Phase II Environmental Investigation Report

229 Homer Street Site
Olean, New York

February 2015 0225-015-001

Prepared For: Benson Construction & Development, LLC

TurnKey Environmental Restoration, LLC

2558 Hamburg Turnpike, Buffalo, New York | phone: (716) 856-0599 | fax: (716) 856-0583

PHASE II ENVIRONMENTAL INVESTIGATION REPORT

229 Homer Street Site
Olean, New York

February 2015 0225-015-001

Prepared for:

Benson Construction and Development, LLC

PHASE II ENVIRONMENTAL INVESTIGATION REPORT

229 Homer Street Site

229 Homer Street

Olean, New York

Table of Contents

LIST OF TABLES

LIST OF FIGURES

APPENDICES

1.0 BACKGROUND AND SITE DESCRIPTION

TurnKey Environmental Restoration, LLC (TurnKey) performed a Phase II Environmental Investigation at a property owned by Benson Construction and Development, LLC (Benson) located at 229 Homer Street in Olean, Cattaraugus County, New York (Site, see Figure 1 and 2).

1.1 Site Description

The Site is comprised of an approximate 3.34-acre parcel of commercially used land located in a historic heavy industrial area of the City of Olean. The Site is located within the limits of the approximate 125-acre Exxon/Mobil Legacy Site (EMLS). The EMLS operated as an oil refinery under several different names from approximately 1880 to 1950s. The Site is located within the EMLS Works #3 area where oil refining and storage historically took place; based on historical aerial photographs, the area of the Site appears to be primarily an oil storage area. According to a May 2008 Phase I Environmental Site Assessment (ESA) completed by GZA GeoEnvironmental (GZA), the site was used by Yellow Freight from 1989 to 1997 and Meadow Brook Dairy in at least 2003. Benson has occupied the Site since 2006.

The parcel is currently improved with one, one-story building used as an office and storage/warehouse building. The Site is bound by Two Mile Creek and Homer Street to the northwest, a Casella Waste Management of New York transfer station to the northeast, Southern Tier Rail Authority rail lines to the southeast, and a vacant parcel (251 Homer Street, currently being remediated under the New York State Department of Environmental Conservation (NYSDEC) Brownfield Cleanup Program (BCP)) to the southwest.

1.2 Environmental History

Based on a Phase I Environmental Site Assessment of the Site completed by GZA in May 2008, we understand that the Site was historically a portion of a larger petroleum refinery and petroleum bulk storage facility commonly known as the former Socony-Vacuum facility. The Phase I ESA identified the following recognized environmental condition associated with the Site:

- The Site was historically occupied by a large tank, used for oil storage by Socony Vacuum and/or Felmont Oil, and two tank berm areas. The Site was identified as

part of the EMLS Works #3 area. The tank and berm areas were removed by the 1970s. Potential historic releases may have impacted the soil and/or groundwater at the Site.

GZA also recommended that a 1,000-gallon aboveground storage tank (AST) located on-Site be placed in an area of secondary containment [note- there was no evidence of leaks surrounding the AST at the time of the Site inspection]. This AST has since been removed from the Site.

Based on an 1898 historic topographic map and 1930, 1938, 1955, and 1960 aerial photographs reviewed by TurnKey, the Site historically contained portions of two (2) large aboveground storage tanks (ASTs, see Appendix A). Similar tanks were noted on the adjacent properties.

During an interim remedial measure (IRM) completed by TurnKey at the southern adjacent property, 251 Homer Street (NYSDEC BCP Site No. C9050037), abandoned refinery piping containing petroleum was identified and removed. The piping containing the petroleum was identified extending onto 229 Homer Street and adjacent Southern Tier Rail Authority property from 251 Homer Street. The pipes from 251 Homer Street were drained, cut-off, and capped at the 229 Homer Street southern property boundary. NYSDEC assigned Spill Number 1300860 to the 229 Homer Street and adjacent Southern Tier Rail Authority property.

1.3 Scope of Work

This investigation was completed on behalf of Benson to assess potential environmental impacts associated with the historic use of the Site as a petroleum bulk storage facility and petroleum refinery. This investigation included completion of test pits, soil sampling and analysis for volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), and metals.

2.0 METHODS OF INVESTIGATION

2.1 Test Pit Excavation

A test pit investigation was conducted on December 22, 2014 and consisted of excavating twelve (12) test pits designated as TP-1 through TP-12 (see Figure 3). Test pit locations were selected based on piping locations identified on the southern adjacent property, review of historic aerial photographs, and site accessibility.

The physical characteristics of test pits were classified using the ASTM D2488 Visual-Manual Procedure Description. TurnKey personnel screened soils from each test pit via headspace screening using a MiniRae 2000 Photoionization Detector (PID) equipped with a 10.6 eV lamp and noted visual and/or olfactory observations. The PID is capable of detecting the presence of contaminants that emit volatile organics such as petroleum products and solvents with ionization potentials less than 10.6 eV. Field observations, including lithology, depths, PID scan results, etc., at each test pit location are summarized in the test pit log sheets provided in Appendix B.

2.2 Soil Sampling and Analysis

Soil samples were collected during the test pits using dedicated stainless steel sampling tools. Representative soil samples were placed in pre-cleaned sample jars. Six (6) soil samples were submitted under chain-of-custody to Alpha analytical, Inc., for analysis of Target Compound List (TCL) plus NYSDEC CP-51 List VOCs, PAHs, and Resource Conservation and Recovery Act (RCRA) metals.

The soil samples were analyzed via United States Environmental Protection Agency (USEPA) SW-846 methods. The laboratory analytical reports are provided in Appendix C.

3.0 INVESTIGATION FINDINGS

A summary of the qualitative soil screening and soil sample results from the test pits are presented in Tables 1 and 2. Compounds that were analyzed for and detected above their respective laboratory reporting limit are listed on the Table 2 with their associated results. Table 2 also presents the NYSDEC 6NYCRR Part 375 and Commissioner's Policy/Soil Cleanup Guidance (CP-51) soil cleanup objectives (SCOs) for comparison purposes. The soil sample results are discussed below.

3.1 Qualitative Soil Screening

During the test pits, elevated PID readings and olfactory evidence of impact (petroleum-like odors) were observed in five (5) of the twelve (12) test pits, including TP-1, TP-5, TP-6, TP-8, and TP-12. Impacts were apparent at depths ranging from 3 feet below ground surface (fbgs) to 10 fbgs. Furthermore, during the test pit excavations, abandon refinery piping was identified at TP-1 and TP-9 and petroleum product, a light non-aqueous phase liquid (LNAPL), was encountered on the groundwater infiltrating into TP-9.

Soil samples were screened for total organic compounds using a MiniRae 2000 PID. As shown on Table 1, PID measurements were as high as 1,014 parts per million (ppm) at TP-1.

3.2 Soil Analytical Results

As shown on Table 2, acetone was detected at concentrations above its respective Part 375 Unrestricted SCO in four (4) of the seven (7) samples. Additionally, elevated VOC Tentatively Identified Compounds (TICs) were identified in the soil samples from TP-1 (6 to 8 fbgs) and TP-6 (6 to 8 fbgs) at 23 and 41 ppm, respectively.

No other VOCs, PAHs or metals were detected at concentrations exceeding their respective NYSDEC Part 375 Unrestricted or CP-51 SCOs in the samples analyzed.

3.3 Site Geology/Hydrogeology

The overburden geology over a majority of the site is generally described as fill material in the upper 4 fbgs overlying sandy lean clay with various amounts of gravel to depth of 10 to 12 fbgs. In the three (3) test pits completed along the northern property line (TP-8, TP-9 and TP-10) overburden geology consisted of silty sand with gravel in the upper 3 fbgs overlying a poorly graded sand with gravel.

Groundwater was encountered at TP-9, at a depth of approximately 5 fbgs. LNAPL was observed on the groundwater at this location.

4.0 CONCLUSIONS

Based on the results of this investigation, TurnKey offers the following conclusions and recommendations:

- The Site is located within the limits of the Exxon/Mobil Legacy Site (EMLS). The EMLS operated as an oil refinery under several different names from approximately 1880 to 1950s. The Site is located within the EMLS Works #3 area where oil refining historically took place; based on historical aerial photographs, the area of the Site appears to be primarily an oil storage area.
- The Site historically contained ASTs and berm areas similar to the adjacent 251 Homer Street. Based on historic petroleum storage/refinery use of 229 Homer Street, which was once part of the greater refinery, it is likely that similar subsurface conditions exist at 229 Homer Street that were identified at 251 Homer Street.
- Elevated PID readings over 1,000 ppm and olfactory evidence of impacts (petroleum-like odors) were observed in five (5) of the twelve (12) test pits, with impacts apparent at depths ranging from 3 to 10 fbgs.
- Abandoned refinery piping was observed at two (2) locations, TP-1 (southern portion of the Site) and TP-9 (northern portion of the Site). LNAPL was also observed on the groundwater in TP-9 at approximately 5 fbgs.
- Acetone was detected at concentrations above its respective Part 375 Unrestricted SCO in four (4) of the seven (7) samples analyzed. Elevated VOC TICs were also identified in soil samples from TP-1 (23 ppm) and TP-6 (41 ppm).
- Based on the evidence of petroleum odors, elevated PID measurements, the presence abandon piping and LNAPL, as well as elevated VOC TICs identified, significant petroleum-impacts are evident. The environmental impacts can reasonably be attributed to the historical use of the Site as a petroleum refinery and petroleum bulk storage facility. Further Site investigation and remediation appears warranted as NYSDEC Spill No 1300860 will need to be addressed.
- TurnKey understands that Benson would like to address the contamination at the Site and is considering an expansion of the existing building in 2015. Consideration should be given to applying to the BCP, which offers remediation and redevelopment tax credits, as well as release of certain environmental liabilities from New York State.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of Benson Construction and Development, LLC. 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 information sources to be true and accurate. The findings herein may be relied upon only at the discretion of Benson. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

TABLES

TABLE 1

QUALITATIVE SOIL SCREENING SUMMARY
PHASE II ENVIRONMENTAL SITE ASSESSMENT
229 HOMER STREET
OLEAN, NEW YORK

SAMPLE LOCATION	Highest PID Reading (ppm)	Highest PID Sample Interval (fbgs)	NOTES
TP-1	1014	6 to 8	Piping encountered. Petroleum-like odor (6 to 10 fbgs)
TP-2	0	NA	
TP-3	0	NA	
TP-4	0	NA	
TP-5	100	8 to 10	Petroleum-like odor (5 to 10 fbgs)
TP-6	702	6 to 8	Petroleum-like odor (4 to 10 fbgs)
TP-7	0	NA	
TP-8	50	3 to 5	Petroleum-like odor (3 to 5 fbgs)
TP-9	0	NA	Piping encountered. Petroleum product observed on water at 5 fbgs.
TP-10	0	NA	
TP-11	0	NA	
TP-12	698	4 to 6	Petroleum-like odor (5 to 10 fbgs)

Notes:

fbgs= feet below ground surface

NA = Not applicable

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS
PHASE II ENVIRONMENTAL SITE ASSESSMENT
229 HOMER STREET
OLEAN, NEW YORK

Parameter [1]	Unrestricted SCOs[2] (ppm)	CP-51 SCO[3] (ppm)	SAMPLE LOCATION					
			TP-1 6 to 8 fbgs	TP-5 7 to 9 fbgs	TP-6 6 to 8 fbgs	TP-8 3 to 5 fbgs	TP-9 3 to 5 fbgs	TP-12 5 to 7 fbgs
TCL plus CP-51 Volatile Organic Compounds (VOCs) - mg/kg [3]								
Acetone	**0.05**	--	**0.230 J**	**0.095**	**0.200 J**	0.017 J	0.0064 J	**0.075**
2-Butanone (MEK)	**0.12**	--	ND	0.014	ND	ND	ND	0.013
Cyclohexane	--	--	ND	ND	0.130 J	0.029 J	ND	0.00052 J
Isopropylbenzene (Cumene)	--	**2.3**	0.031 J	ND	0.015 J	ND	ND	ND
Methylcyclohexane	--	--	0.260	0.001 J	3.4	0.250	ND	0.014
n-Propylbenzene	**3.9**	**3.9**	0.054 J	ND	ND	ND	ND	ND
p-Cymene (p-isopropyltoluene)	--	**10**	0.025 J	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**3.6**	**3.6**	0.230 J	ND	0.085 J	ND	ND	0.110
1,3,5-Trimethylbenzene	**8.4**	**8.4**	0.370	ND	ND	ND	ND	0.052
n-Butylbenzene	**12**	**12**	0.032 J	ND	ND	ND	ND	ND
sec-Butylbenzene	**11**	**11**	0.051 J	ND	0.150	0.0059 J	ND	0.0032
tert-Butylbenzene	**5.9**	**5.9**	ND	ND	0.026 J	ND	ND	0.0012 J
Tentatively Identified Compounds (TICs)	--	--	23 J	0.750 J	41 J	4.9 J	0.270 J	0.310 J
Polynuclear Aromatic Hydrocarbons (PAHs) - mg/kg [3]								
Anthracene	**100**	**100**	ND	ND	ND	ND	0.240	ND
Benzo(a)anthracene	**1**	**1**	ND	0.045 J	ND	ND	0.640	ND
Benzo(b)fluoranthene	**1**	**1**	ND	0.066 J	ND	ND	0.710	ND
Benzo(k)fluoranthene	**0.8**	**1**	ND	ND	ND	ND	0.220	ND
Benzo(g,h,i)perylene	**100**	**100**	ND	ND	ND	ND	0.260	ND
Benzo(a)pyrene	**1**	**1**	ND	ND	ND	ND	0.430	ND
Chrysene	**1**	**1**	ND	0.053 J	ND	ND	0.660	ND
Dibenzo(a,h)anthracene	**0.33**	**0.33**	ND	ND	ND	ND	0.091 J	ND
Fluoranthene	**100**	**100**	ND	0.110	ND	ND	1.7	ND
Fluorene	**30**	**100**	ND	ND	ND	ND	0.074 J	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	ND	0.041 J	ND	ND	0.320	ND
Phenanthrene	**100**	**100**	0.057 J	0.076 J	0.500	ND	1.6	ND
Pyrene	**100**	**100**	ND	0.088 J	ND	ND	1.1	ND
2-Methylnaphthalene	--	--	0.240	ND	5.4	ND	ND	0.086 J
RCRA Metals - mg/kg								
Arsenic	**13**	--	9.5	7.5	6.8	5.1	7.2	6.9
Barium	**350**	--	78	50	78	50	59	55
Cadmium	**2.5**	--	ND	ND	ND	ND	ND	ND
Chromium, trivalent	**30**	--	11	9.2	6.6	5.8	8.5	7.9
Lead	**63**	--	4.2	11	4	4.5	4.8	5.2
Mercury	**0.18**	--	ND	0.04 J	0.02 J	0.03 J	0.02 J	0.03 J
Selenium	**3.9**	--	ND	ND	ND	ND	ND	ND
Silver	**2**	--	ND	ND	ND	ND	ND	ND

Notes:

1. Parameters detected at a minimum of one sample location are presented in this table; other compounds analyzed for were reported as non-detect.
2. SCO values per NYSDEC 6NYCRR 375 Soil Cleanup Objectives (SCOs), December 2006.
3. SCO values per NYSDEC Commissioners Policy (CP)/Soil Cleanup Guidance, November 2009.
4. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparison to SCOs.

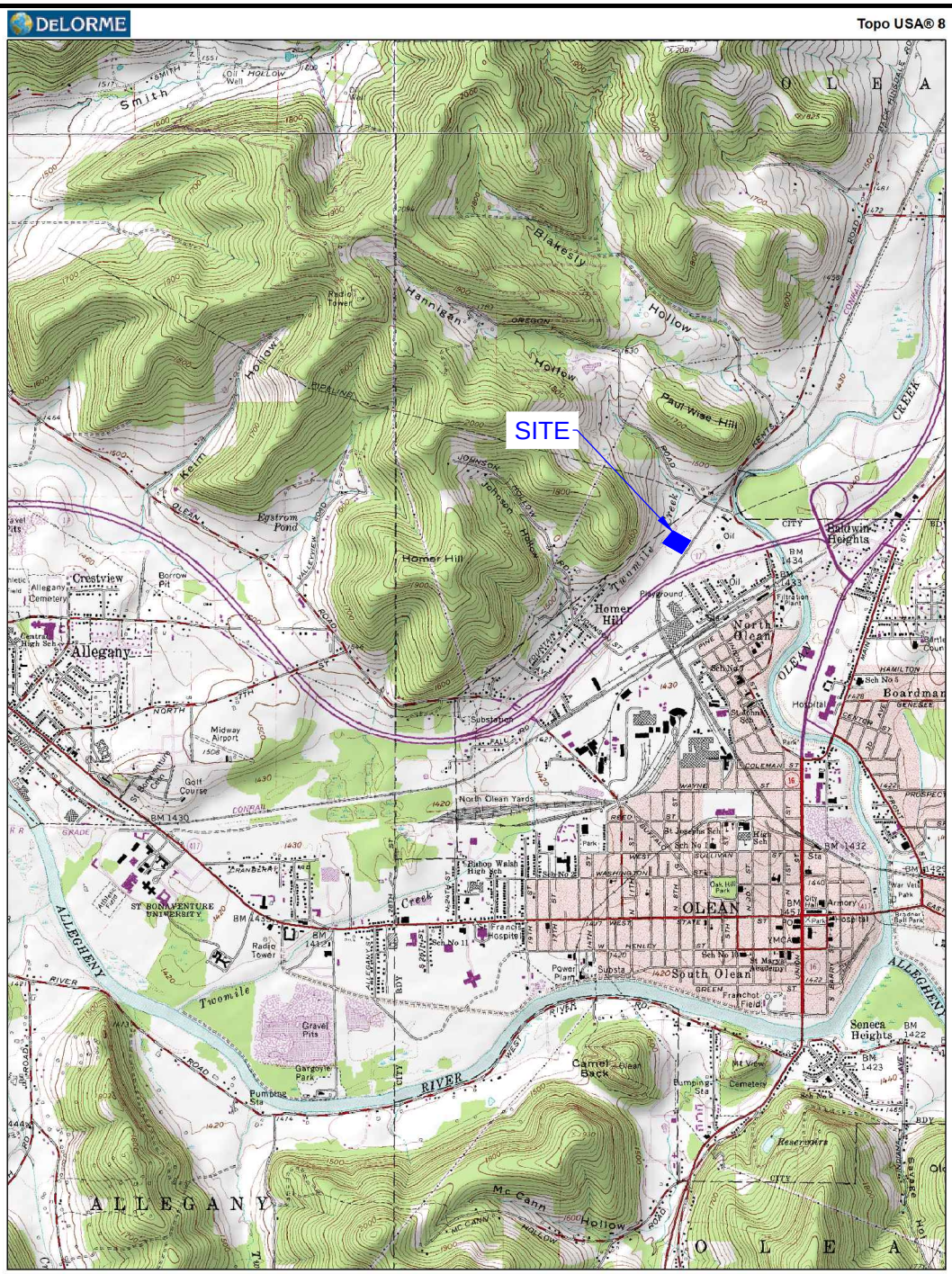
Definitions:

mg/kg = milligrams per kilogram
ug/kg = micrograms per kilogram
ND = Parameter not detected above laboratory detection limit
"--" = No SCO available
J = Estimated value; result is less than the sample quantitation limit but greater than zero
= detected concentration exceeds its respective Part 375 Unrestricted and/or CP-51 SCO.

FIGURES

F:\CAD\TurnKey\Benson\229 Homer Street\Phase II ESA\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



TURNKEY ENVIRONMENTAL RESTORATION, LLC

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

PROJECT NO.: 0225-015-001

DATE: JANUARY 2015

DRAFTED BY: BLR

SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL SITE ASSESSMENT

229 HOMER STREET SITE

OLEAN, NEW YORK

PREPARED FOR

BENSON CONSTRUCTION AND DEVELOPMENT, LLC

DATE: JANUARY 2015
DRAFTED BY: BLR

FIGURE 2

SITE PLAN (AERIAL)

PHASE II ENVIRONMENTAL SITE ASSESSMENT

229 HOMER STREET SITE

OLEAN, NEW YORK

PREPARED FOR

BENSON CONSTRUCTION AND DEVELOPMENT, LLC

TURNKEY ENVIRONMENTAL RESTORATION, LLC

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

JOB NO.: 0225-015-001

F:\CAD\TurnKey\Benson\229 Homer Street\Phase II ESA\Figure 3; Investigation Locations (aerial).dwg

DATE: JANUARY 2015
DRAFTED BY: BLR

FIGURE 3

INVESTIGATION LOCATIONS

PHASE II ENVIRONMENTAL SITE ASSESSMENT

229 HOMER STREET SITE

OLEAN, NEW YORK

PREPARED FOR

BENSON CONSTRUCTION AND DEVELOPMENT, LLC

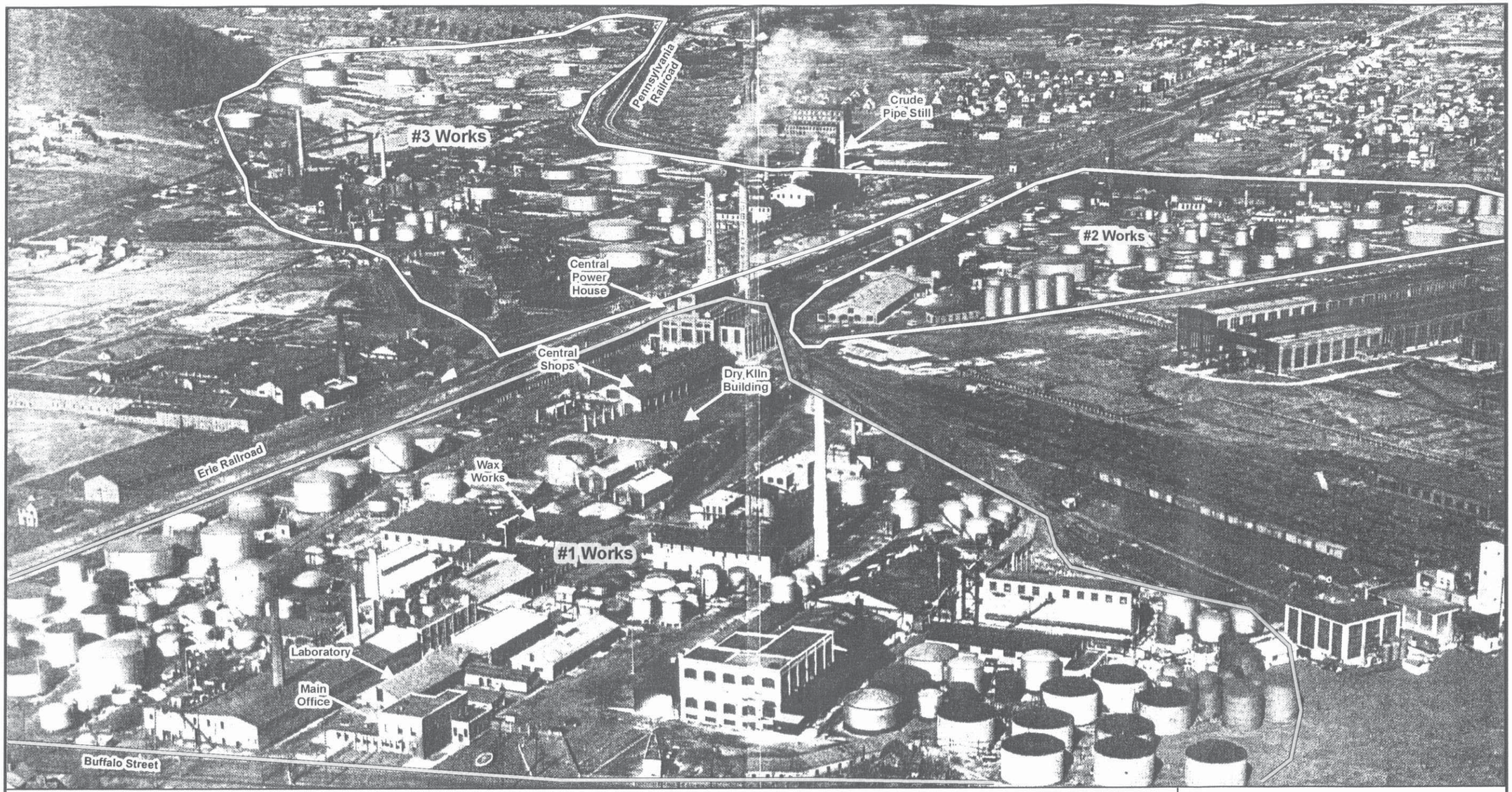
TURNKEY ENVIRONMENTAL RESTORATION, LLC

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

JOB NO.: 0225-015-001

APPENDIX A

HISTORICAL TOPOGRAPHIC MAPS & AERIAL PHOTOGRAPHS



LEGEND

- Former Socony-Vacuum Refinery #1 Works Area
- Former Socony-Vacuum Refinery #2 Works Area
- Former Socony-Vacuum Refinery #3 Works Area

SOURCE: Olean Historical & Preservation Society
Olean, New York

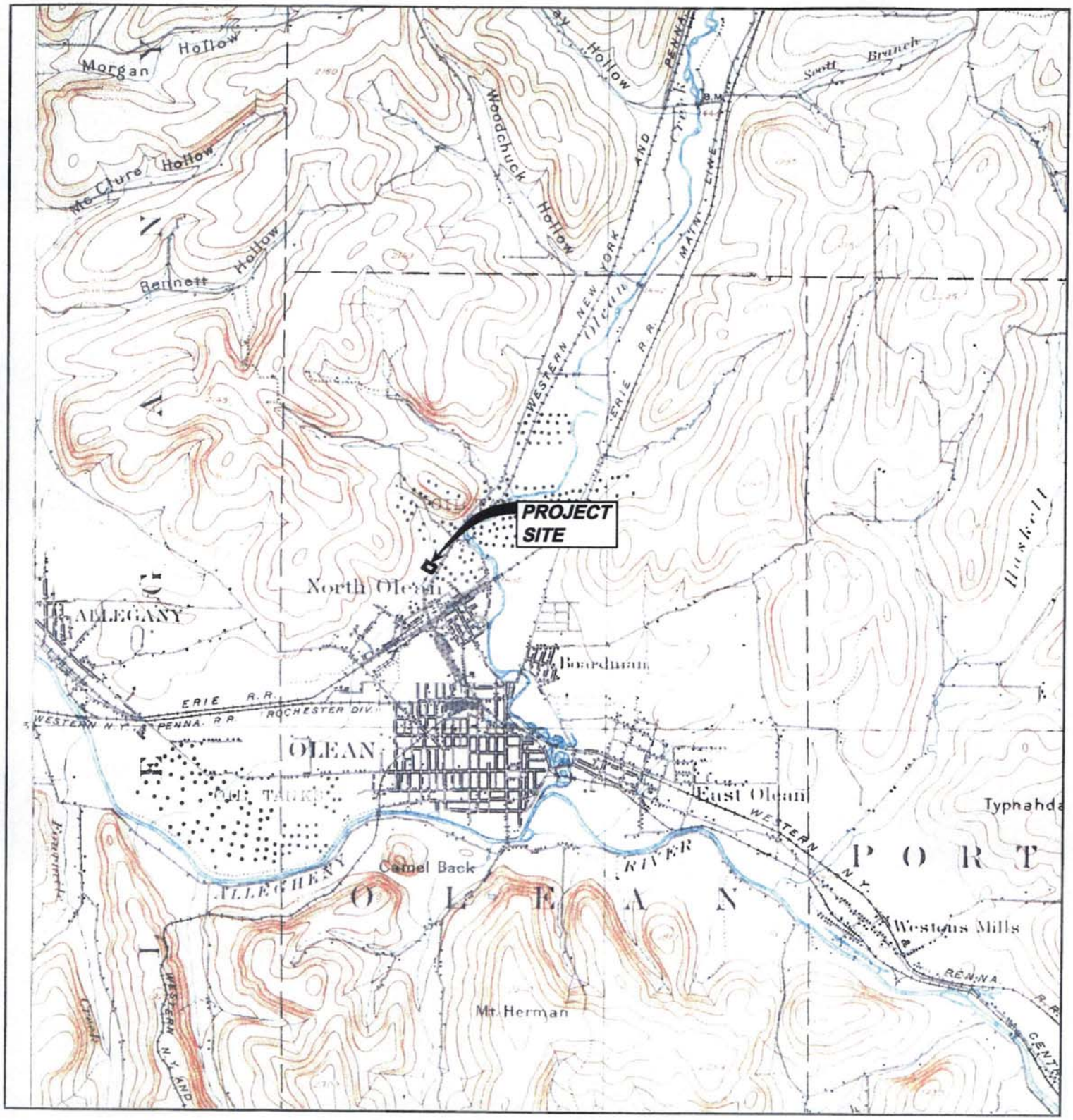
Note: Property boundaries are approximate based on current tax map interpretation.

amec Earth & Environmental

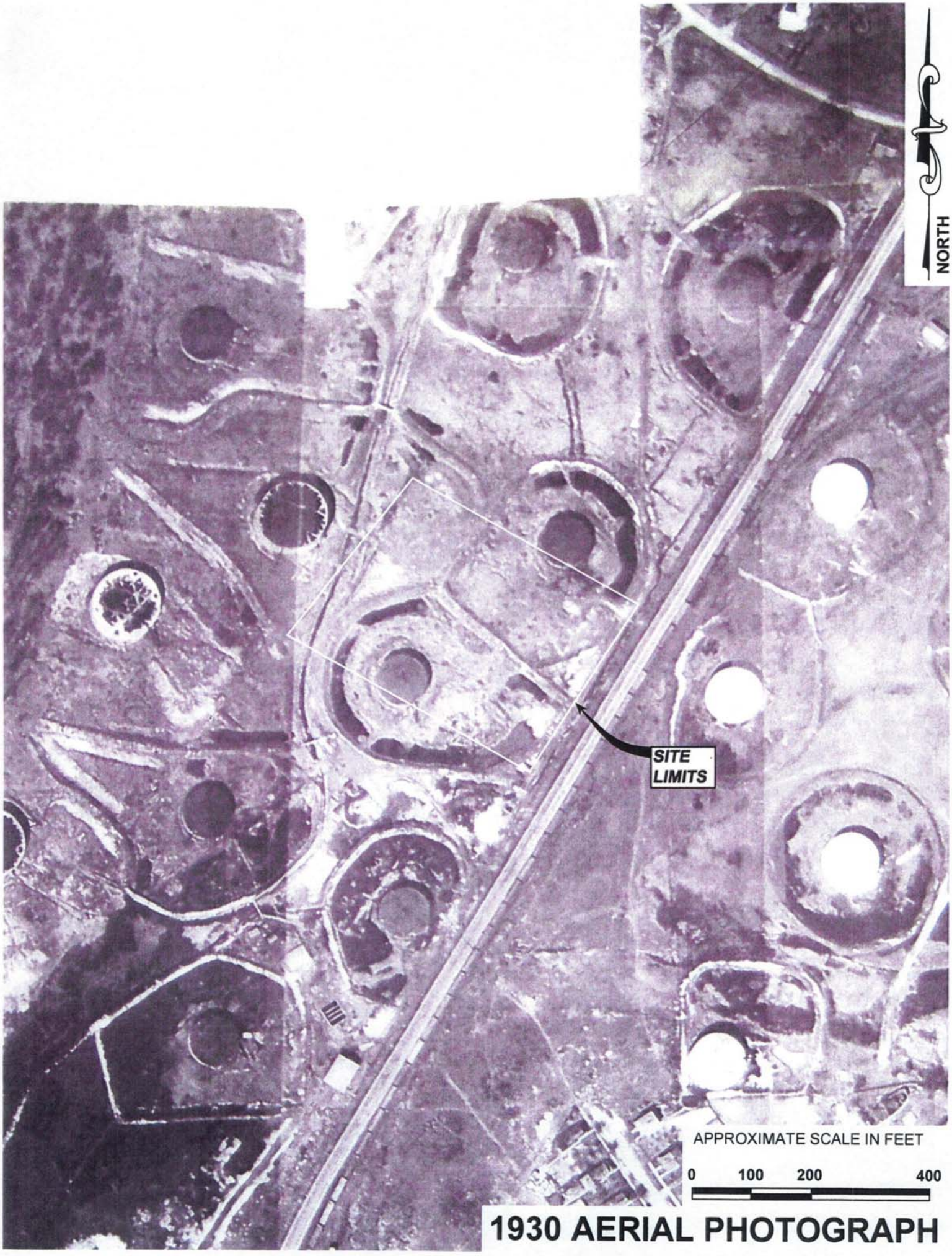
Figure 4 - 1
Undated Site Aerial Photograph (1927-1954)
Former Socony-Vacuum Oil Refinery
Olean, New York

Rev. By: CB	Contract No.: 676400000	03/21/2006

Historical Topographic Map

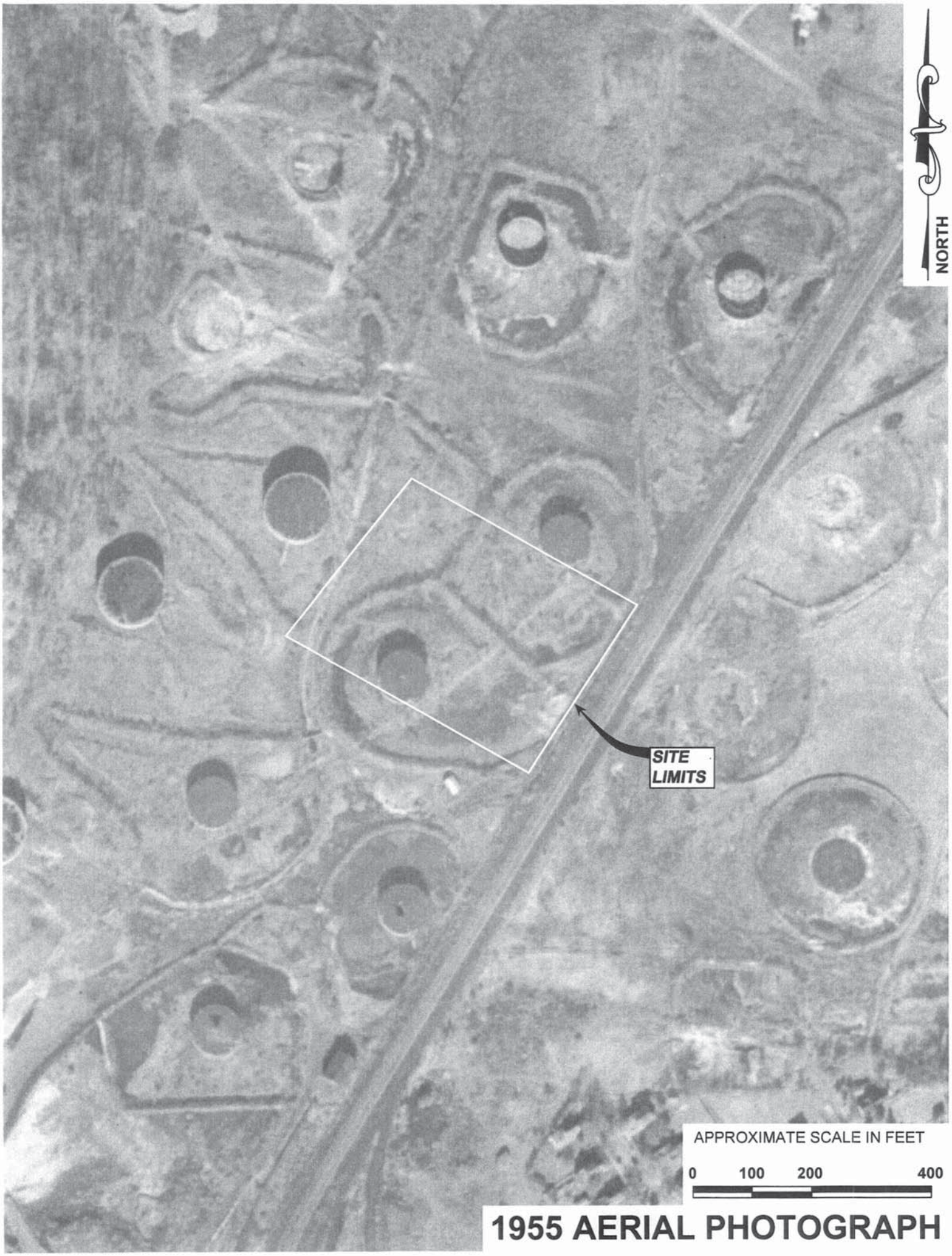


N	TARGET QUAD NAME: OLEAN MAP YEAR: 1898 SERIES: 15 SCALE: 1:62500	SITE NAME: Office building and vacant land ADDRESS: 229 Homes Street Olean, NY 14760 LAT/LONG: 42.1009 / 78.4403	CLIENT: GZA GeoEnvironmental, Inc. CONTACT: Jen Davide INQUIRY#: 2170049.4 RESEARCH DATE: 03/18/2008

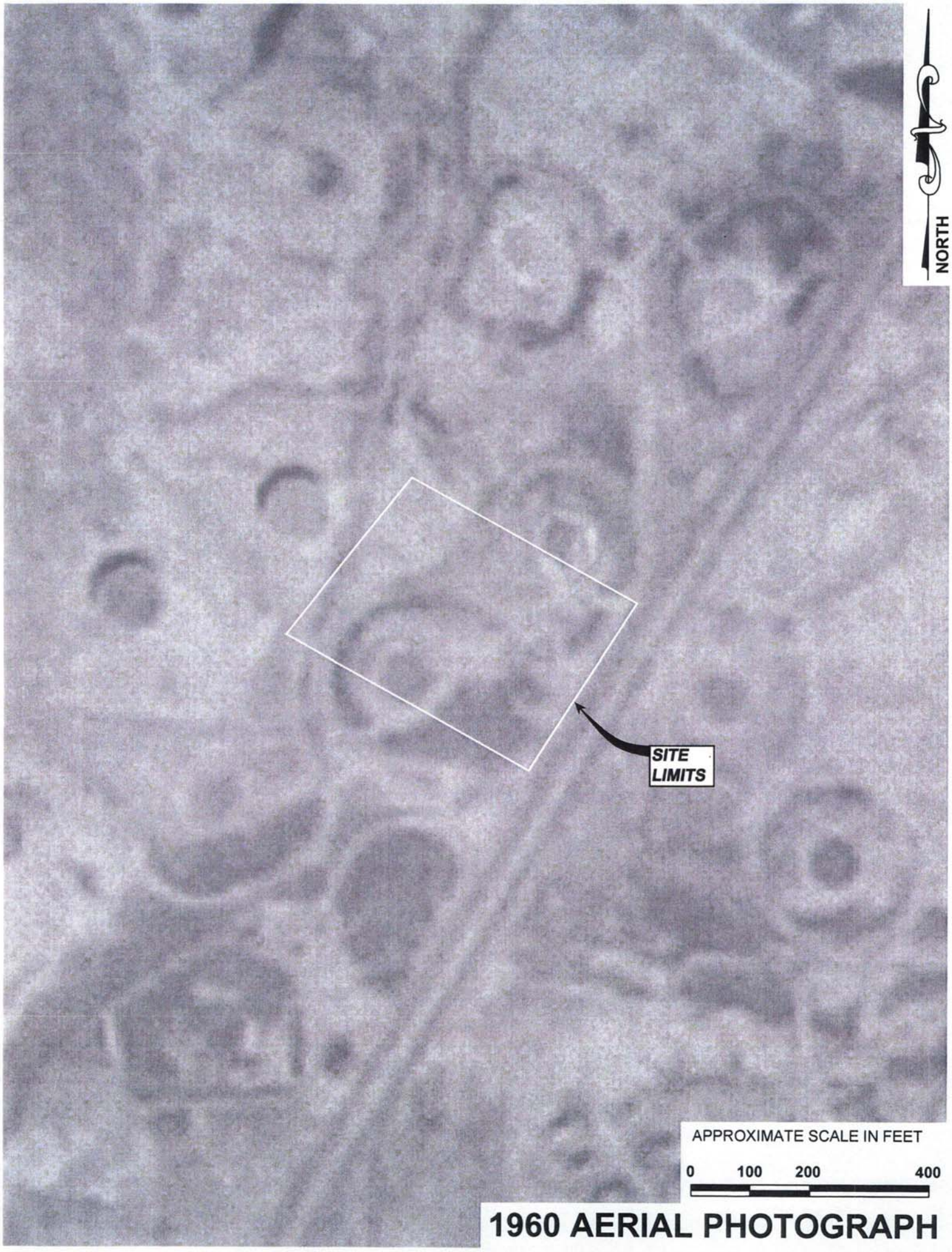


1930 AERIAL PHOTOGRAPH

1938 AERIAL PHOTOGRAPH



1955 AERIAL PHOTOGRAPH



1960 AERIAL PHOTOGRAPH

1970s AERIAL PHOTOGRAPH

APPENDIX B

TEST PIT LOGS

TEST PIT EXCAVATION LOG

Project No: 0225-015-001 ***Test Pit I.D.:*** TP-01

Project: Phase II Investigation ***Logged By:*** PWW

Client: Benson Construction & Development ***Checked By:*** CB

Site Location: 229 Homer Street

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	PID VOCs ppm (0 – 1000 – 2000)	Lab Sample	Remarks
0.0	0.0 / 0.0	Ground Surface				
		Sandy Lean Clay with Gravel and Fill Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
				0.0		
	-4.0 / 4.0	***Sandy Lean Clay*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, petroleum-like odor 6 fbgs		34.0		
5.0				598.0	sample collected	
				1014.0		
10.0	-10.0 / 10.0	End of Test Pit		678.0		

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: Strong petroleum-like odor 6 fbgs***

Comments: Abandoned refinery piping encountered at 4 feet below ground surface

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-02

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0 / 0.0	Ground Surface				
		Sandy Lean Clay with Gravel and Fill Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
				0.0		
	-4.0 / 4.0	***Sandy Lean Clay*** Greyish with Black, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive		0.0		
5.0				0.0		
				0.0		
				0.0		
10.0	-10.0 / 10.0	End of Test Pit		0.0		

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: Benson Construction & Development ***Length: 20*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: None***

Comments:

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-03

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0 / 0.0	Ground Surface				
		Sandy Lean Clay with Gravel and Fill Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
				0.0		
	-4.0 / 4.0	***Sandy Lean Clay*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive		0.0		
5.0				0.0		
				0.0		
				0.0		
10.0	-10.0 / 10.0	End of Test Pit		0.0		

PID VOCs ppm scale: 0 25 50 75 100

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: None***

Comments:

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-04

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0 / 0.0	Ground Surface				
		Sandy Lean Clay with Gravel and Fill Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
	-4.0 / 4.0	***Sandy Lean Clay*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive		0.0		
5.0				0.0		
				0.0		
				0.0		
10.0	-10.0 / 10.0	End of Test Pit		0.0		

PID VOCs ppm scale: 0 25 50 75 100

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: None***

Comments:

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-05

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Sandy Lean Clay with Gravel*** Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
	-4.0			0.0		
	4.0	***Sandy Lean Clay with Gravel*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive, petroleum-like odor		23.0		
5.0				45.0		
				99.6	sample collected	
				78.0		
10.0	-10.0					
	10.0	End of Test Pit				

Excavated By: Benson Construction & Development
Excavator Type: CAT 420D Backhoe
Excavation Date(s): 12-22-14
Comments:

Length: 15
Width: 3
Depth: 10

Depth to Water: NA
Visual Impacts: None
Olfactory Observations: Petroleum-like odor @ 5 fbgs

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: 0225-015-001 ***Test Pit I.D.:*** TP-06

Project: Phase II Investigation ***Logged By:*** PWW

Client: Benson Construction & Development ***Checked By:*** CB

Site Location: 229 Homer Street

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	PID VOCs ppm (0 – 1000 – 2000)	Lab Sample	Remarks
0.0	0.0 / 0.0	Ground Surface				
	0.0 / 0.0	***Sandy Lean Clay with Gravel*** Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
				0.0		
	-4.0 / 4.0	***Sandy Lean Clay*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive, petroleum-like odor		75.0		
5.0				561.0	sample collected	
				702.0		
10.0	-10.0 / 10.0	End of Test Pit		532.0		

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: Strong petroleum-like odor 6 fbgs***

Comments:

Sheet: 1 of 1

TEST PIT EXCAVATION LOG

Project No: 0225-015-001 ***Test Pit I.D.:*** TP-07

Project: Phase II Investigation ***Logged By:*** PWW

Client: Benson Construction & Development ***Checked By:*** CB

Site Location: 229 Homer Street

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Sandy Lean Clay with Gravel and Fill*** Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, large logs,massive, stiff, medium toughness,medium dry strength		0.0		
				0.0		
	-4.0 4.0	***Sandy Lean Clay*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive		0.0		
5.0				0.0		
				0.0		
				0.0		
10.0				0.0		
	-12.0 12.0	End of Test Pit				

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 12*** ***Olfactory Observations: None***

Comments:

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-08

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Silty Sand with Gravel*** Brown, moist, mostly non-plastic fines, some fine sand, little fine gravel, medium dense, loose when disturbed		0.0		
	-3.0			22.0		
	3.0	***Poorly Graded Sand with Gravel*** Grey, moist, mostly fine sand, some gravel, medium dense, loose when disturbed, massive, petroleum-like odor		50.0	sample collected	
5.0				0.0		
				0.0		
10.0	-10.0			0.0		
	10.0	End of Test Pit				

Excavated By: ***Benson Construction & Development*** ***Length:*** ***15***
Excavator Type: ***CAT 420D Backhoe*** ***Width:*** ***3***
Excavation Date(s): ***12-22-14*** ***Depth:*** ***10***
Comments:

Depth to Water: ***NA***
Visual Impacts: ***None***
Olfactory Observations: ***Petroleum-like odor @ 3 fbgs***

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-09

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
0.0	0.0	***Silty Sand with Gravel*** Brown, moist, mostly non-plastic fines, some fine sand, little fine gravel, medium dense, loose when disturbed		0.0		
	-3.0			0.0		
	3.0	***Poorly Graded Sand with Gravel*** Grey, moist, mostly fine sand, some gravel, medium dense, loose when disturbed, massive, water @ 5 fbgs, no odor, floating product on water		0.0	sample collected	
5.0				0.0		
				0.0		
				0.0		
10.0	-10.0			0.0		
	10.0	End of Test Pit				

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: 5***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: Floating product on water***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: None***

Comments: Abandoned refinery piping encountered at 4 feet below ground surface

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-10

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0	Ground Surface				
	0.0	***Silty Sand with Gravel*** Brown, moist, mostly non-plastic fines, some fine sand, little fine gravel, medium dense, loose when disturbed		0.0		
	-3.0					
	3.0	***Poorly Graded Sand with Gravel*** Grey, moist, mostly fine sand, some gravel, medium dense, loose when disturbed, massive		0.0		
5.0				0.0		
				0.0		
				0.0		
10.0	-10.0			0.0		
	10.0	End of Test Pit				

PID VOCs ppm scale: 0 25 50 75 100

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: None***

Comments:

TEST PIT EXCAVATION LOG

Project No: 0225-015-001 | ***Test Pit I.D.:*** TP-11

Project: Phase II Investigation | ***Logged By:*** PWW

Client: Benson Construction & Development | ***Checked By:*** CB

Site Location: 229 Homer Street

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0 / 0.0	Ground Surface				
		Sandy Lean Clay with Gravel and Fill Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
				0.0		
5.0				0.0		
	-6.0 / 6.0	***Sandy Lean Clay*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive		0.0		
				0.0		
10.0	-10.0 / 10.0	End of Test Pit		0.0		

PID VOCs scale: 0 25 50 75 100 ppm

Excavated By: Benson Construction & Development ***Length: 15*** ***Depth to Water: NA***

Excavator Type: CAT 420D Backhoe ***Width: 3*** ***Visual Impacts: None***

Excavation Date(s): 12-22-14 ***Depth: 10*** ***Olfactory Observations: None***

Comments:

TEST PIT EXCAVATION LOG

Project No: 0225-015-001

Project: Phase II Investigation

Client: Benson Construction & Development

Site Location: 229 Homer Street

Test Pit I.D.: TP-12

Logged By: PWW

Checked By: CB

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	PID VOCs (ppm)	Lab Sample	Remarks
0.0	0.0 / 0.0	Ground Surface				
		Sandy Lean Clay with Gravel Brown moist, mostly low plasticity fines, some fine sand, little fine gravel, massive, stiff, medium toughness,medium dry strength		0.0		
				0.0		
	-4.0 / 4.0	***Sandy Lean Clay*** Grey, moist, mostly medium plasticity fines, some fine sand, little coarse gravel, stiff, massive, petroleum-like odor		124.0	sample collected	
5.0				698.0		
				345.0		
10.0	-10.0 / 10.0	End of Test Pit		331.0		

Excavated By: Benson Construction & Development
Excavator Type: CAT 420D Backhoe
Excavation Date(s): 12-22-14
Comments:

Length: 15
Width: 3
Depth: 10

Depth to Water: NA
Visual Impacts: None
Olfactory Observations: Strong petroleum-like odor 6 fbgs

APPENDIX C

LABORATORY ANALYTICAL REPORT

ANALYTICAL REPORT

Lab Number:	L1431113
Client:	Benchmark & Turnkey Companies 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Mike Lesakowski
Phone:	(716) 856-0599
Project Name:	229 HOMER ST. SITE
Project Number:	0225-015-001
Report Date:	01/07/15

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: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1431113-01	TP-1 (6-8)	SOIL	229 HOMER ST.	12/22/14 11:00	12/24/14
L1431113-02	TP-5 (7-9)	SOIL	229 HOMER ST.	12/22/14 13:00	12/24/14
L1431113-03	TP-6 (6-8)	SOIL	229 HOMER ST.	12/22/14 13:15	12/24/14
L1431113-04	TP-8 (3-5)	SOIL	229 HOMER ST.	12/22/14 14:45	12/24/14
L1431113-05	TP-9 (3-5)	SOIL	229 HOMER ST.	12/22/14 15:00	12/24/14
L1431113-06	TP-12 (5-7)	SOIL	229 HOMER ST.	12/22/14 16:00	12/24/14

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

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. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

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

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

Project Name:	229 HOMER ST. SITE	**Lab Number:**	L1431113
Project Number:	0225-015-001	**Report Date:**	01/07/15

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.

L1431113-01 and -04 have elevated detection limits due to the dilutions required by the elevated concentrations of non-target compounds in the samples.

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

Authorized Signature: Michelle M. Morris

Title: Technical Director/Representative Date: 01/07/15

ORGANICS

VOLATILES

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-01 D
Client ID: TP-1 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/02/15 23:44
Analyst: PP
Percent Solids: 84%

Date Collected: 12/22/14 11:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	600	66.	50
1,1-Dichloroethane	ND		ug/kg	90	5.1	50
Chloroform	ND		ug/kg	90	22.	50
Carbon tetrachloride	ND		ug/kg	60	12.	50
1,2-Dichloropropane	ND		ug/kg	210	14.	50
Dibromochloromethane	ND		ug/kg	60	9.2	50
1,1,2-Trichloroethane	ND		ug/kg	90	18.	50
Tetrachloroethene	ND		ug/kg	60	8.4	50
Chlorobenzene	ND		ug/kg	60	21.	50
Trichlorofluoromethane	ND		ug/kg	300	23.	50
1,2-Dichloroethane	ND		ug/kg	60	6.8	50
1,1,1-Trichloroethane	ND		ug/kg	60	6.6	50
Bromodichloromethane	ND		ug/kg	60	10.	50
trans-1,3-Dichloropropene	ND		ug/kg	60	7.2	50
cis-1,3-Dichloropropene	ND		ug/kg	60	7.0	50
Bromoform	ND		ug/kg	240	14.	50
1,1,2,2-Tetrachloroethane	ND		ug/kg	60	6.0	50
Benzene	ND		ug/kg	60	7.0	50
Toluene	ND		ug/kg	90	12.	50
Ethylbenzene	ND		ug/kg	60	7.6	50
Chloromethane	ND		ug/kg	300	18.	50
Bromomethane	ND		ug/kg	120	20.	50
Vinyl chloride	ND		ug/kg	120	7.0	50
Chloroethane	ND		ug/kg	120	19.	50
1,1-Dichloroethene	ND		ug/kg	60	16.	50
trans-1,2-Dichloroethene	ND		ug/kg	90	13.	50
Trichloroethene	ND		ug/kg	60	7.5	50
1,2-Dichlorobenzene	ND		ug/kg	300	9.2	50
1,3-Dichlorobenzene	ND		ug/kg	300	8.1	50
1,4-Dichlorobenzene	ND		ug/kg	300	8.3	50

Project Name: 229 HOMER ST. SITE **Lab Number:** L1431113

Project Number: 0225-015-001 **Report Date:** 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-01 D Date Collected: 12/22/14 11:00

Client ID: TP-1 (6-8) Date Received: 12/24/14

Sample Location: 229 HOMER ST. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	120	5.0	50
p/m-Xylene	ND		ug/kg	120	12.	50
o-Xylene	ND		ug/kg	120	10.	50
cis-1,2-Dichloroethene	ND		ug/kg	60	8.5	50
Styrene	ND		ug/kg	120	24.	50
Dichlorodifluoromethane	ND		ug/kg	600	11.	50
Acetone	230	J	ug/kg	600	62.	50
Carbon disulfide	ND		ug/kg	600	66.	50
2-Butanone	ND		ug/kg	600	16.	50
4-Methyl-2-pentanone	ND		ug/kg	600	14.	50
2-Hexanone	ND		ug/kg	600	40.	50
Bromochloromethane	ND		ug/kg	300	16.	50
1,2-Dibromoethane	ND		ug/kg	240	10.	50
n-Butylbenzene	32	J	ug/kg	60	6.8	50
sec-Butylbenzene	51	J	ug/kg	60	7.3	50
tert-Butylbenzene	ND		ug/kg	300	8.1	50
1,2-Dibromo-3-chloropropane	ND		ug/kg	300	24.	50
Isopropylbenzene	31	J	ug/kg	60	6.2	50
p-Isopropyltoluene	25	J	ug/kg	60	7.5	50
Naphthalene	ND		ug/kg	300	8.3	50
n-Propylbenzene	54	J	ug/kg	60	6.5	50
1,2,3-Trichlorobenzene	ND		ug/kg	300	8.8	50
1,2,4-Trichlorobenzene	ND		ug/kg	300	11.	50
1,3,5-Trimethylbenzene	370		ug/kg	300	8.6	50
1,2,4-Trimethylbenzene	230	J	ug/kg	300	8.4	50
Methyl Acetate	ND		ug/kg	1200	16.	50
Cyclohexane	ND		ug/kg	1200	8.7	50
1,4-Dioxane	ND		ug/kg	6000	860	50
Freon-113	ND		ug/kg	1200	16.	50
Methyl cyclohexane	260		ug/kg	240	9.2	50

Project Name: 229 HOMER ST. SITE
Lab Number: L1431113
Project Number: 0225-015-001
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-01 D
Client ID: TP-1 (6-8)
Sample Location: 229 HOMER ST.
Date Collected: 12/22/14 11:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	23000	J	ug/kg			50
Cyclohexane, ethyl-	1200	NJ	ug/kg			50
Unknown	2100	J	ug/kg			50
Cyclohexane, propyl-	1800	NJ	ug/kg			50
Unknown Alkane	1400	J	ug/kg			50
Unknown Cyclohexane	2200	J	ug/kg			50
Unknown	2900	J	ug/kg			50
Unknown Benzene	2600	J	ug/kg			50
Unknown	2300	J	ug/kg			50
Unknown	2800	J	ug/kg			50
Unknown Naphthalene	3600	J	ug/kg			50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	79		70-130
Toluene-d8	89		70-130
4-Bromofluorobenzene	109		70-130
Dibromofluoromethane	85		70-130

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-02
Client ID: TP-5 (7-9)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/02/15 21:03
Analyst: PP
Percent Solids: 88%

Date Collected: 12/22/14 13:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.3	1
1,1-Dichloroethane	ND		ug/kg	1.7	0.10	1
Chloroform	ND		ug/kg	1.7	0.42	1
Carbon tetrachloride	ND		ug/kg	1.1	0.24	1
1,2-Dichloropropane	ND		ug/kg	4.0	0.26	1
Dibromochloromethane	ND		ug/kg	1.1	0.18	1
1,1,2-Trichloroethane	ND		ug/kg	1.7	0.35	1
Tetrachloroethene	ND		ug/kg	1.1	0.16	1
Chlorobenzene	ND		ug/kg	1.1	0.40	1
Trichlorofluoromethane	ND		ug/kg	5.7	0.44	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.13	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.13	1
Bromodichloromethane	ND		ug/kg	1.1	0.20	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.14	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
Bromoform	ND		ug/kg	4.6	0.27	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.12	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.7	0.22	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.7	0.34	1
Bromomethane	ND		ug/kg	2.3	0.38	1
Vinyl chloride	ND		ug/kg	2.3	0.13	1
Chloroethane	ND		ug/kg	2.3	0.36	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.30	1
trans-1,2-Dichloroethene	ND		ug/kg	1.7	0.24	1
Trichloroethene	ND		ug/kg	1.1	0.14	1
1,2-Dichlorobenzene	ND		ug/kg	5.7	0.17	1
1,3-Dichlorobenzene	ND		ug/kg	5.7	0.15	1
1,4-Dichlorobenzene	ND		ug/kg	5.7	0.16	1

Project Name: 229 HOMER ST. SITE
Lab Number: L1431113
Project Number: 0225-015-001
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-02
Client ID: TP-5 (7-9)
Sample Location: 229 HOMER ST.
Date Collected: 12/22/14 13:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.3	0.10	1
p/m-Xylene	ND		ug/kg	2.3	0.22	1
o-Xylene	ND		ug/kg	2.3	0.20	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.16	1
Styrene	ND		ug/kg	2.3	0.46	1
Dichlorodifluoromethane	ND		ug/kg	11	0.22	1
Acetone	95		ug/kg	11	1.2	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	14		ug/kg	11	0.31	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.28	1
2-Hexanone	ND		ug/kg	11	0.76	1
Bromochloromethane	ND		ug/kg	5.7	0.32	1
1,2-Dibromoethane	ND		ug/kg	4.6	0.20	1
n-Butylbenzene	ND		ug/kg	1.1	0.13	1
sec-Butylbenzene	ND		ug/kg	1.1	0.14	1
tert-Butylbenzene	ND		ug/kg	5.7	0.15	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.7	0.45	1
Isopropylbenzene	ND		ug/kg	1.1	0.12	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.14	1
Naphthalene	ND		ug/kg	5.7	0.16	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.7	0.17	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.7	0.21	1
1,3,5-Trimethylbenzene	ND		ug/kg	5.7	0.16	1
1,2,4-Trimethylbenzene	ND		ug/kg	5.7	0.16	1
Methyl Acetate	ND		ug/kg	23	0.31	1
Cyclohexane	ND		ug/kg	23	0.17	1
1,4-Dioxane	ND		ug/kg	110	16.	1
Freon-113	ND		ug/kg	23	0.31	1
Methyl cyclohexane	1.0	J	ug/kg	4.6	0.18	1

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-02
Client ID: TP-5 (7-9)
Sample Location: 229 HOMER ST.
Date Collected: 12/22/14 13:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	750	J	ug/kg			1
Unknown	49	J	ug/kg			1
Unknown	45	J	ug/kg			1
Unknown	90	J	ug/kg			1
Decane, 3,7-dimethyl-	38	NJ	ug/kg			1
Unknown Cyclohexane	45	J	ug/kg			1
Unknown Naphthalene	150	J	ug/kg			1
Cyclohexane, 1-methyl-3-pentyl-	44	NJ	ug/kg			1
Unknown	52	J	ug/kg			1
Unknown	140	J	ug/kg			1
Unknown	92	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	88		70-130
4-Bromofluorobenzene	83		70-130
Dibromofluoromethane	89		70-130

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-03 D
Client ID: TP-6 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/03/15 00:11
Analyst: PP
Percent Solids: 91%

Date Collected: 12/22/14 13:15
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	550	61.	50
1,1-Dichloroethane	ND		ug/kg	83	4.7	50
Chloroform	ND		ug/kg	83	20.	50
Carbon tetrachloride	ND		ug/kg	55	12.	50
1,2-Dichloropropane	ND		ug/kg	190	12.	50
Dibromochloromethane	ND		ug/kg	55	8.5	50
1,1,2-Trichloroethane	ND		ug/kg	83	17.	50
Tetrachloroethene	ND		ug/kg	55	7.7	50
Chlorobenzene	ND		ug/kg	55	19.	50
Trichlorofluoromethane	ND		ug/kg	280	21.	50
1,2-Dichloroethane	ND		ug/kg	55	6.2	50
1,1,1-Trichloroethane	ND		ug/kg	55	6.1	50
Bromodichloromethane	ND		ug/kg	55	9.6	50
trans-1,3-Dichloropropene	ND		ug/kg	55	6.7	50
cis-1,3-Dichloropropene	ND		ug/kg	55	6.5	50
Bromoform	ND		ug/kg	220	13.	50
1,1,2,2-Tetrachloroethane	ND		ug/kg	55	5.6	50
Benzene	ND		ug/kg	55	6.5	50
Toluene	ND		ug/kg	83	11.	50
Ethylbenzene	ND		ug/kg	55	7.0	50
Chloromethane	ND		ug/kg	280	16.	50
Bromomethane	ND		ug/kg	110	19.	50
Vinyl chloride	ND		ug/kg	110	6.5	50
Chloroethane	ND		ug/kg	110	17.	50
1,1-Dichloroethene	ND		ug/kg	55	14.	50
trans-1,2-Dichloroethene	ND		ug/kg	83	12.	50
Trichloroethene	ND		ug/kg	55	6.9	50
1,2-Dichlorobenzene	ND		ug/kg	280	8.4	50
1,3-Dichlorobenzene	ND		ug/kg	280	7.4	50
1,4-Dichlorobenzene	ND		ug/kg	280	7.6	50

Project Name: 229 HOMER ST. SITE **Lab Number:** L1431113

Project Number: 0225-015-001 **Report Date:** 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-03 D Date Collected: 12/22/14 13:15

Client ID: TP-6 (6-8) Date Received: 12/24/14

Sample Location: 229 HOMER ST. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	110	4.6	50
p/m-Xylene	ND		ug/kg	110	11.	50
o-Xylene	ND		ug/kg	110	9.5	50
cis-1,2-Dichloroethene	ND		ug/kg	55	7.9	50
Styrene	ND		ug/kg	110	22.	50
Dichlorodifluoromethane	ND		ug/kg	550	10.	50
Acetone	200	J	ug/kg	550	57.	50
Carbon disulfide	ND		ug/kg	550	61.	50
2-Butanone	ND		ug/kg	550	15.	50
4-Methyl-2-pentanone	ND		ug/kg	550	13.	50
2-Hexanone	ND		ug/kg	550	37.	50
Bromochloromethane	ND		ug/kg	280	15.	50
1,2-Dibromoethane	ND		ug/kg	220	9.6	50
n-Butylbenzene	100		ug/kg	55	6.3	50
sec-Butylbenzene	150		ug/kg	55	6.7	50
tert-Butylbenzene	26	J	ug/kg	280	7.5	50
1,2-Dibromo-3-chloropropane	ND		ug/kg	280	22.	50
Isopropylbenzene	15	J	ug/kg	55	5.7	50
p-Isopropyltoluene	ND		ug/kg	55	6.9	50
Naphthalene	ND		ug/kg	280	7.6	50
n-Propylbenzene	ND		ug/kg	55	6.0	50
1,2,3-Trichlorobenzene	ND		ug/kg	280	8.1	50
1,2,4-Trichlorobenzene	ND		ug/kg	280	10.	50
1,3,5-Trimethylbenzene	ND		ug/kg	280	7.9	50
1,2,4-Trimethylbenzene	85	J	ug/kg	280	7.8	50
Methyl Acetate	ND		ug/kg	1100	15.	50
Cyclohexane	130	J	ug/kg	1100	8.0	50
1,4-Dioxane	ND		ug/kg	5500	800	50
Freon-113	ND		ug/kg	1100	15.	50
Methyl cyclohexane	3400		ug/kg	220	8.5	50

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-03 D
Client ID: TP-6 (6-8)
Sample Location: 229 HOMER ST.
Date Collected: 12/22/14 13:15
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	41000	J	ug/kg			50
Unknown Cyclohexane	5500	J	ug/kg			50
Unknown	1800	J	ug/kg			50
Unknown Cyclohexane	3600	J	ug/kg			50
Unknown	3400	J	ug/kg			50
Unknown Cycloaromatic	5700	J	ug/kg			50
Unknown	5100	J	ug/kg			50
Unknown	3900	J	ug/kg			50
Unknown	5600	J	ug/kg			50
Unknown Cycloaromatic	3700	J	ug/kg			50
Unknown Cycloaromatic	3000	J	ug/kg			50

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	79		70-130
Toluene-d8	95		70-130
4-Bromofluorobenzene	112		70-130
Dibromofluoromethane	85		70-130

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-04 D
Client ID: TP-8 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/02/15 21:29
Analyst: PP
Percent Solids: 84%

Date Collected: 12/22/14 14:45
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	60	6.6	5
1,1-Dichloroethane	ND		ug/kg	8.9	0.51	5
Chloroform	ND		ug/kg	8.9	2.2	5
Carbon tetrachloride	ND		ug/kg	6.0	1.2	5
1,2-Dichloropropane	ND		ug/kg	21	1.4	5
Dibromochloromethane	ND		ug/kg	6.0	0.92	5
1,1,2-Trichloroethane	ND		ug/kg	8.9	1.8	5
Tetrachloroethene	ND		ug/kg	6.0	0.84	5
Chlorobenzene	ND		ug/kg	6.0	2.1	5
Trichlorofluoromethane	ND		ug/kg	30	2.3	5
1,2-Dichloroethane	ND		ug/kg	6.0	0.68	5
1,1,1-Trichloroethane	ND		ug/kg	6.0	0.66	5
Bromodichloromethane	ND		ug/kg	6.0	1.0	5
trans-1,3-Dichloropropene	ND		ug/kg	6.0	0.72	5
cis-1,3-Dichloropropene	ND		ug/kg	6.0	0.70	5
Bromoform	ND		ug/kg	24	1.4	5
1,1,2,2-Tetrachloroethane	ND		ug/kg	6.0	0.60	5
Benzene	ND		ug/kg	6.0	0.70	5
Toluene	ND		ug/kg	8.9	1.2	5
Ethylbenzene	ND		ug/kg	6.0	0.76	5
Chloromethane	ND		ug/kg	30	1.8	5
Bromomethane	ND		ug/kg	12	2.0	5
Vinyl chloride	ND		ug/kg	12	0.70	5
Chloroethane	ND		ug/kg	12	1.9	5
1,1-Dichloroethene	ND		ug/kg	6.0	1.6	5
trans-1,2-Dichloroethene	ND		ug/kg	8.9	1.3	5
Trichloroethene	ND		ug/kg	6.0	0.74	5
1,2-Dichlorobenzene	ND		ug/kg	30	0.91	5
1,3-Dichlorobenzene	ND		ug/kg	30	0.80	5
1,4-Dichlorobenzene	ND		ug/kg	30	0.82	5

Project Name: 229 HOMER ST. SITE **Lab Number:** L1431113

Project Number: 0225-015-001 **Report Date:** 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-04 D Date Collected: 12/22/14 14:45

Client ID: TP-8 (3-5) Date Received: 12/24/14

Sample Location: 229 HOMER ST. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	12	0.50	5
p/m-Xylene	ND		ug/kg	12	1.2	5
o-Xylene	ND		ug/kg	12	1.0	5
cis-1,2-Dichloroethene	ND		ug/kg	6.0	0.85	5
Styrene	ND		ug/kg	12	2.4	5
Dichlorodifluoromethane	ND		ug/kg	60	1.1	5
Acetone	17	J	ug/kg	60	6.2	5
Carbon disulfide	ND		ug/kg	60	6.6	5
2-Butanone	ND		ug/kg	60	1.6	5
4-Methyl-2-pentanone	ND		ug/kg	60	1.4	5
2-Hexanone	ND		ug/kg	60	4.0	5
Bromochloromethane	ND		ug/kg	30	1.6	5
1,2-Dibromoethane	ND		ug/kg	24	1.0	5
n-Butylbenzene	ND		ug/kg	6.0	0.68	5
sec-Butylbenzene	5.9	J	ug/kg	6.0	0.73	5
tert-Butylbenzene	ND		ug/kg	30	0.81	5
1,2-Dibromo-3-chloropropane	ND		ug/kg	30	2.4	5
Isopropylbenzene	ND		ug/kg	6.0	0.62	5
p-Isopropyltoluene	ND		ug/kg	6.0	0.74	5
Naphthalene	ND		ug/kg	30	0.82	5
n-Propylbenzene	ND		ug/kg	6.0	0.65	5
1,2,3-Trichlorobenzene	ND		ug/kg	30	0.88	5
1,2,4-Trichlorobenzene	ND		ug/kg	30	1.1	5
1,3,5-Trimethylbenzene	ND		ug/kg	30	0.86	5
1,2,4-Trimethylbenzene	ND		ug/kg	30	0.84	5
Methyl Acetate	ND		ug/kg	120	1.6	5
Cyclohexane	29	J	ug/kg	120	0.87	5
1,4-Dioxane	ND		ug/kg	600	86.	5
Freon-113	ND		ug/kg	120	1.6	5
Methyl cyclohexane	250		ug/kg	24	0.92	5

Project Name: 229 HOMER ST. SITE
Lab Number: L1431113
Project Number: 0225-015-001
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-04 D
Client ID: TP-8 (3-5)
Sample Location: 229 HOMER ST.
Date Collected: 12/22/14 14:45
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	4900	J	ug/kg			5
Unknown	300	J	ug/kg			5
Unknown	200	J	ug/kg			5
Unknown	230	J	ug/kg			5
Cyclohexane, butyl-	330	NJ	ug/kg			5
Unknown	580	J	ug/kg			5
Cyclohexane, pentyl-	550	NJ	ug/kg			5
Unknown Naphthalene	680	J	ug/kg			5
Cyclohexane, 1-methyl-3-pentyl-	320	NJ	ug/kg			5
Unknown	800	J	ug/kg			5
Unknown	870	J	ug/kg			5

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	79		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	82		70-130
Dibromofluoromethane	88		70-130

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-05
Client ID: TP-9 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/02/15 21:56
Analyst: PP
Percent Solids: 82%

Date Collected: 12/22/14 15:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	12	1.4	1
1,1-Dichloroethane	ND		ug/kg	1.8	0.10	1
Chloroform	ND		ug/kg	1.8	0.45	1
Carbon tetrachloride	ND		ug/kg	1.2	0.26	1
1,2-Dichloropropane	ND		ug/kg	4.3	0.28	1
Dibromochloromethane	ND		ug/kg	1.2	0.19	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	6.1	0.47	1
1,2-Dichloroethane	ND		ug/kg	1.2	0.14	1
1,1,1-Trichloroethane	ND		ug/kg	1.2	0.14	1
Bromodichloromethane	ND		ug/kg	1.2	0.21	1
trans-1,3-Dichloropropene	ND		ug/kg	1.2	0.15	1
cis-1,3-Dichloropropene	ND		ug/kg	1.2	0.14	1
Bromoform	ND		ug/kg	4.9	0.29	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.2	0.12	1
Benzene	ND		ug/kg	1.2	0.14	1
Toluene	ND		ug/kg	1.8	0.24	1
Ethylbenzene	ND		ug/kg	1.2	0.16	1
Chloromethane	ND		ug/kg	6.1	0.36	1
Bromomethane	ND		ug/kg	2.4	0.41	1
Vinyl chloride	ND		ug/kg	2.4	0.14	1
Chloroethane	ND		ug/kg	2.4	0.39	1
1,1-Dichloroethene	ND		ug/kg	1.2	0.32	1
trans-1,2-Dichloroethene	ND		ug/kg	1.8	0.26	1
Trichloroethene	ND		ug/kg	1.2	0.15	1
1,2-Dichlorobenzene	ND		ug/kg	6.1	0.19	1
1,3-Dichlorobenzene	ND		ug/kg	6.1	0.16	1
1,4-Dichlorobenzene	ND		ug/kg	6.1	0.17	1

Project Name: 229 HOMER ST. SITE **Lab Number:** L1431113

Project Number: 0225-015-001 **Report Date:** 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-05 Date Collected: 12/22/14 15:00

Client ID: TP-9 (3-5) Date Received: 12/24/14

Sample Location: 229 HOMER ST. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.4	0.10	1
p/m-Xylene	ND		ug/kg	2.4	0.24	1
o-Xylene	ND		ug/kg	2.4	0.21	1
cis-1,2-Dichloroethene	ND		ug/kg	1.2	0.17	1
Styrene	ND		ug/kg	2.4	0.49	1
Dichlorodifluoromethane	ND		ug/kg	12	0.23	1
Acetone	6.4	J	ug/kg	12	1.3	1
Carbon disulfide	ND		ug/kg	12	1.3	1
2-Butanone	ND		ug/kg	12	0.33	1
4-Methyl-2-pentanone	ND		ug/kg	12	0.30	1
2-Hexanone	ND		ug/kg	12	0.82	1
Bromochloromethane	ND		ug/kg	6.1	0.34	1
1,2-Dibromoethane	ND		ug/kg	4.9	0.21	1
n-Butylbenzene	ND		ug/kg	1.2	0.14	1
sec-Butylbenzene	ND		ug/kg	1.2	0.15	1
tert-Butylbenzene	ND		ug/kg	6.1	0.16	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	6.1	0.48	1
Isopropylbenzene	ND		ug/kg	1.2	0.13	1
p-Isopropyltoluene	ND		ug/kg	1.2	0.15	1
Naphthalene	ND		ug/kg	6.1	0.17	1
n-Propylbenzene	ND		ug/kg	1.2	0.13	1
1,2,3-Trichlorobenzene	ND		ug/kg	6.1	0.18	1
1,2,4-Trichlorobenzene	ND		ug/kg	6.1	0.22	1
1,3,5-Trimethylbenzene	ND		ug/kg	6.1	0.18	1
1,2,4-Trimethylbenzene	ND		ug/kg	6.1	0.17	1
Methyl Acetate	ND		ug/kg	24	0.33	1
Cyclohexane	ND		ug/kg	24	0.18	1
1,4-Dioxane	ND		ug/kg	120	18.	1
Freon-113	ND		ug/kg	24	0.34	1
Methyl cyclohexane	ND		ug/kg	4.9	0.19	1

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-05
Client ID: TP-9 (3-5)
Sample Location: 229 HOMER ST.
Date Collected: 12/22/14 15:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	270	J	ug/kg			1
Dodecane	13	NJ	ug/kg			1
Unknown Naphthalene	12	J	ug/kg			1
Unknown	11	J	ug/kg			1
Tridecane, 7-methyl-	36	NJ	ug/kg			1
Unknown	9.2	J	ug/kg			1
Unknown	47	J	ug/kg			1
Unknown	9.7	J	ug/kg			1
Heptylcyclohexane	20	NJ	ug/kg			1
Unknown Alkane	96	J	ug/kg			1
Unknown	16	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	82		70-130
Toluene-d8	87		70-130
4-Bromofluorobenzene	95		70-130
Dibromofluoromethane	89		70-130

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-06
Client ID: TP-12 (5-7)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8260C
Analytical Date: 01/02/15 22:23
Analyst: PP
Percent Solids: 93%

Date Collected: 12/22/14 16:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/kg	11	1.2	1
1,1-Dichloroethane	ND		ug/kg	1.6	0.09	1
Chloroform	ND		ug/kg	1.6	0.40	1
Carbon tetrachloride	ND		ug/kg	1.1	0.23	1
1,2-Dichloropropane	ND		ug/kg	3.8	0.24	1
Dibromochloromethane	ND		ug/kg	1.1	0.16	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	0.33	1
Tetrachloroethene	ND		ug/kg	1.1	0.15	1
Chlorobenzene	ND		ug/kg	1.1	0.37	1
Trichlorofluoromethane	ND		ug/kg	5.4	0.42	1
1,2-Dichloroethane	ND		ug/kg	1.1	0.12	1
1,1,1-Trichloroethane	ND		ug/kg	1.1	0.12	1
Bromodichloromethane	ND		ug/kg	1.1	0.19	1
trans-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
cis-1,3-Dichloropropene	ND		ug/kg	1.1	0.13	1
Bromoform	ND		ug/kg	4.3	0.25	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.1	0.11	1
Benzene	ND		ug/kg	1.1	0.13	1
Toluene	ND		ug/kg	1.6	0.21	1
Ethylbenzene	ND		ug/kg	1.1	0.14	1
Chloromethane	ND		ug/kg	5.4	0.32	1
Bromomethane	ND		ug/kg	2.2	0.36	1
Vinyl chloride	ND		ug/kg	2.2	0.13	1
Chloroethane	ND		ug/kg	2.2	0.34	1
1,1-Dichloroethene	ND		ug/kg	1.1	0.28	1
trans-1,2-Dichloroethene	ND		ug/kg	1.6	0.23	1
Trichloroethene	ND		ug/kg	1.1	0.13	1
1,2-Dichlorobenzene	ND		ug/kg	5.4	0.16	1
1,3-Dichlorobenzene	ND		ug/kg	5.4	0.14	1
1,4-Dichlorobenzene	ND		ug/kg	5.4	0.15	1

Project Name: 229 HOMER ST. SITE **Lab Number:** L1431113

Project Number: 0225-015-001 **Report Date:** 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-06 Date Collected: 12/22/14 16:00

Client ID: TP-12 (5-7) Date Received: 12/24/14

Sample Location: 229 HOMER ST. Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/kg	2.2	0.09	1
p/m-Xylene	ND		ug/kg	2.2	0.21	1
o-Xylene	ND		ug/kg	2.2	0.18	1
cis-1,2-Dichloroethene	ND		ug/kg	1.1	0.15	1
Styrene	ND		ug/kg	2.2	0.43	1
Dichlorodifluoromethane	ND		ug/kg	11	0.20	1
Acetone	75		ug/kg	11	1.1	1
Carbon disulfide	ND		ug/kg	11	1.2	1
2-Butanone	13		ug/kg	11	0.29	1
4-Methyl-2-pentanone	ND		ug/kg	11	0.26	1
2-Hexanone	ND		ug/kg	11	0.72	1
Bromochloromethane	ND		ug/kg	5.4	0.30	1
1,2-Dibromoethane	ND		ug/kg	4.3	0.19	1
n-Butylbenzene	ND		ug/kg	1.1	0.12	1
sec-Butylbenzene	3.2		ug/kg	1.1	0.13	1
tert-Butylbenzene	1.2	J	ug/kg	5.4	0.14	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.4	0.43	1
Isopropylbenzene	ND		ug/kg	1.1	0.11	1
p-Isopropyltoluene	ND		ug/kg	1.1	0.13	1
Naphthalene	ND		ug/kg	5.4	0.15	1
n-Propylbenzene	ND		ug/kg	1.1	0.12	1
1,2,3-Trichlorobenzene	ND		ug/kg	5.4	0.16	1
1,2,4-Trichlorobenzene	ND		ug/kg	5.4	0.20	1
1,3,5-Trimethylbenzene	52		ug/kg	5.4	0.15	1
1,2,4-Trimethylbenzene	110		ug/kg	5.4	0.15	1
Methyl Acetate	ND		ug/kg	22	0.29	1
Cyclohexane	0.52	J	ug/kg	22	0.16	1
1,4-Dioxane	ND		ug/kg	110	16.	1
Freon-113	ND		ug/kg	22	0.29	1
Methyl cyclohexane	14		ug/kg	4.3	0.17	1

Project Name: 229 HOMER ST. SITE
Lab Number: L1431113
Project Number: 0225-015-001
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-06
Client ID: TP-12 (5-7)
Sample Location: 229 HOMER ST.
Date Collected: 12/22/14 16:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Tentatively Identified Compounds						
Total TIC Compounds	310	J	ug/kg			1
Cyclohexane, ethyl-	27	NJ	ug/kg			1
Unknown Cyclohexane	26	J	ug/kg			1
Unknown	37	J	ug/kg			1
Unknown	30	J	ug/kg			1
Octane, 2,6-dimethyl-	32	NJ	ug/kg			1
Unknown	30	J	ug/kg			1
Unknown Alkane	34	J	ug/kg			1
Cyclohexane, 1-methyl-3-propyl-	25	NJ	ug/kg			1
Benzene, 1,2,4,5-tetramethyl-	32	NJ	ug/kg			1
Unknown Naphthalene	34	J	ug/kg			1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	81		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	128		70-130
Dibromofluoromethane	89		70-130

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/15 15:13
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG753161-3					
Methylene chloride	ND		ug/kg	10	1.1
1,1-Dichloroethane	ND		ug/kg	1.5	0.09
Chloroform	ND		ug/kg	1.5	0.37
Carbon tetrachloride	ND		ug/kg	1.0	0.21
1,2-Dichloropropane	ND		ug/kg	3.5	0.23
Dibromochloromethane	ND		ug/kg	1.0	0.15
1,1,2-Trichloroethane	ND		ug/kg	1.5	0.30
Tetrachloroethene	ND		ug/kg	1.0	0.14
Chlorobenzene	ND		ug/kg	1.0	0.35
Trichlorofluoromethane	ND		ug/kg	5.0	0.39
1,2-Dichloroethane	ND		ug/kg	1.0	0.11
1,1,1-Trichloroethane	ND		ug/kg	1.0	0.11
Bromodichloromethane	ND		ug/kg	1.0	0.17
trans-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
cis-1,3-Dichloropropene	ND		ug/kg	1.0	0.12
Bromoform	ND		ug/kg	4.0	0.24
1,1,2,2-Tetrachloroethane	ND		ug/kg	1.0	0.10
Benzene	ND		ug/kg	1.0	0.12
Toluene	ND		ug/kg	1.5	0.19
Ethylbenzene	ND		ug/kg	1.0	0.13
Chloromethane	ND		ug/kg	5.0	0.29
Bromomethane	ND		ug/kg	2.0	0.34
Vinyl chloride	ND		ug/kg	2.0	0.12
Chloroethane	ND		ug/kg	2.0	0.32
1,1-Dichloroethene	ND		ug/kg	1.0	0.26
trans-1,2-Dichloroethene	ND		ug/kg	1.5	0.21
Trichloroethene	ND		ug/kg	1.0	0.12
1,2-Dichlorobenzene	ND		ug/kg	5.0	0.15
1,3-Dichlorobenzene	ND		ug/kg	5.0	0.14

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/15 15:13
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG753161-3					
1,4-Dichlorobenzene	ND		ug/kg	5.0	0.14
Methyl tert butyl ether	ND		ug/kg	2.0	0.08
p/m-Xylene	ND		ug/kg	2.0	0.20
o-Xylene	ND		ug/kg	2.0	0.17
cis-1,2-Dichloroethene	ND		ug/kg	1.0	0.14
Styrene	ND		ug/kg	2.0	0.40
Dichlorodifluoromethane	ND		ug/kg	10	0.19
Acetone	5.0	J	ug/kg	10	1.0
Carbon disulfide	ND		ug/kg	10	1.1
2-Butanone	3.8	J	ug/kg	10	0.27
4-Methyl-2-pentanone	ND		ug/kg	10	0.24
2-Hexanone	ND		ug/kg	10	0.67
Bromochloromethane	ND		ug/kg	5.0	0.28
1,2-Dibromoethane	ND		ug/kg	4.0	0.17
n-Butylbenzene	ND		ug/kg	1.0	0.11
sec-Butylbenzene	ND		ug/kg	1.0	0.12
tert-Butylbenzene	ND		ug/kg	5.0	0.14
1,2-Dibromo-3-chloropropane	ND		ug/kg	5.0	0.40
Isopropylbenzene	ND		ug/kg	1.0	0.10
p-Isopropyltoluene	ND		ug/kg	1.0	0.12
Naphthalene	ND		ug/kg	5.0	0.14
n-Propylbenzene	ND		ug/kg	1.0	0.11
1,2,3-Trichlorobenzene	ND		ug/kg	5.0	0.15
1,2,4-Trichlorobenzene	ND		ug/kg	5.0	0.18
1,3,5-Trimethylbenzene	ND		ug/kg	5.0	0.14
1,2,4-Trimethylbenzene	ND		ug/kg	5.0	0.14
Methyl Acetate	ND		ug/kg	20	0.27
Cyclohexane	ND		ug/kg	20	0.15
1,4-Dioxane	ND		ug/kg	100	14.

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8260C
Analytical Date: 01/02/15 15:13
Analyst: PP

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG753161-3					
Freon-113	ND		ug/kg	20	0.27
Methyl cyclohexane	ND		ug/kg	4.0	0.15
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/kg		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	79		70-130
Toluene-d8	86		70-130
4-Bromofluorobenzene	93		70-130
Dibromofluoromethane	83		70-130

Lab Control Sample Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG753161-1 WG753161-2								
Methylene chloride	112		113		70-130	1		30
1,1-Dichloroethane	126		119		70-130	6		30
Chloroform	103		98		70-130	5		30
Carbon tetrachloride	105		100		70-130	5		30
1,2-Dichloropropane	**135**	Q	126		70-130	7		30
Dibromochloromethane	98		94		70-130	4		30
2-Chloroethylvinyl ether	118		114		70-130	3		30
1,1,2-Trichloroethane	90		86		70-130	5		30
Tetrachloroethene	106		100		70-130	6		30
Chlorobenzene	101		97		70-130	4		30
Trichlorofluoromethane	74		70		70-139	6		30
1,2-Dichloroethane	97		92		70-130	5		30
1,1,1-Trichloroethane	97		90		70-130	7		30
Bromodichloromethane	102		96		70-130	6		30
trans-1,3-Dichloropropene	93		89		70-130	4		30
cis-1,3-Dichloropropene	117		111		70-130	5		30
1,1-Dichloropropene	112		106		70-130	6		30
Bromoform	88		85		70-130	3		30
1,1,2,2-Tetrachloroethane	82		78		70-130	5		30
Benzene	121		115		70-130	5		30
Toluene	99		94		70-130	5		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG753161-1 WG753161-2								
Ethylbenzene	100		95		70-130	5		30
Chloromethane	**152**	Q	**143**	Q	52-130	6		30
Bromomethane	113		106		57-147	6		30
Vinyl chloride	126		119		67-130	6		30
Chloroethane	102		95		50-151	7		30
1,1-Dichloroethene	114		106		65-135	7		30
trans-1,2-Dichloroethene	120		115		70-130	4		30
Trichloroethene	113		106		70-130	6		30
1,2-Dichlorobenzene	102		96		70-130	6		30
1,3-Dichlorobenzene	104		98		70-130	6		30
1,4-Dichlorobenzene	103		98		70-130	5		30
Methyl tert butyl ether	108		103		66-130	5		30
p/m-Xylene	106		101		70-130	5		30
o-Xylene	107		102		70-130	5		30
cis-1,2-Dichloroethene	122		117		70-130	4		30
Dibromomethane	97		92		70-130	5		30
Styrene	104		100		70-130	4		30
Dichlorodifluoromethane	80		75		30-146	6		30
Acetone	99		95		54-140	4		30
Carbon disulfide	101		96		59-130	5		30
2-Butanone	125		108		70-130	15		30

Lab Control Sample Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG753161-1 WG753161-2								
Vinyl acetate	127		119		70-130	7		30
4-Methyl-2-pentanone	120		117		70-130	3		30
1,2,3-Trichloropropane	80		79		68-130	1		30
2-Hexanone	100		97		70-130	3		30
Bromochloromethane	121		115		70-130	5		30
2,2-Dichloropropane	103		97		70-130	6		30
1,2-Dibromoethane	91		88		70-130	3		30
1,3-Dichloropropane	94		90		69-130	4		30
1,1,1,2-Tetrachloroethane	104		99		70-130	5		30
Bromobenzene	104		100		70-130	4		30
n-Butylbenzene	91		85		70-130	7		30
sec-Butylbenzene	94		88		70-130	7		30
tert-Butylbenzene	101		95		70-130	6		30
o-Chlorotoluene	99		92		70-130	7		30
p-Chlorotoluene	98		93		70-130	5		30
1,2-Dibromo-3-chloropropane	85		81		68-130	5		30
Hexachlorobutadiene	98		91		67-130	7		30
Isopropylbenzene	97		92		70-130	5		30
p-Isopropyltoluene	101		95		70-130	6		30
Naphthalene	98		94		70-130	4		30
Acrylonitrile	**136**	Q	127		70-130	7		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST. SITE

Project Number: 0225-015-001

Lab Number: L1431113

Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG753161-1 WG753161-2								
Isopropyl Ether	**158**	Q	**148**	Q	66-130	7		30
tert-Butyl Alcohol	94		89		70-130	5		30
n-Propylbenzene	95		89		70-130	7		30
1,2,3-Trichlorobenzene	102		97		70-130	5		30
1,2,4-Trichlorobenzene	108		101		70-130	7		30
1,3,5-Trimethylbenzene	97		92		70-130	5		30
1,2,4-Trimethylbenzene	98		92		70-130	6		30
Methyl Acetate	117		117		51-146	0		30
Ethyl Acetate	120		114		70-130	5		30
Acrolein	122		118		70-130	3		30
Cyclohexane	131		123		59-142	6		30
1,4-Dioxane	87		81		65-136	7		30
Freon-113	95		88		50-139	8		30
1,4-Diethylbenzene	103		96		70-130	7		30
4-Ethyltoluene	97		91		70-130	6		30
1,2,4,5-Tetramethylbenzene	107		100		70-130	7		30
Tetrahydrofuran	128		121		66-130	6		30
Ethyl ether	113		108		67-130	5		30
trans-1,4-Dichloro-2-butene	88		85		70-130	3		30
Methyl cyclohexane	101		94		70-130	7		30
Ethyl-Tert-Butyl-Ether	130		123		70-130	6		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST. SITE

Project Number: 0225-015-001

Lab Number: L1431113

Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG753161-1 WG753161-2								
Tertiary-Amyl Methyl Ether	114		108		70-130	5		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	80		80		70-130
Toluene-d8	88		87		70-130
4-Bromofluorobenzene	96		95		70-130
Dibromofluoromethane	93		92		70-130

SEMIVOLATILES

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-01
Client ID: TP-1 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/06/15 23:21
Analyst: RC
Percent Solids: 84%

Date Collected: 12/22/14 11:00
Date Received: 12/24/14
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/29/14 19:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	41.	1
2-Chloronaphthalene	ND		ug/kg	200	64.	1
Fluoranthene	ND		ug/kg	120	36.	1
Naphthalene	ND		ug/kg	200	66.	1
Benzo(a)anthracene	ND		ug/kg	120	39.	1
Benzo(a)pyrene	ND		ug/kg	160	48.	1
Benzo(b)fluoranthene	ND		ug/kg	120	40.	1
Benzo(k)fluoranthene	ND		ug/kg	120	38.	1
Chrysene	ND		ug/kg	120	39.	1
Acenaphthylene	ND		ug/kg	160	37.	1
Anthracene	ND		ug/kg	120	33.	1
Benzo(ghi)perylene	ND		ug/kg	160	41.	1
Fluorene	ND		ug/kg	200	56.	1
Phenanthrene	57	J	ug/kg	120	39.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	38.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	160	44.	1
Pyrene	ND		ug/kg	120	38.	1
2-Methylnaphthalene	240		ug/kg	240	63.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	88		23-120
2-Fluorobiphenyl	61		30-120
4-Terphenyl-d14	63		18-120

Project Name: 229 HOMER ST. SITE
Lab Number: L1431113
Project Number: 0225-015-001
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID:	L1431113-02	Date Collected:	12/22/14 13:00
Client ID:	TP-5 (7-9)	Date Received:	12/24/14
Sample Location:	229 HOMER ST.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/29/14 19:18
Analytical Date:	01/06/15 23:47		
Analyst:	RC		
Percent Solids:	88%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	38.	1
2-Chloronaphthalene	ND		ug/kg	190	61.	1
Fluoranthene	110		ug/kg	110	34.	1
Naphthalene	ND		ug/kg	190	62.	1
Benzo(a)anthracene	45	J	ug/kg	110	36.	1
Benzo(a)pyrene	ND		ug/kg	150	46.	1
Benzo(b)fluoranthene	66	J	ug/kg	110	38.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	53	J	ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	150	35.	1
Anthracene	ND		ug/kg	110	31.	1
Benzo(ghi)perylene	ND		ug/kg	150	39.	1
Fluorene	ND		ug/kg	190	53.	1
Phenanthrene	76	J	ug/kg	110	36.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	36.	1
Indeno(1,2,3-cd)pyrene	41	J	ug/kg	150	41.	1
Pyrene	88	J	ug/kg	110	36.	1
2-Methylnaphthalene	ND		ug/kg	220	59.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	79		23-120
2-Fluorobiphenyl	64		30-120
4-Terphenyl-d14	60		18-120

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-03
Client ID: TP-6 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/07/15 00:12
Analyst: RC
Percent Solids: 91%

Date Collected: 12/22/14 13:15
Date Received: 12/24/14
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/29/14 19:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	37.	1
2-Chloronaphthalene	ND		ug/kg	180	59.	1
Fluoranthene	ND		ug/kg	110	33.	1
Naphthalene	ND		ug/kg	180	60.	1
Benzo(a)anthracene	ND		ug/kg	110	36.	1
Benzo(a)pyrene	ND		ug/kg	140	44.	1
Benzo(b)fluoranthene	ND		ug/kg	110	37.	1
Benzo(k)fluoranthene	ND		ug/kg	110	35.	1
Chrysene	ND		ug/kg	110	36.	1
Acenaphthylene	ND		ug/kg	140	34.	1
Anthracene	ND		ug/kg	110	30.	1
Benzo(ghi)perylene	ND		ug/kg	140	38.	1
Fluorene	ND		ug/kg	180	52.	1
Phenanthrene	500		ug/kg	110	35.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	35.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	40.	1
Pyrene	ND		ug/kg	110	35.	1
2-Methylnaphthalene	5400		ug/kg	220	58.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	90		23-120
2-Fluorobiphenyl	67		30-120
4-Terphenyl-d14	67		18-120

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-04
Client ID: TP-8 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/07/15 00:37
Analyst: RC
Percent Solids: 84%

Date Collected: 12/22/14 14:45
Date Received: 12/24/14
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/29/14 19:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	150	40.	1
2-Chloronaphthalene	ND		ug/kg	190	63.	1
Fluoranthene	ND		ug/kg	120	36.	1
Naphthalene	ND		ug/kg	190	64.	1
Benzo(a)anthracene	ND		ug/kg	120	38.	1
Benzo(a)pyrene	ND		ug/kg	150	47.	1
Benzo(b)fluoranthene	ND		ug/kg	120	39.	1
Benzo(k)fluoranthene	ND		ug/kg	120	37.	1
Chrysene	ND		ug/kg	120	38.	1
Acenaphthylene	ND		ug/kg	150	36.	1
Anthracene	ND		ug/kg	120	32.	1
Benzo(ghi)perylene	ND		ug/kg	150	40.	1
Fluorene	ND		ug/kg	190	55.	1
Phenanthrene	ND		ug/kg	120	38.	1
Dibenzo(a,h)anthracene	ND		ug/kg	120	37.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	150	43.	1
Pyrene	ND		ug/kg	120	38.	1
2-Methylnaphthalene	ND		ug/kg	230	62.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	67		23-120
2-Fluorobiphenyl	56		30-120
4-Terphenyl-d14	53		18-120

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-05
Client ID: TP-9 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil
Analytical Method: 1,8270D
Analytical Date: 01/07/15 01:03
Analyst: RC
Percent Solids: 82%

Date Collected: 12/22/14 15:00
Date Received: 12/24/14
Field Prep: Not Specified
Extraction Method: EPA 3546
Extraction Date: 12/29/14 19:18

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	160	41.	1
2-Chloronaphthalene	ND		ug/kg	200	65.	1
Fluoranthene	1700		ug/kg	120	37.	1
Naphthalene	ND		ug/kg	200	66.	1
Benzo(a)anthracene	640		ug/kg	120	39.	1
Benzo(a)pyrene	430		ug/kg	160	49.	1
Benzo(b)fluoranthene	710		ug/kg	120	40.	1
Benzo(k)fluoranthene	220		ug/kg	120	38.	1
Chrysene	660		ug/kg	120	39.	1
Acenaphthylene	ND		ug/kg	160	37.	1
Anthracene	240		ug/kg	120	33.	1
Benzo(ghi)perylene	260		ug/kg	160	42.	1
Fluorene	74	J	ug/kg	200	57.	1
Phenanthrene	1600		ug/kg	120	39.	1
Dibenzo(a,h)anthracene	91	J	ug/kg	120	39.	1
Indeno(1,2,3-cd)pyrene	320		ug/kg	160	44.	1
Pyrene	1100		ug/kg	120	39.	1
2-Methylnaphthalene	ND		ug/kg	240	64.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	86		23-120
2-Fluorobiphenyl	75		30-120
4-Terphenyl-d14	66		18-120

Project Name: 229 HOMER ST. SITE
Lab Number: L1431113
Project Number: 0225-015-001
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID:	L1431113-06	Date Collected:	12/22/14 16:00
Client ID:	TP-12 (5-7)	Date Received:	12/24/14
Sample Location:	229 HOMER ST.	Field Prep:	Not Specified
Matrix:	Soil	Extraction Method:	EPA 3546
Analytical Method:	1,8270D	Extraction Date:	12/29/14 19:18
Analytical Date:	01/07/15 01:28		
Analyst:	RC		
Percent Solids:	93%		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Acenaphthene	ND		ug/kg	140	36.	1
2-Chloronaphthalene	ND		ug/kg	180	58.	1
Fluoranthene	ND		ug/kg	110	32.	1
Naphthalene	ND		ug/kg	180	59.	1
Benzo(a)anthracene	ND		ug/kg	110	35.	1
Benzo(a)pyrene	ND		ug/kg	140	43.	1
Benzo(b)fluoranthene	ND		ug/kg	110	36.	1
Benzo(k)fluoranthene	ND		ug/kg	110	34.	1
Chrysene	ND		ug/kg	110	35.	1
Acenaphthylene	ND		ug/kg	140	33.	1
Anthracene	ND		ug/kg	110	29.	1
Benzo(ghi)perylene	ND		ug/kg	140	37.	1
Fluorene	ND		ug/kg	180	51.	1
Phenanthrene	ND		ug/kg	110	35.	1
Dibenzo(a,h)anthracene	ND		ug/kg	110	34.	1
Indeno(1,2,3-cd)pyrene	ND		ug/kg	140	39.	1
Pyrene	ND		ug/kg	110	34.	1
2-Methylnaphthalene	86	J	ug/kg	210	57.	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Nitrobenzene-d5	89		23-120
2-Fluorobiphenyl	74		30-120
4-Terphenyl-d14	70		18-120

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D
Analytical Date: 01/06/15 11:32
Analyst: RC

Extraction Method: EPA 3546
Extraction Date: 12/29/14 19:18

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-06 Batch: WG752364-1					
Acenaphthene	ND		ug/kg	130	34.
2-Chloronaphthalene	ND		ug/kg	160	53.
Fluoranthene	ND		ug/kg	98	30.
Naphthalene	ND		ug/kg	160	54.
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.
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.
2-Methylnaphthalene	ND		ug/kg	200	52.

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	46		25-120
Phenol-d6	51		10-120
Nitrobenzene-d5	51		23-120
2-Fluorobiphenyl	52		30-120
2,4,6-Tribromophenol	59		0-136
4-Terphenyl-d14	63		18-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG752364-2 WG752364-3								
Acenaphthene	58		53		31-137	9		50
Benzidine	8	Q	17			**69**	Q	50
n-Nitrosodimethylamine	54		40			30		50
1,2,4-Trichlorobenzene	55		46		38-107	18		50
Hexachlorobenzene	61		57		40-140	7		50
Bis(2-chloroethyl)ether	57		47		40-140	19		50
2-Chloronaphthalene	59		52		40-140	13		50
1,2-Dichlorobenzene	54		42		40-140	25		50
1,3-Dichlorobenzene	52		40		40-140	26		50
1,4-Dichlorobenzene	52		40		28-104	26		50
3,3'-Dichlorobenzidine	**38**	Q	**37**	Q	40-140	3		50
2,4-Dinitrotoluene	63		58		28-89	8		50
2,6-Dinitrotoluene	65		60		40-140	8		50
Fluoranthene	62		55		40-140	12		50
4-Chlorophenyl phenyl ether	58		53		40-140	9		50
4-Bromophenyl phenyl ether	65		59		40-140	10		50
Azobenzene	68		62		40-140	9		50
Bis(2-chloroisopropyl)ether	68		57		40-140	18		50
Bis(2-chloroethoxy)methane	61		55		40-117	10		50
Hexachlorobutadiene	54		45		40-140	18		50
Hexachlorocyclopentadiene	48		42		40-140	13		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG752364-2 WG752364-3								
Hexachloroethane	52		40		40-140	26		50
Isophorone	62		56		40-140	10		50
Naphthalene	54		46		40-140	16		50
Nitrobenzene	58		49		40-140	17		50
NitrosoDiPhenylAmine(NDPA)/DPA	64		59			8		50
n-Nitrosodi-n-propylamine	68		59		32-121	14		50
Bis(2-Ethylhexyl)phthalate	67		65		40-140	3		50
Butyl benzyl phthalate	64		58		40-140	10		50
Di-n-butylphthalate	64		58		40-140	10		50
Di-n-octylphthalate	70		63		40-140	11		50
Diethyl phthalate	62		57		40-140	8		50
Dimethyl phthalate	60		55		40-140	9		50
Benzo(a)anthracene	60		55		40-140	9		50
Benzo(a)pyrene	62		56		40-140	10		50
Benzo(b)fluoranthene	63		55		40-140	14		50
Benzo(k)fluoranthene	60		56		40-140	7		50
Chrysene	58		54		40-140	7		50
Acenaphthylene	59		54		40-140	9		50
Anthracene	60		55		40-140	9		50
Benzo(ghi)perylene	60		55		40-140	9		50
Fluorene	60		55		40-140	9		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG752364-2 WG752364-3								
Phenanthrene	60		55		40-140	9		50
Dibenzo(a,h)anthracene	62		56		40-140	10		50
Indeno(1,2,3-cd)Pyrene	63		58		40-140	8		50
Pyrene	59		55		35-142	7		50
Biphenyl	63		56			12		50
Aniline	**27**	Q	**31**	Q	40-140	14		50
4-Chloroaniline	65		60		40-140	8		50
2-Nitroaniline	69		63		47-134	9		50
3-Nitroaniline	49		46		26-129	6		50
4-Nitroaniline	65		60		41-125	8		50
Dibenzofuran	61		56		40-140	9		50
2-Methylnaphthalene	61		54		40-140	12		50
1,2,4,5-Tetrachlorobenzene	59		53		40-117	11		50
Acetophenone	67		58		14-144	14		50
2,4,6-Trichlorophenol	66		60		30-130	10		50
P-Chloro-M-Cresol	70		65		26-103	7		50
2-Chlorophenol	64		55		25-102	15		50
2,4-Dichlorophenol	67		60		30-130	11		50
2,4-Dimethylphenol	64		62		30-130	3		50
2-Nitrophenol	70		62		30-130	12		50
4-Nitrophenol	78		72		11-114	8		50

Lab Control Sample Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG752364-2 WG752364-3								
2,4-Dinitrophenol	27		56		4-130	**70**	Q	50
4,6-Dinitro-o-cresol	60		61		10-130	2		50
Pentachlorophenol	61		56		17-109	9		50
Phenol	62		55		26-90	12		50
2-Methylphenol	68		61		30-130.	11		50
3-Methylphenol/4-Methylphenol	72		65		30-130	10		50
2,4,5-Trichlorophenol	66		62		30-130	6		50
Benzoic Acid	3	Q	24			**157**	Q	50
Benzyl Alcohol	62		56		40-140	10		50
Carbazole	65		59		54-128	10		50
Benzaldehyde	63		46			31		50
Caprolactam	79		77			3		50
Atrazine	80		73			9		50
2,3,4,6-Tetrachlorophenol	65		61			6		50
Pyridine	34		34		10-93	0		50
Parathion, ethyl	91		86		40-140	6		50
1-Methylnaphthalene	64		55		26-130	15		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST. SITE

Project Number: 0225-015-001

Lab Number: L1431113

Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-06 Batch: WG752364-2 WG752364-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	60		49		25-120
Phenol-d6	64		56		10-120
Nitrobenzene-d5	65		55		23-120
2-Fluorobiphenyl	62		54		30-120
2,4,6-Tribromophenol	76		68		0-136
4-Terphenyl-d14	67		58		18-120

METALS

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-01
Client ID: TP-1 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil
Percent Solids: 84%

Date Collected: 12/22/14 11:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	9.5		mg/kg	0.47	0.10	1	01/06/15 10:04	01/06/15 13:26	EPA 3050B	1,6010C	JH
Barium, Total	78		mg/kg	0.47	0.14	1	01/06/15 10:04	01/06/15 13:26	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.47	0.03	1	01/06/15 10:04	01/06/15 13:26	EPA 3050B	1,6010C	JH
Chromium, Total	11		mg/kg	0.47	0.10	1	01/06/15 10:04	01/06/15 13:26	EPA 3050B	1,6010C	JH
Lead, Total	4.2		mg/kg	2.4	0.10	1	01/06/15 10:04	01/06/15 13:26	EPA 3050B	1,6010C	JH
Mercury, Total	ND		mg/kg	0.08	0.02	1	12/26/14 13:08	12/30/14 10:39	EPA 7471B	1,7471B	MC
Selenium, Total	ND		mg/kg	0.95	0.14	1	01/06/15 10:04	01/06/15 13:26	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.47	0.10	1	01/06/15 10:04	01/06/15 13:26	EPA 3050B	1,6010C	JH

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-02
Client ID: TP-5 (7-9)
Sample Location: 229 HOMER ST.
Matrix: Soil
Percent Solids: 88%

Date Collected: 12/22/14 13:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	7.5		mg/kg	0.44	0.09	1	01/06/15 10:04	01/06/15 13:30	EPA 3050B	1,6010C	JH
Barium, Total	50		mg/kg	0.44	0.13	1	01/06/15 10:04	01/06/15 13:30	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.44	0.03	1	01/06/15 10:04	01/06/15 13:30	EPA 3050B	1,6010C	JH
Chromium, Total	9.2		mg/kg	0.44	0.09	1	01/06/15 10:04	01/06/15 13:30	EPA 3050B	1,6010C	JH
Lead, Total	11		mg/kg	2.2	0.09	1	01/06/15 10:04	01/06/15 13:30	EPA 3050B	1,6010C	JH
Mercury, Total	0.04	J	mg/kg	0.08	0.02	1	12/26/14 13:08	12/30/14 10:41	EPA 7471B	1,7471B	MC
Selenium, Total	ND		mg/kg	0.89	0.13	1	01/06/15 10:04	01/06/15 13:30	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.44	0.09	1	01/06/15 10:04	01/06/15 13:30	EPA 3050B	1,6010C	JH

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-03
Client ID: TP-6 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil
Percent Solids: 91%

Date Collected: 12/22/14 13:15
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	6.8		mg/kg	0.43	0.09	1	01/06/15 10:04	01/06/15 13:34	EPA 3050B	1,6010C	JH
Barium, Total	78		mg/kg	0.43	0.13	1	01/06/15 10:04	01/06/15 13:34	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.43	0.03	1	01/06/15 10:04	01/06/15 13:34	EPA 3050B	1,6010C	JH
Chromium, Total	6.6		mg/kg	0.43	0.09	1	01/06/15 10:04	01/06/15 13:34	EPA 3050B	1,6010C	JH
Lead, Total	4.0		mg/kg	2.2	0.09	1	01/06/15 10:04	01/06/15 13:34	EPA 3050B	1,6010C	JH
Mercury, Total	0.02	J	mg/kg	0.07	0.02	1	12/26/14 13:08	12/30/14 10:43	EPA 7471B	1,7471B	MC
Selenium, Total	ND		mg/kg	0.86	0.13	1	01/06/15 10:04	01/06/15 13:34	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.43	0.09	1	01/06/15 10:04	01/06/15 13:34	EPA 3050B	1,6010C	JH

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-04
Client ID: TP-8 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil
Percent Solids: 84%

Date Collected: 12/22/14 14:45
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	5.1		mg/kg	0.47	0.09	1	01/06/15 10:04	01/06/15 13:38	EPA 3050B	1,6010C	JH
Barium, Total	50		mg/kg	0.47	0.14	1	01/06/15 10:04	01/06/15 13:38	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.47	0.03	1	01/06/15 10:04	01/06/15 13:38	EPA 3050B	1,6010C	JH
Chromium, Total	5.8		mg/kg	0.47	0.09	1	01/06/15 10:04	01/06/15 13:38	EPA 3050B	1,6010C	JH
Lead, Total	4.5		mg/kg	2.3	0.09	1	01/06/15 10:04	01/06/15 13:38	EPA 3050B	1,6010C	JH
Mercury, Total	0.03	J	mg/kg	0.09	0.02	1	12/26/14 13:08	12/30/14 10:44	EPA 7471B	1,7471B	MC
Selenium, Total	ND		mg/kg	0.94	0.14	1	01/06/15 10:04	01/06/15 13:38	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.47	0.09	1	01/06/15 10:04	01/06/15 13:38	EPA 3050B	1,6010C	JH

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-05
Client ID: TP-9 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil
Percent Solids: 82%

Date Collected: 12/22/14 15:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	7.2		mg/kg	0.46	0.09	1	01/06/15 10:04	01/06/15 13:41	EPA 3050B	1,6010C	JH
Barium, Total	59		mg/kg	0.46	0.14	1	01/06/15 10:04	01/06/15 13:41	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.46	0.03	1	01/06/15 10:04	01/06/15 13:41	EPA 3050B	1,6010C	JH
Chromium, Total	8.5		mg/kg	0.46	0.09	1	01/06/15 10:04	01/06/15 13:41	EPA 3050B	1,6010C	JH
Lead, Total	4.8		mg/kg	2.3	0.09	1	01/06/15 10:04	01/06/15 13:41	EPA 3050B	1,6010C	JH
Mercury, Total	0.02	J	mg/kg	0.08	0.02	1	12/26/14 13:08	12/30/14 10:46	EPA 7471B	1,7471B	MC
Selenium, Total	ND		mg/kg	0.92	0.14	1	01/06/15 10:04	01/06/15 13:41	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.46	0.09	1	01/06/15 10:04	01/06/15 13:41	EPA 3050B	1,6010C	JH

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-06
Client ID: TP-12 (5-7)
Sample Location: 229 HOMER ST.
Matrix: Soil
Percent Solids: 93%

Date Collected: 12/22/14 16:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	6.9		mg/kg	0.42	0.08	1	01/06/15 10:04	01/06/15 14:08	EPA 3050B	1,6010C	JH
Barium, Total	55		mg/kg	0.42	0.13	1	01/06/15 10:04	01/06/15 14:08	EPA 3050B	1,6010C	JH
Cadmium, Total	ND		mg/kg	0.42	0.03	1	01/06/15 10:04	01/06/15 14:08	EPA 3050B	1,6010C	JH
Chromium, Total	7.9		mg/kg	0.42	0.08	1	01/06/15 10:04	01/06/15 14:08	EPA 3050B	1,6010C	JH
Lead, Total	5.2		mg/kg	2.1	0.08	1	01/06/15 10:04	01/06/15 14:08	EPA 3050B	1,6010C	JH
Mercury, Total	0.03	J	mg/kg	0.07	0.02	1	12/26/14 13:08	12/30/14 10:52	EPA 7471B	1,7471B	MC
Selenium, Total	ND		mg/kg	0.84	0.13	1	01/06/15 10:04	01/06/15 14:08	EPA 3050B	1,6010C	JH
Silver, Total	ND		mg/kg	0.42	0.08	1	01/06/15 10:04	01/06/15 14:08	EPA 3050B	1,6010C	JH

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001
Lab Number: L1431113
Report Date: 01/07/15

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG751918-1										
Mercury, Total	ND		mg/kg	0.08	0.02	1	12/26/14 13:08	12/30/14 10:18	1,7471B	MC

Prep Information

Digestion Method: EPA 7471B

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-06 Batch: WG753506-1										
Arsenic, Total	ND		mg/kg	0.40	0.08	1	01/06/15 10:04	01/06/15 12:08	1,6010C	TT
Barium, Total	ND		mg/kg	0.40	0.12	1	01/06/15 10:04	01/06/15 12:08	1,6010C	TT
Cadmium, Total	ND		mg/kg	0.40	0.03	1	01/06/15 10:04	01/06/15 12:08	1,6010C	TT
Chromium, Total	ND		mg/kg	0.40	0.08	1	01/06/15 10:04	01/06/15 12:08	1,6010C	TT
Lead, Total	ND		mg/kg	2.0	0.08	1	01/06/15 10:04	01/06/15 12:08	1,6010C	TT
Selenium, Total	ND		mg/kg	0.80	0.12	1	01/06/15 10:04	01/06/15 12:08	1,6010C	TT
Silver, Total	ND		mg/kg	0.40	0.08	1	01/06/15 10:04	01/06/15 12:08	1,6010C	TT

Prep Information

Digestion Method: EPA 3050B

Lab Control Sample Analysis

Batch Quality Control

Project Name: 229 HOMER ST. SITE

Project Number: 0225-015-001

Lab Number: L1431113

Report Date: 01/07/15

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG751918-2 SRM Lot Number: D083-540								
Mercury, Total	121		-		75-126	-		
Total Metals - Westborough Lab Associated sample(s): 01-06 Batch: WG753506-2 SRM Lot Number: D083-540								
Arsenic, Total	98		-		78-122	-		
Barium, Total	102		-		82-117	-		
Cadmium, Total	92		-		82-118	-		
Chromium, Total	96		-		79-121	-		
Lead, Total	89		-		81-119	-		
Selenium, Total	96		-		78-123	-		
Silver, Total	94		-		74-125	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG751918-4 QC Sample: L1431109-01 Client ID: MS Sample												
Mercury, Total	0.03J	0.159	0.26	**163**	Q	-	-		80-120	-		20
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG753506-4 QC Sample: L1430765-01 Client ID: MS Sample												
Arsenic, Total	12.	11.1	22	90		-	-		75-125	-		20
Barium, Total	120	186	310	102		-	-		75-125	-		20
Cadmium, Total	ND	4.73	4.2	89		-	-		75-125	-		20
Chromium, Total	19.	18.6	36	92		-	-		75-125	-		20
Lead, Total	31.	47.3	67	76		-	-		75-125	-		20
Selenium, Total	ND	11.1	9.0	81		-	-		75-125	-		20
Silver, Total	ND	27.8	25	90		-	-		75-125	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG751918-3 QC Sample: L1431109-01 Client ID: DUP Sample						
Mercury, Total	0.03J	0.04J	mg/kg	NC		20
Total Metals - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG753506-3 QC Sample: L1430765-01 Client ID: DUP Sample						
Arsenic, Total	12.	12	mg/kg	0		20
Barium, Total	120	140	mg/kg	15		20
Cadmium, Total	ND	ND	mg/kg	NC		20
Chromium, Total	19.	20	mg/kg	5		20
Lead, Total	31.	36	mg/kg	15		20
Selenium, Total	ND	ND	mg/kg	NC		20
Silver, Total	ND	ND	mg/kg	NC		20

INORGANICS
&
MISCELLANEOUS

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-01
Client ID: TP-1 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil

Date Collected: 12/22/14 11:00
Date Received: 12/24/14
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	83.7		%	0.100	NA	1	-	12/24/14 22:18	30,2540G	RT

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-02
Client ID: TP-5 (7-9)
Sample Location: 229 HOMER ST.
Matrix: Soil

Date Collected: 12/22/14 13:00
Date Received: 12/24/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.6		%	0.100	NA	1	-	12/24/14 22:18	30,2540G	RT

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-03
Client ID: TP-6 (6-8)
Sample Location: 229 HOMER ST.
Matrix: Soil

Date Collected: 12/22/14 13:15
Date Received: 12/24/14
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	90.6		%	0.100	NA	1	-	12/24/14 22:18	30,2540G	RT

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-04
Client ID: TP-8 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil

Date Collected: 12/22/14 14:45
Date Received: 12/24/14
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	83.8		%	0.100	NA	1	-	12/24/14 22:18	30,2540G	RT

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-05
Client ID: TP-9 (3-5)
Sample Location: 229 HOMER ST.
Matrix: Soil

Date Collected: 12/22/14 15:00
Date Received: 12/24/14
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	81.7		%	0.100	NA	1	-	12/24/14 22:18	30,2540G	RT

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

SAMPLE RESULTS

Lab ID: L1431113-06
Client ID: TP-12 (5-7)
Sample Location: 229 HOMER ST.
Matrix: Soil

Date Collected: 12/22/14 16:00
Date Received: 12/24/14
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	92.9		%	0.100	NA	1	-	12/24/14 22:18	30,2540G	RT

Lab Duplicate Analysis
Batch Quality Control

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-06 QC Batch ID: WG751899-1 QC Sample: L1431112-04 Client ID: DUP Sample						
Solids, Total	97.9	98.0	%	0		20

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1431113-01A	Glass 120ml/4oz unpreserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-01B	Glass 250ml/8oz unpreserved	A	N/A	3.1	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)
L1431113-01X	Vial MeOH preserved split	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-02A	Glass 120ml/4oz unpreserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-02B	Glass 250ml/8oz unpreserved	A	N/A	3.1	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)
L1431113-02X	Vial MeOH preserved split	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-03A	Glass 120ml/4oz unpreserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-03B	Glass 250ml/8oz unpreserved	A	N/A	3.1	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)
L1431113-03X	Vial MeOH preserved split	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-04A	Glass 120ml/4oz unpreserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-04B	Glass 250ml/8oz unpreserved	A	N/A	3.1	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)
L1431113-04X	Vial MeOH preserved split	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-05A	Glass 120ml/4oz unpreserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-05B	Glass 250ml/8oz unpreserved	A	N/A	3.1	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)
L1431113-05X	Vial MeOH preserved split	A	N/A	3.1	Y	Absent	NYTCL-8260(14)
L1431113-06A	Glass 120ml/4oz unpreserved	A	N/A	3.1	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name: 229 HOMER ST. SITE
Project Number: 0225-015-001

Lab Number: L1431113
Report Date: 01/07/15

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1431113-06B	Glass 250ml/8oz unpreserved	A	N/A	3.1	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)
L1431113-06X	Vial MeOH preserved split	A	N/A	3.1	Y	Absent	NYTCL-8260(14)

*Values in parentheses indicate holding time in days

Project Name:	229 HOMER ST. SITE	**Lab Number:**	L1431113
Project Number:	0225-015-001	**Report Date:**	01/07/15

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.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

Report Format: DU Report with 'J' Qualifiers

Project Name:	229 HOMER ST. SITE	**Lab Number:**	L1431113
Project Number:	0225-015-001	**Report Date:**	01/07/15

Data Qualifiers

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	229 HOMER ST. SITE	**Lab Number:**	L1431113
Project Number:	0225-015-001	**Report Date:**	01/07/15

REFERENCES

1 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.

Certification Information

Last revised December 16, 2014

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

Westborough Facility
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 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WESTBORO, MA TEL: 508-898-9220 FAX: 508-898-9193
MANSFIELD, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 12-24-14

ALPHA Job #: L1431113

Client Information

Client: Turnkey
Address: 2558 Hamburg Turnpike Buffalo NY 14218
Phone: 716-856-0599
Fax: 716-856-0583
Email:

☐ These samples have been previously analyzed by Alpha

Project Information

Project Name: 229 Howe St Site
Project Location: 229 Howe St
Project #: 0225-015-001
Project Manager: Mike Lesakowski
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ RUSH (only confirmed if pre-approved!)
Date Due: 01-06-15 Time:

Report Information - Data Deliverables

☐ FAX ☐ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Regulatory Requirements/Report Limits

State /Fed Program	Criteria

Other Project Specific Requirements/Comments/Detection Limits:

ANALYSIS: TCL + CP-51 VOC + TICs; PAHs; RCRA Metals

SAMPLE HANDLING
Filtration
☐ Done ☐ Not needed ☐ Lab to do
Preservation
☐ Lab to do (Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TCL+CP-51 VOC+TICs	PAHs	RCRA Metals	Sample Specific Comments	TOTAL # BOTTLES
31113-01	TP-1 (6-8)	12-22-14	11 00	Soil	PWW	X	X	X		2
02	TP-5 (7-9)		13 00			X	X	X		2
03	TP-6 (6-8)		13 15			X	X	X		2
04	TP-8 (3-5)		14 45			X	X	X		2
05	TP-9 (3-5)		15 00			X	X	X		2
06	TP-12 (5-7)		16 00			X	X	X		2

Container Type										
Preservative										

Relinquished By:	Date/Time	Received By:	Date/Time
	12-24-14 10:30		12/24/14 1030
AAL	12-24-14	AAL	12/24/14 12:30
AAL	12-24-14 15:30		12/24/14 1530
	12-24-14 2120		12-24-14 2120

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Terms and Conditions. See reverse side.

FORM NO: 01-01 (rev. 14-OCT-07)