATE COMPLETED:	3/31/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~5 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH7
DATE STARTED:	3/31/2010	DATE COMPLETED:	3/31/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~4 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT
		NA	FALL
			NA

[illegible]

NOTES	NA = Not Applicable	Fill to ~8 ft. bgs
	ft. bgs = feet below ground surface	No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH8	
DATE STARTED:	3/31/2010	DATE COMPLETED:	3/31/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA		
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT	NA	FALL NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~5.5 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

**LCS Inc.**

SUBSURFACE LOG

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22
CLIENT: Russo Development, Inc. BORING/WELL No. BH9
DATE STARTED: 3/31/2010 DATE COMPLETED: 3/31/2010 RECORDED BY: AZ
GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA
WEATHER: 45°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.
DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA

Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
1	0.8	0-2	U	-	-	24	0-3ft: Black silty gravel with brick (coarse, angular, loose, moist) 3-4ft: Black silty gravelly sand (coarse, medium, fine, dense, moist) 4-12ft: Blackish-gray silty clay (high plasticity, soft, moist)
2	3.2	2-4	U	-	-	24	
3	1.4	4-6	U	-	-	16	
4	1.1	6-8	U	-	-	16	
5	1.2	8-10	U	-	-	24	
6	0.7	10-12	U	-	-	24	

NOTES NA = Not Applicable

Fill to ~4 ft. bgs

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

**LCS Inc.**

SUBSURFACE LOG

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22
CLIENT: Russo Development, Inc. BORING/WELL No. BH10
DATE STARTED: 3/31/2010 DATE COMPLETED: 3/31/2010 RECORDED BY: AZ
GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA
WEATHER: 45°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.
DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA

Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
1	35.1	0-2	U	-	-	15	0-3.5ft: Black sandy silt (no plasticity, moist) 3.5-6ft: Gray sand (coarse, medium, fine, dense, moist) 6-10ft: Brownish-gray silty clay (high plasticity, soft, moist) 10-12ft: brownish-gray silty sand (coarse, medium, fine, dense, moist)
2	1.2	2-4	U	-	-	15	
3	1.0	4-6	U	-	-	20	
4	1.3	6-8	U	-	-	20	
5	0.7	8-10	U	-	-	20	
6	0.3	10-12	U	-	-	20	

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~3.5 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH11	
DATE STARTED:	3/31/2010	DATE COMPLETED:	4/2/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA		AFTER COMPLETION:	NA	
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT	NA	FALL NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~1 ft. bgs

Suspect petroleum-type odors @ 1-11 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH12
DATE STARTED:	3/31/2010	DATE COMPLETED:	3/31/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~8 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~3 ft. bgs

Suspect petroleum-type odors @ 3-4 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH13
DATE STARTED:	3/31/2010	DATE COMPLETED:	3/31/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	45°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~1 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH14	
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA		
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT	NA	FALL NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~1 ft. bgs
No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH15
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~0.4 ft. bgs

Suspect petroleum-type odors @ 0-5 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH16	
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA		
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT	NA	FALL NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~0.4 ft. bgs
No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

[illegible]

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH18
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~8 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~5 ft. bgs

Suspect petroleum-type odors @ 3-10 ft. bgs

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

C - CORE

**LCS Inc.****SUBSURFACE LOG**

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22
CLIENT: Russo Development, Inc. BORING/WELL No. BH19
DATE STARTED: 4/1/2010 DATE COMPLETED: 4/1/2010 RECORDED BY: AZ
GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA
WEATHER: 51°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.
DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA

Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
1	60.9	0.4-2	U	-	-	18	0-0.4ft: Asphalt 0.4-5.5ft: Black sandy gravelly silt (no plasticity, moist) 5.5-12ft: Brownish-gray silty clay (medium plasticity, soft, moist)
2	923	2-4	U	-	-	18	
3	845	4-6	U	-	-	12	
4	229	6-8	U	-	-	12	
5	51.3	8-10	U	-	-	20	
6	22.9	10-12	U	-	-	20	

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~5.5 ft. bgs

Suspect petroleum-type odors @ 1-10 ft. bgs

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH20
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~9 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~2 ft. bgs
No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH21
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~2 ft. bgs
No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

[illegible]

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

[illegible]

Suspect petroleum-type odors @ 3-8 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH24	
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA		AFTER COMPLETION:	NA	
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT	NA	FALL NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Suspect petroleum-type odors @ 3-5.5 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH25
DATE STARTED:	4/1/2010	DATE COMPLETED:	4/1/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~8 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	51°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~4 ft. bgs

Suspect petroleum-type odors @ 0-10 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

**LCS Inc.**

SUBSURFACE LOG

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22
CLIENT: Russo Development, Inc. BORING/WELL No. BH26
DATE STARTED: 4/1/2010 DATE COMPLETED: 4/1/2010 RECORDED BY: AZ
GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA
WEATHER: 51°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.
DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA

Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
1	-	0-4	U	-	-	0	0-4ft: No recovery
2	102	4-8	U	-	-	15	
3	175	8-10	U	-	-	17	4-12ft: Gray silty clay (medium plasticity, stiff, moist)
4	32.1	10-12	U	-	-	16	

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

No apparent fill encountered

Suspect petroleum-type odors @ 8-10 ft. bgs

*SS - SPLIT-SPOON SAMPLE

U - UNDISTURBED TUBE

P - PISTON TUBE

C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22

CLIENT: Russo Development, Inc. BORING/WELL No. BH27

DATE STARTED: 4/2/2010 DATE COMPLETED: 4/2/2010 RECORDED BY: AZ

GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA

WEATHER: 65°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.

DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA	FALL	NA
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[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~1 ft. bgs

Suspect petroleum-type odors @ 2-12 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH28
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

NOTES	NA = Not Applicable	Fill to ~1 ft. bgs
	ft. bgs = feet below ground surface	Suspect petroleum-type odors @ 1-8 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH29
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~8 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Suspect petroleum-type odors @ 8-12 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

[illegible]

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH31
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~8 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

No apparent fill encountered

Suspect petroleum-type odors @ 8-11 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH32
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	~9 ft. bgs	AFTER COMPLETION:	NA
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA	FALL	NA
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[illegible]

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22

CLIENT: Russo Development, Inc. BORING/WELL No. BH35

DATE STARTED: 4/2/2010 DATE COMPLETED: 4/2/2010 RECORDED BY: AZ

GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA

WEATHER: 65°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.

DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~5 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

**LCS Inc.**

SUBSURFACE LOG

PROJECT/ LOCATION: 300 Ohio Street, Buffalo, New York PROJECT No. 10B667.22
CLIENT: Russo Development, Inc. BORING/WELL No. BH36
DATE STARTED: 4/2/1010 DATE COMPLETED: 4/2/2010 RECORDED BY: AZ
GROUNDWATER DEPTH WHILE DRILLING: NA AFTER COMPLETION: NA
WEATHER: 65°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.
DRILL SIZE/TYPE: Macro-core SAMPLE HAMMER: WEIGHT NA FALL NA

Sample No.	PID/HNu Reading (ppm)	Depth (Feet)	Type *	Blows/6"	N	Recovery (Inches)	Material Classification and Description (Unified Soil Classification System-Visual Manual Method)
							Did not complete due to close proximity of natural gas utility

NOTES NA = Not Applicable

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
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CLIENT: Russo Development, Inc. BORING/WELL No. BH37

DATE STARTED: 3/31/2010 DATE COMPLETED: 4/2/2010 RECORDED BY: AZ

GROUNDWATER DEPTH WHILE DRILLING: ~10 ft. bgs AFTER COMPLETION: NA

WEATHER: 65°F, Sunny DRILL RIG: Geoprobe DRILLER: Russo Development, Inc.

DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA	FALL	NA
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[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~4 ft. bgs

Suspect petroleum-type odors @ 0.4-16 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH38	
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA		
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA	FALL	NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

Fill to ~3 ft. bgs
Suspect petroleum-type odors @ 6-8 ft. bgs
Suspect petroleum-type staining @ 6-8 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH39
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

Fill to ~8 ft. bgs

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York	PROJECT No.	10B667.22
CLIENT:	Russo Development, Inc.	BORING/WELL No.	BH40
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010
		RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe
		DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER: WEIGHT	NA
		FALL	NA

[illegible]

NOTES NA = Not Applicable

ft. bgs = feet below ground surface

No apparent fill encountered

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

LCS Inc.

SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH41	
DATE STARTED:	4/2/2010	DATE COMPLETED:	4/2/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA	AFTER COMPLETION:	NA		
WEATHER:	45° Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT	NA	FALL NA

[illegible]

NOTES NA = Not Applicable
ft. bgs = feet below ground surface

No apparent fill encountered
Suspect petroleum-type odors @ 4-8 ft. bgs
Suspect petroleum-type staining @ 4-8 ft. bgs

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C – CORE



SUBSURFACE LOG

PROJECT/ LOCATION:	300 Ohio Street, Buffalo, New York		PROJECT No.	10B667.22	
CLIENT:	Russo Development, Inc.		BORING/WELL No.	BH42	
DATE STARTED:	3/31/2010	DATE COMPLETED:	4/2/2010	RECORDED BY:	AZ
GROUNDWATER DEPTH WHILE DRILLING:	NA		AFTER COMPLETION:	NA	
WEATHER:	65°F, Sunny	DRILL RIG:	Geoprobe	DRILLER:	Russo Development, Inc.
DRILL SIZE/TYPE:	Macro-core	SAMPLE HAMMER:	WEIGHT	NA	FALL NA

[illegible]

NOTES NA = Not Applicable

No apparent fill encountered

ft. bgs = feet below ground surface

No suspect odors detected

*SS - SPLIT-SPOON SAMPLE U - UNDISTURBED TUBE P - PISTON TUBE C - CORE

90 B John Muir Drive
Amherst, New York 14228
(716) 565-0624 • Fax (716) 565-0625



October 3, 2010

Tim McInerney
National Vacuum
408 47th Street
Niagara Falls, NY 14304

Transmitted via email to: Tim McInerney (jtmcinerney@nationalvacuum.com)

Dear Mr. McInerney:

Subject: Geophysical Survey Results, 300 Ohio Street, Buffalo, NY

1.0 INTRODUCTION

This letter report presents the results of the geophysical investigation performed for National Vacuum in support of their environmental investigation of a property located at 300 Ohio Street in Buffalo, NY. We understand that historical information compiled by others suggests that this property once operated as an automotive fuel station.

The geophysical investigation was designed to geophysically characterize the subsurface and focus a follow-up intrusive investigation. The information provided herein is intended to assist national Vacuum with their assessment of potential environmental concerns at the Site.

The objective for the geophysical survey was to explore for anomalies indicative of underground storage tanks (USTs). AMEC Geomatrix, Inc. performed data acquisition on September 8 and 9, 2010.

2.0 METHODOLOGY

A series of reference grids were installed at the site to facilitate data acquisition along lines spaced five feet apart. The grids were marked with orange and white spray paint with select coordinates labeled to allow subsequent work if necessary.

The site was geophysically surveyed using the Geonics EM61. The EM61 unit is a high sensitivity, high resolution time domain electromagnetic (TDEM) metal detector that can detect both ferrous and nonferrous metallic objects. It has an approximate investigation depth of 10 feet. The processing console is contained in a backpack worn by the operator which is

AMEC Geomatrix, Inc.

interfaced to a digital data logger. The transmitter and two receiver coils are located on a two-wheeled cart that is pulled by the operator.

The device's transmitter coil generates a pulsed primary EM field at a rate of 150 pulses per second, inducing eddy currents into the subsurface. The decay rates of these eddy currents are measured by two, 3.28 foot by 1.64 foot (1 meter by $\frac{1}{2}$ meter) rectangular receiver coils. By taking the measurements at a relatively long time frame after termination of the primary pulse, the response is practically independent of the survey area's terrain conductivity. Specifically, the decay rates of the eddy currents are much longer for metals than for normal soils allowing the discrimination of the two.



EM61 in use (photo not from this site)

Data are collected from the EM61's two receiver coils. One of the receiver coils is located coincident to the transmitter coil. The other receiver coil is located 1.31 feet (0.4 meters) above the transmitter coil. Data from the top receiver coil are stored on Channel 1 of a digital data logger. Data from the bottom receiver coil are stored on Channel 2 of the data logger. Channel 1 and Channel 2 data are simultaneously recorded at

each station location. The instrument responses are

recorded in units of milliVolts (mV). Data were recorded digitally by a data logger at a rate of approximately 2 measurements per foot along the survey lines which were spaced 5 feet apart.

3.0 RESULTS

The EM61 data for the site are shown in Figures 1 through 3. The color bar to the right of the maps indicates the colors associated with the respective measured values. Areas suspected to be free of buried metals are shown as color shades of blue. All areas exhibiting a response greater than background (0 to 40 mVolts) likely contain buried metals. These areas are depicted in shades of dark blue through yellow on the figures.

Figure 2 shows the geophysical data overlain with an air-photo. Figure 3 shows the geophysical data overlain with a historic site map showing UST's that was provided by the DEC.

Numerous surface and buried metal anomalies are observed on the figures and are shown in shades of yellow. Several linear anomalies, likely related to buried pipes, are shown in shades of dark blue.

Anomalies interpreted to be potentially significant are labeled A through S on the figures. These anomalies likely represent buried metal objects and are potentially UST's. Other explanations for the anomalies may be that some relate to miscellaneous buried metal objects. The airphoto (Figure 2) suggests that Anomalies in the region of "A" may be related to the footprint of a former building.

Any of the additional above background responses may be significant from an environmental perspective however they are more likely associated with miscellaneous surface or buried metals.

4.0 LIMITATIONS

The geophysical methods used during this survey are established, indirect techniques for non-destructive subsurface reconnaissance exploration. As these instruments utilize indirect methods, they are subject to inherent limitations and ambiguities. Metallic surface features (reinforced concrete pads, electrical wires, scrap metal, etc.) preclude reliable non-invasive data/results beneath, and in the immediate vicinity of, the surface features. Targets such as buried drums, buried tanks, conduits, etc. are detectable only if they produce recognizable anomalies or patterns against the background geophysical data collected. As with any remote sensing technique, the anomalies identified during a geophysical survey should be further investigated by other techniques such as historical aerial photography, test pit excavation and/or test boring, if warranted.

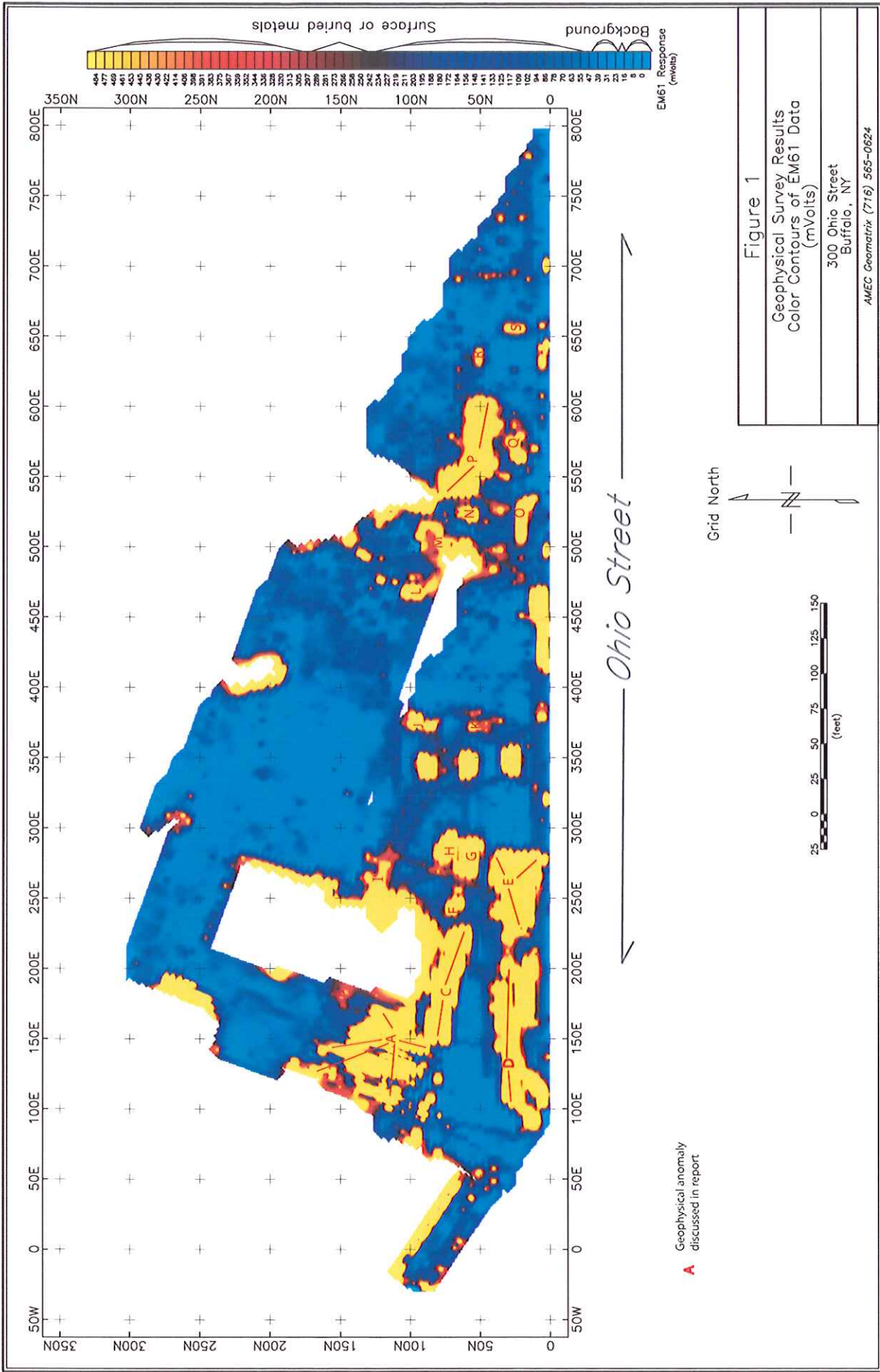
Tim McInerney
National Vacuum
October 3, 2010
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Please do not hesitate to contact us if you have any questions or require additional information.

Sincerely yours,
AMEC GEOMATRIX, INC.

A handwritten signature in cursive script, appearing to read "John Luttinger", written in dark ink.

John Luttinger
Senior Geophysicist





A Geophysical anomaly
discussed in report

