LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT

1395 DELAWARE AVENUE SITE
BUFFALO, NEW YORK

May 2018 0136-018-005

Prepared for:

9187 Group, LLC

Prepared By:

TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT

1395 Delaware Avenue Site
Buffalo, New York

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1.0 INTRODUCTION

1.1 Background

TurnKey Environmental Restoration, LLC (TurnKey) conducted a Limited Phase II Environmental Investigation on behalf of 9187 Group, LLC at the property located at the corner of Delaware Avenue and West Delavan Avenue and addressed at 1395 Delaware Avenue, City of Buffalo, Erie County, New York (Site; see Figures 1 and 2). The Site is currently vacant and was used as an automobile gasoline filling station and automotive service/repair facility.

Previous investigations and historic records indicate multiple automobile service and filling stations, including the presence of numerous former and existing underground storage tanks (USTs) on Site.

1.2 Site Description

The Site is located in a highly developed mixed use commercial and residential area of the City of Buffalo, New York. The 0.33 acre Site is located at the southeast corner of Delaware Avenue and West Delavan Avenue. The Site is currently occupied with a former automobile service/retail building, and gasoline pump island with associated canopy. All structures are unused and/or vacant. NYSDEC Petroleum Bulk Storage 9-041602 is associated with this Site. Surrounding properties include religious (cemetery), residential, and commercial use.

1.3 Previous Environmental Study

A Phase I Environmental Site Assessment was completed by TurnKey Environmental Restoration, LLC (TurnKey) for the Site. The following recognized environmental conditions (RECs) were identified for the 1395 Delaware Avenue parcel, including:

- The Site was utilized as an automobile service/greasing and filling station since at least 1928, including multiple fuel oil, waste oil, in-ground hydraulic lifts and gasoline USTs. One (1) existing and three (3) separate historic pump islands were also noted in the records.

- Numerous historic and existing USTs of varying size were identified in connection with the Site.

2.0 SOIL/FILL INVESTIGATION

The purpose of the investigation was to assess subsurface conditions related to the historic use of the Site as an automobile service, greasing, and filling station.

2.1 Soil Borings

On April 10, 2018, TurnKey's drilling subcontractor, Trec Environmental, Inc. (Trec) mobilized a track-mounted direct-push drill rig to the Site. Twelve (12) soil boring locations, identified as SB-1 through SB-12, were advanced in areas of suspected RECs to a target depth of 12-16 feet below ground surface (fbgs) (see Figure 2).

The soil borings were advanced using 1.5-inch diameter samplers that are 4-feet in length. Continuous sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil/fill samples by TurnKey's Environmental Scientist. The retrieved soil-fill samples from each boring were screened using a photoionization detector (PID) and visual and/or olfactory observations were noted. Findings of the investigation are described below.

2.2 Laboratory Analysis

Nine (9) soil-fill samples were collected for laboratory analysis from borings SB-2, SB-3, SB-4, SB-5 SB-7, SB-8, and SB-10. Soil/fill samples collected were placed in pre-cleaned, laboratory provided sample bottles using dedicated stainless-steel sampling tools, and cooled to 4º C in the field, and transported under chain-of-custody command to a NYSDOH Environmental Laboratory Accreditation Program (ELAP) certified analytical laboratory.

Representative soil/fill samples were collected and selectively analyzed for NYSDEC CP-51 List plus Target Compound List (TCL) volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), and Resource Conservation and Recovery Act (RCRA) metals. Laboratory analytical results are presented below.

3.0 INVESTIGATION FINDINGS

Table 1 presents a summary of the soil/fill sample results. Each compound that was analyzed and detected above the laboratory reporting limit is listed on the table with its associated result to provide a complete data summary. For comparison purposes, Table 1 presents soil cleanup objectives (SCOs) for each of the detected parameters as published in 6NYCRR Part 375 and NYSDEC CP-51 Soil Cleanup Levels (SCLs). A photolog is provided in Appendix A, soil borings logs are provided in Appendix B, and laboratory analytical data packages are provided electronically in Appendix C.

3.1 Qualitative Soil-Fill Screening

Field evidence of grossly contaminated petroleum soil-fill, including odors, black-stained soils, and elevated PID readings were noted in 11 of the 13 investigation locations. Oily product and black staining was detected on the cutting sleeve and within the retrieved soil samples at SB-3, SB-4, SB-5, and SB-10. Additional boring locations, SB-1 and SB-8, had similar black staining within the soil matrix, without free product. Drilling equipment refusal was encountered at SB-10 at approximately 4-5 fbgs due to the presence of a metal fragment with strong odors, likely indicating the presence historic UST or associated line (see photolog).

Elevated PID readings above 5 ppm were detected in 11 of the 13 locations, with highest PID readings in SB-2 (283 ppm), SB-3 (700 ppm), SB-4 (1326 ppm), SB-5 (1695 ppm), and SB-10 (620 ppm). Soil boring logs are provided in Appendix B.

Fill materials, generally consisting of brick, block, concrete, and reworked clay were generally identified within the upper 1-4 fbgs, and underlain by clay and sand. Shallow perched water was encountered at a depth of 5-9 fbgs.

Based on the field findings during the investigation, including visual product and staining, odors and elevated PID readings, notification was provided to the NYSDEC hotline and Spill No. 1800334 was issued for the Site. The Spill file is currently open.

3.2 Soil Analytical Results

Laboratory analytical results are summarized on Table 1 with comparison to applicable SCOs/SCLs. Petroleum related VOCs were analyzed at SB-2, SB-3, SB-4, SB-5, and SB-10. Elevated petroleum VOCs were detected exceeding Unrestricted Use SCOs

(USCOs)/SCLs in all five (5) sampled locations, with elevated levels exceeding Restricted Residential Use SCOs (RRSCOs) at SB-4 and SB-10.

Elevated PAHs were detected exceeding RRSCOs and USCOs/CP-51 SCLs in three (3) of the four (4) sampled locations.

Elevated metals, including cadmium, lead and mercury, were detected exceeding USCOs/CP-51 SCLs, with elevated lead exceeding its RRSCOs at SB-3.

4.0 CONCLUSIONS AND RECOMMENDATIONS

Based on the results of this Limited Phase II Environmental Investigation at the Site, TurnKey offers the following conclusions and recommendations:

- Grossly contaminated petroleum soils were identified on-Site, including visual product, odors, and elevated PID readings.
  - Oily product and sheen was identified at four (4) sample locations. Evidence of suspect tank or fuel system lines was identified at SB-10.
  - Odors and elevated PID readings were detected in eleven (11) of the thirteen (13) borings, with highest reading of 1,695 ppm.
- Elevated VOCs were detected on Site exceeding Unrestricted Use, Restricted Residential Use SCOs.
- Elevated PAHs were detected on-Site exceeding USCOs and RRSCOs.
- Elevated metals, including lead, was detected on-Site exceeding USCOs and RRSCOs.
- Based on the findings of this investigation, additional investigation and remediation would be required to address Spill No. 1800334.
- TurnKey understands that 9187 Group, LLC is considering redeveloping the property; and, based on environmental impacts noted during this investigation, the Site may be eligible for the NYS Brownfield Cleanup Program.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of 9187 Group, 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 historic information sources to be true and accurate. The findings herein may be relied upon only at the discretion of 9187 Group, LLC. Use of or reliance on this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

TABLE

TABLE 1

SUMMARY OF SUBSURFACE SOIL/FILL SAMPLE ANALYTICAL RESULTS

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

1395 DELAWARE AVENUE

BUFFALO, NEW YORK

PARAMETER[1]	CP-51 SCLs [2] / Unrestricted Use SCOs [3]	Restricted Residential Use SCOs [3]	Sample Location (Depth (ft))								
			SB-2 (3"-1.5')	SB-2 (8-10')	SB-3 (6"-2.5')	SB-3 (6-8')	SB-4 (6-8')	SB-5 (2-4')	SB-7 (6"-2.5')	SB-8 (6"-1.5')	SB-10 (2-4')
			4/10/2018								
Volatile Organic Compounds (VOCs) - mg/Kg [4]											
1,2,4-Trimethylbenzene	**3.6**	**52**	**--**	2.3	--	**15**	**72**	**24**	--	--	**120**
1,3,5-Trimethylbenzene	**8.4**	**52**	**--**	0.79 *	--	4.8 *	**20 ***	**8.9 ***	--	--	**22**
Ethylbenzene	**1**	**41**	**--**	0.52	--	**5.2**	**15**	**2.6 J**	--	--	**6.4 F1**
Isopropylbenzene (Cumene)	**2.3**	**--**	--	ND	--	0.44 J	1.9	ND	--	--	**3.7 F1**
n-Butylbenzene	**12**	**100**	**--**	0.19 J	--	2	9	ND	--	--	ND
n-Propylbenzene	**3.9**	**100**	**--**	ND	--	ND	ND	ND	--	--	**5.9 F1**
sec-Butylbenzene	**11**	**100**	**--**	ND	--	ND	1.2 *	ND	--	--	3.4 * F1
Toluene	**0.7**	**100**	--	**1.1**	--	ND	**0.98 J**	ND	--	--	ND
Total Xylenes	**0.26**	**100**	**--**	**4.2**	--	**22**	**88**	**11 J**	--	--	**35**
Polycyclic Aromatic Hydrocarbons (PAHs) - mg/Kg [4]											
Acenaphthene	**20**	**100**	ND	--	0.42 J	--	--	--	0.69 J	ND	--
Anthracene	**100**	**100**	ND	--	0.71 J	--	--	--	1.6 J	ND	--
Benzo(a)anthracene	**1**	**1**	ND	--	**2.4**	--	--	--	**4.3**	**1.8 J**	--
Benzo(a)pyrene	**1**	**1**	ND	--	**2.3**	--	--	--	**4.3**	**2.2 J**	--
Benzo(b)fluoranthene	**1**	**1**	ND	--	**2.4**	--	--	--	**4.5**	**2.4 J**	--
Benzo(ghi)perylene	**100**	**100**	ND	--	1.6	--	--	--	3.5 J	2.1 J	--
Benzo(k)fluoranthene	**0.8**	**3.9**	ND	--	**2**	--	--	--	**4.3**	**1.8 J**	--
Chrysene	**1**	**3.9**	ND	--	**2.7**	--	--	--	**5.2**	**2 J**	--
Fluoranthene	**100**	**100**	ND	--	5.7	--	--	--	13	4.1	--
Fluorene	**30**	**100**	ND	--	0.29 J	--	--	--	0.7 J	ND	--
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	ND	--	**1.3**	--	--	--	**3.1 J**	**1.8 J**	--
Naphthalene	**12**	**100**	ND	--	0.15 J	--	--	--	ND	ND	--
Phenanthrene	**100**	**100**	ND	--	4.2	--	--	--	8.2	1.5 J	--
Pyrene	**100**	**100**	ND	--	4.9	--	--	--	10	3.2 J	--
Metals - mg/Kg											
Arsenic	**13**	**16**	3	--	5.4	--	--	--	4.4	5.5	--
Barium	**350**	**400**	226	--	209	--	--	--	98 F2 F1	131	--
Cadmium	**2.5**	**4.3**	ND	--	ND	--	--	--	0.58	**2.5**	--
Chromium	**30**	**180**	19.6	--	0.47	--	--	--	7.5	11.7	--
Lead	**63**	**400**	**121**	--	**479**	--	--	--	**183 F2 F1**	**369**	--
Mercury	**0.18**	**0.81**	**0.39**	--	0.062	--	--	--	0.032	**0.21**	--

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
2. Values per NYSDEC CP-51 Soil Cleanup Levels (SCLs) for gasoline and fuel oil contaminated soils.
3. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
4. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCLs and SCOs.

Definitions:

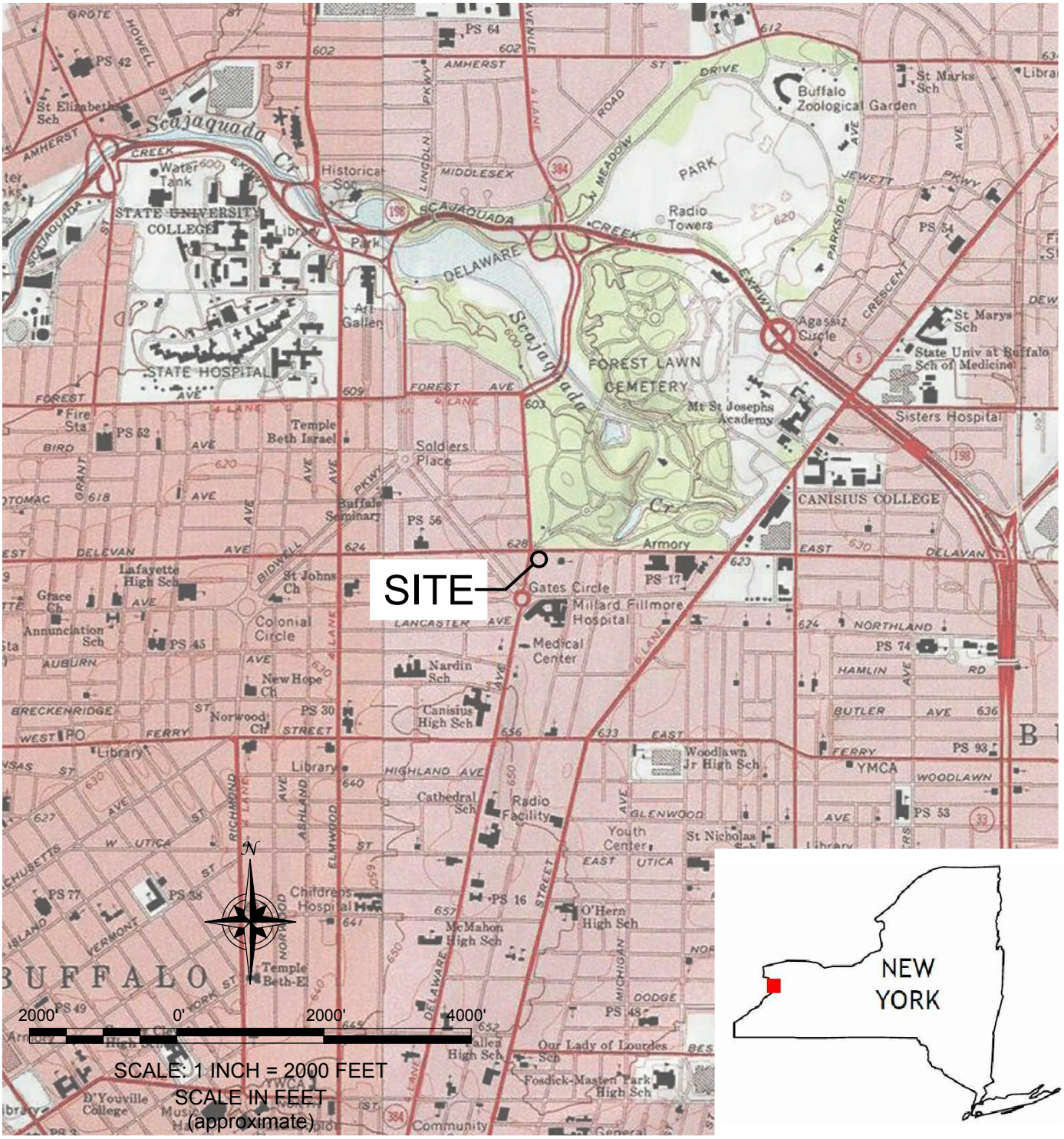
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
F1 = MS and/or MSD recovery is outside acceptance limits
F2 = MS/MSD RPD exceeds control limits
* = LCS or LCSD is outside acceptance limits

Bold	= Result exceeds CP-51 SCLs / USCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.

FIGURES

F:\CAD\TurnKey\Ellicott Development\1395 Delaware\Phase II\Figure 1 - Site Location and Vicinity Map.dwg

FIGURE 1



TurnKey Environmental Restoration, LLC

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SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION

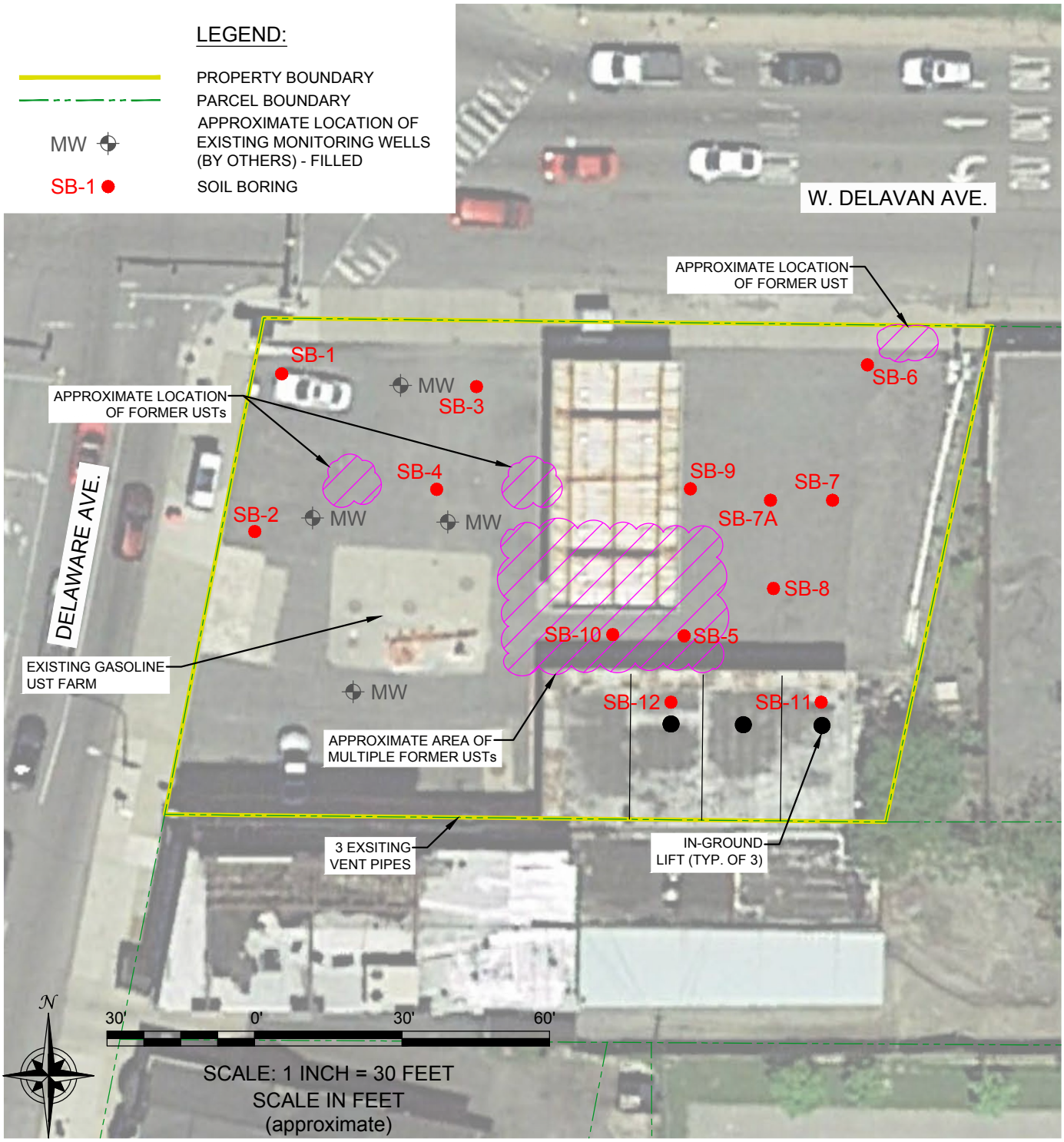
1395 DELAWARE AVENUE
BUFFALO, NEW YORK

PREPARED FOR
9187 GROUP, LLC

PROJECT NO.:	0136-018-005
DATE:	MAY 2018
DRAFTED BY:	CMS

F:\CAD\TurnKey\Ellicott Development\1395 Delaware\Phase II\Figure 2 - Investigation Locations.dwg

FIGURE 2



TurnKey Environmental Restoration, LLC

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

PROJECT NO.: 0136-018-005

DATE: MAY 2018

DRAFTED BY: CMS

INVESTIGATION LOCATIONS

PHASE II ENVIRONMENTAL INVESTIGATION

1395 DELAWARE AVENUE
BUFFALO, NEW YORK

PREPARED FOR
9187 GROUP, LLC

APPENDIX A

PHOTOLOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: View of the existing pump island, canopy, and building – facing east.

Photo 2: View of the existing UST farm – facing west.

Photo 3: View of existing vents associated with existing USTs.

Photo 4: View of a former monitoring well, typical of four (4) locations proximate to existing UST field.

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 5: View of fill material typical of multiple locations on-Site.

Photo 6: View of the location of SB-3 – facing southeast.

Photo 7, 8: View of black staining and oily product with strong petroleum odors found at SB-3.

SITE PHOTOGRAPHS

Photo 9:

Photo 10:

Photo 11:

Photo 12:

Photo 9: View of the location of SB-4 – facing southeast.

Photo 10, 11, 12: View of black staining and oily product with strong petroleum odors found at SB-4.

SITE PHOTOGRAPHS

Photo 13:

Photo 14:

Photo 15:

Photo 16:

Photo 13: View of the location of SB-5 – facing south.

Photo 14, 15, 16: View of black staining and oily product with strong petroleum odors found at SB-5.

SITE PHOTOGRAPHS

Photo 17:

Photo 18:

Photo 19:

Photo 20:

Photo 17: View of the location of SB-10 – facing east

Photo 18: View of black staining and oily product with strong petroleum odors found at SB-10.

Photo 19: View of oily product found at SB-10.

Photo 20: View of metal fragment found at SB-10.

SITE PHOTOGRAPHS

Photo 21:

Photo 22:

Photo 23:

Photo 24:

Photo 21: View of the location of SB-1 – facing southwest

Photo 22: View of black staining found at SB-1.

Photo 23: View of the location of SB-8 – facing south.

Photo 24: View of black staining found at SB-8

APPENDIX B

SOIL BORING LOGS

Project No: T0136-018-005

Borehole Number: SB-1

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***					5.1		
	-0.5								
	0.5	***Fill*** Light brown, mostly granular fines, some angular gravel, some red brick.					9.0		
							12.3		
			1		1.3		9.4		
	-4.0								
	4.0	***Fill*** Reddish brown, moist, mostly medium plastic fines (reworked clay), trace fine sand, high density, medium toughness, no odor.					9.9		
5.0							10.5		
	-5.3								
	5.3	***Lean Clay*** Brown, mostly medium plastic fines, trace fine sand, high density, medium toughness, wet at 7.5 fbgs, no odor.					12.3		
			2		2.8		9.7		
							10.6		
							13.2		
							14.1		
	-8.0						15.5		
	8.0	***Lean Clay with Sand*** Brown with pockets of black staining, moist, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.					14.6		
	-9.3						15.1		
	9.3	***Poorly Graded Sand with Clay*** Brown with pockets of black staining, mostly fine sands, trace medium plastic fines, no odor.					18.4		
10.0							17.2		
			3		2.3		14.6		
							14.4		
	-12.0								
	12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-2

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 250 – 500)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***							
	-0.5 / 0.5	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand, high density, soft, no odor.	1		2.3		16.7, 30.8, 15.8, 12.6, 12.8, 15.8, 17.3, 12.0	Sample Location	
	-4.0 / 4.0	As above.	2		2.4		28.2, 35.8, 50.1, 31.6, 85.8, 170.5, 69.5, 17.3		
5.0									
	-8.0 / 8.0	As above. Wet at 8 fbgs.	3		2.7		59.1, 81.9, 121.4, 283.6, 55.5	Sample Location	
10.0	-10.0 / 10.0	***Poorly Graded Sand with Clay*** Light brown, wet, mostly fine sands, trace medium plastic fines, slight petroleum-like odor.							
	-12.0 / 12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprob 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-3

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0 -0.5	***Asphalt and Subbase***					10.4		
	0.5	***Fill*** Reddish brown, moist, mostly medium plastic fines (reworked clay), pocket of light brown fine sand, slight petroleum-like odor.	1		1.8		11.2 14.4 14.2	Sample Location	
	-4.0						25.0		
	4.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sands, high density, medium toughness, black staining at 4 fbgs, strong petroleum odor.	2		3.3		68.7 128.3 207.0 396.3 273.3 700.1 690.1	Sample Location	
5.0	-8.0						417.0		
	8.0	As above. Strong petroleum odor.					175.0		
	-9.0						70.0		
	9.0	***Poorly Graded Sand with Clay*** Black staining, wet at 9 fbgs, mostly fine sand, trace medium plastic fines, visible sheen, strong petroleum odor.	3		2.8		53.5 63.4 112.4		
10.0	-10.5						119.3 216.7		
	10.5	As above. Brown. Strong petroleum odor.					217.8		
	-12.0						174.1		
	12.0	As above. Slight petroleum-like odor.	4		2.8		86.4 90.7 67.5		
15.0							101.5 40.7		
	-16.0						40.4		
	16.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-4

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 1000 / 2000)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***					3.2		
	-0.5								
	0.5	***Fill*** Reddish brown, moist mostly medium plastic fines (reworked clay), trace fine sand, pocket of light brown fine sand, large angular gravel, no odor.	1		2.0		4.5, 5.1, 6.8, 7.9		
	-4.0						51.7		
	4.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand, high density, medium toughness, visible sheen, slight petroleum-like odor.					589.1		
5.0	-5.3						588.1		
	5.3	As above. Black staining, visible sheen, slight petroleum-like odor.	2		3.2		278.4, 670.2		
	-6.2								
	6.2	As above. Reddish brown, strong petroleum odor.					708.5, 1046, 1326	Sample Location	
	-8.0						653.6		
	8.0	As above. Black staining at 9 fbgs, wet at 9 fbgs, dense, soft, strong petroleum odors.					323.8, 1129		
	-9.7						873.6		
10.0	9.7	As above. Strong petroleum odor.	3		3.2		581.2, 520.6, 506.8, 418.2		
	-12.0						440.1		
	12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-5

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 1000 / 2000)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***							
	-0.8 / 0.8	***Lean CLay*** Brown, moist, mostly medium plastic fines, trace gravel, trace fine sand, high density, high toughness, visible sheen, strong petroleum odor.	1		2.7		5.0, 1.7, 269.1, 233.7, 356.3, 488.4, 501.5, 843.0	Sample Location	
5.0	-4.0 / 4.0	As above. Black staining, visible sheen, strong petroleum odor.	2		2.7		366.7, 398.1, 154.8, 64.7, 253.7, 420.4, 598.8, 697.0		
	-8.0 / 8.0	As above. Black staining, visible sheen, strong petroleum odor.	3		3.7		553.8, 682.8, 102.5, 1695, 394.3, 651.5, 1185, 1112		
10.0	-10.7 / 10.7	***Poorly graded Sand with Clay*** Brown, moist, mostly fine sand, some medium plastic fines, visible sheen, strong petroleum odor.							
	-12.0 / 12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-6

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***							
			1		0.3				
	-4.0								
	4.0	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand, high density, soft, wet at 7 fbgs, no odor.					16.2		
5.0							14.4		
							12.7		
			2		2.7		12.4		
							12.3		
							12.1		
							12.2		
	-8.0								
	8.0	As above.					12.5		
							11.7		
							12.3		
	-9.7						12.1		
	9.7	***Poorly Graded Sand*** Brown, wet, mostly fine sand, trace medium plastic fines, no odor.							
10.0			3		3.3		14.4		
	-10.3								
	10.3	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand, high density, soft, no odor.							
	-12.0								
	12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-7

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***							
	-0.5 / 0.5	***Fill*** Mostly red brick, pockets of granular fines, no odor.					0.0		
			1		1.2		0.0		
							0.0		
	-4.0 / 4.0	As above. Equipment refusal at 5 fbgs.					0.0		
			2		0.6				
5.0	-5.0 / 5.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-7A

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***							
	-0.5								
	0.5	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace gravel, trace fine sand, high density, medium toughness, no odor.	1		3.7		0.0		
	-4.0								
	4.0	As above.	2		3.5		0.0		
5.0									
	-8.0								
	8.0	As above.	3		3.5		0.0		
	-9.5								
	9.5	***Poorly Graded Sand with Clay*** Brown, mostly fine sand, some medium plastic fines, wet at 10 fbgs, no odor.							
10.0	-10.3								
	10.3	***Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace gravel, trace fine sand, high density, medium toughness, no odor.					0.0		
	-12.0								
	12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-8

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 12.5 / 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***					2.6		
	-0.5								
	0.5	***Fill*** Dark brown, moist, mostly granular fines, trace red brick, some angular gravel, no odor.					2.7		
	-1.5						5.9		
	1.5	***Lean Clay*** Brown, moist, mostly high plastic fines, trace fine sand, high density, soft, slight petroleum-like odor.	1		2.0		4.8		
							4.8		
							4.8		
							4.8		
	-4.0						3.1		
	4.0	As above. Black staining, wet at 5 fbgs, slight petroleum-like odor.					6.7		
5.0							4.3		
			2		1.5		4.5		
	-8.0								
	8.0	As above. Slight petroleum-like odor.							
10.0			3		1.7		5.5		
							5.7		
							6.3		
							6.3		
	-12.0						4.5		
	12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-9

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***							
		Lean Clay Reddish brown, moist, mostly medium plastic fines, little angular gravel, trace fine sand, high density, medium toughness, no odor.	1		1.0		6.7, 3.7		
	-4.0 4.0	As above.	2		3.5		4.4, 7.5, 3.4, 2.7, 2.8, 2.5, 3.1		
5.0									
	-8.0 8.0	As above.	3		3.5		7.6, 7.5, 9.6, 8.0, 8.5, 6.1, 4.9, 3.5		
10.0									
	-12.0 12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-10

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 / 500 / 1000)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Subbase***					14.0		
	-0.5								
	0.5	***Fill*** Black, moist, mostly granular fines, slight petroleum-like odor.							
	-1.0								
	1.0	***Lean Clay*** Black, moist, mostly medium plastic fines, trace fine sand, visible sheen, strong petroleum odor.	1		1.3		620	Sample Location	
	-4.0								
	4.0	***Lean Clay with Sand*** As above. Some fine sands, wet at 4.5 fbgs, strong petroleum odor.					52.7		
5.0		Equipment refusal at 6 fbgs due to metal in sleeve from suspected tank/fuel line encounter.	2		1.8				
	-6.0								
	6.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-11

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete***					14.0		
	-0.3								
	0.3	***Fill*** Reddish brown, moist, mostly medium plastic fines (reworked clay), some angular gravel, trace red brick, medium toughness, medium density, no odor.	1		2.3		11.1		
	-4.0						12.4		
	4.0	***Fill*** As above. Wet at 6 fbgs.					10.0		
5.0			2		2.4		11.8		
							11.8		
	-8.0						10.5		
	8.0	***Lean Clay*** Reddish brown, wet, mostly medium plastic fines, trace fine sand, high density, medium toughness, no odor.					11.0		
							11.1		
	-9.7						10.7		
	9.7	***Poorly Graded Sand with Clay*** Reddish brown, wet, mostly fine sand, trace medium plastic fines, no odor.	3		2.7		12.2		
10.0							11.8		
							12.1		
							11.6		
	-12.0						10.0		
	12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: T0136-018-005

Borehole Number: SB-12

Project: Phase II Environmental Investigation

A.K.A.:

Client: 9187 Group, LLC

Logged By: CMS

Site Location: 1395 Delaware Avenue, Buffalo, New York 14209

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs ppm (0 – 12.5 – 25)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Concrete***							
			1		0.5				
	-4.0						11.1		
	4.0	***Poorly Graded Sand***					12.7		
	-4.3	Brown, moist, mostly fine sand, trace medium plastic fines, no odor.					6.7		
	4.3						7.4		
5.0		***Lean Clay***					9.9		
		Reddish brown, moist, mostly medium plastic fines, trace fine sand, high density, medium toughness, wet at 6.5 fbgs, no odor.	2		3.4		9.5		
							4.2		
							4.6		
	-8.0						11.1		
	8.0	As above.					12.5		
							12.7		
							13.1		
10.0			3		2.7		11.7		
							12.2		
							11.3		
							12.0		
	-12.0						11.5		
	12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: Geoprobe 6620DT
Drill Method: Direct Push
Comments:
Drill Date(s): 4/10/18

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

APPENDIX C

LABORATORY ANALYTICAL DATA PACKAGE

(PROVIDED ELECTRONCIALLY)

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-134111-1
Client Project/Site: Benchmark - 1395 Delaware

For:
Benchmark Env. Eng. & Science, PLLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Attn: Mr. Nate Munley

Joseph V. Giacomazza

Authorized for release by:
4/20/2018 9:16:26 AM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

Brian Fischer, Manager of Project Management
(716)504-9835
brian.fischer@testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
X	Surrogate is outside control limits

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-134111-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-134111-1

Comments
No additional comments.

Receipt
The samples were received on 4/11/2018 3:30 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

GC/MS VOA
Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-408797 and analytical batch 480-409117 recovered outside control limits for the following analytes: sec-Butylbenzene, 4-Isopropyltoluene, and tert-Butylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-408797 and analytical batch 480-409117 recovered outside control limits for the following analytes: 1,3,5-Trimethylbenzene. These analytes were biased high in the LCS.

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-408797 and analytical batch 480-409117 recovered outside control limits for the following analytes: 4-Isopropyltoluene and tert-Butylbenzene. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-408797 and analytical batch 480-409117 recovered outside control limits for the following analytes: sec-Butylbenzene and 1,3,5-Trimethylbenzene. These analytes were biased high in the LCS.

Method(s) 8260C: The following volatiles sample analyzed using medium level soil analysis and was diluted due to foaming at the time of purging during the original sample analysis: SB-2 (8-10) (480-134111-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-3 (6-8) (480-134111-4) and SB-4 (6-8) (480-134111-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were analyzed using medium level soil analysis diluted due to the nature of the sample matrix: SB-5 (2-4) (480-134111-6), SB-10 (2-4) (480-134111-9), (480-134111-A-9-B MS) and (480-134111-A-9-C MSD). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were diluted due to the nature of the sample matrix: (480-134111-A-9-B MS) and (480-134111-A-9-C MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

GC/MS Semi VOA
Method(s) 8270D: The following samples were diluted due to color and, viscosity: SB-2 (3"-1.5) (480-134111-1), SB-3 (6"-2.5) (480-134111-3), SB-7 (6"-2.5) (480-134111-7) and SB-8 (6"-1.5) (480-134111-8). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples required a dilution due to the nature of the sample matrix: SB-7 (6"-2.5) (480-134111-7) and SB-8 (6"-1.5) (480-134111-8). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Metals
Method(s) 6010C: The following sample was diluted due to the presence of Total Sulfur which interferes with Lead: SB-3 (6"-2.5)

Job ID: 480-134111-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

(480-134111-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Organic Prep
No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Client Sample ID: SB-2 (3"-1.5)

Lab Sample ID: 480-134111-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.0		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	226		0.63		mg/Kg	1	☼	6010C	Total/NA
Chromium	19.6		0.63		mg/Kg	1	☼	6010C	Total/NA
Lead	121		1.3		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.39		0.025		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-2 (8-10)

Lab Sample ID: 480-134111-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2300		490	140	ug/Kg	4	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	790	*	490	150	ug/Kg	4	☼	8260C	Total/NA
Ethylbenzene	520		490	140	ug/Kg	4	☼	8260C	Total/NA
m-Xylene & p-Xylene	3200		990	270	ug/Kg	4	☼	8260C	Total/NA
n-Butylbenzene	190	J	490	140	ug/Kg	4	☼	8260C	Total/NA
o-Xylene	1000		490	64	ug/Kg	4	☼	8260C	Total/NA
Toluene	1100		490	130	ug/Kg	4	☼	8260C	Total/NA
Xylenes, Total	4200		990	270	ug/Kg	4	☼	8260C	Total/NA

Client Sample ID: SB-3 (6"-2.5)

Lab Sample ID: 480-134111-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	420	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Anthracene	710	J	1100	280	ug/Kg	5	☼	8270D	Total/NA
Benzo(a)anthracene	2400		1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo(a)pyrene	2300		1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo(b)fluoranthene	2400		1100	180	ug/Kg	5	☼	8270D	Total/NA
Benzo(g,h,i)perylene	1600		1100	120	ug/Kg	5	☼	8270D	Total/NA
Benzo(k)fluoranthene	2000		1100	140	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2700		1100	250	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	5700		1100	120	ug/Kg	5	☼	8270D	Total/NA
Fluorene	290	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	1300		1100	140	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	150	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	4200		1100	160	ug/Kg	5	☼	8270D	Total/NA
Pyrene	4900		1100	130	ug/Kg	5	☼	8270D	Total/NA
Arsenic	5.4		2.6		mg/Kg	1	☼	6010C	Total/NA
Barium	209		0.65		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.47		0.26		mg/Kg	1	☼	6010C	Total/NA
Chromium	10.7		0.65		mg/Kg	1	☼	6010C	Total/NA
Lead	479		6.5		mg/Kg	5	☼	6010C	Total/NA
Mercury	0.062		0.025		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-3 (6-8)

Lab Sample ID: 480-134111-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	15000		500	140	ug/Kg	4	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	4800	*	500	150	ug/Kg	4	☼	8260C	Total/NA
Ethylbenzene	5200		500	140	ug/Kg	4	☼	8260C	Total/NA
Isopropylbenzene	440	J	500	75	ug/Kg	4	☼	8260C	Total/NA
m-Xylene & p-Xylene	21000		1000	280	ug/Kg	4	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-3 (6-8) (Continued) — Lab Sample ID: 480-134111-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
N-Propylbenzene	2000		500	130	ug/Kg	4	☼	8260C	Total/NA
o-Xylene	1300		500	65	ug/Kg	4	☼	8260C	Total/NA
Xylenes, Total	22000		1000	280	ug/Kg	4	☼	8260C	Total/NA

Client Sample ID: SB-4 (6-8) — Lab Sample ID: 480-134111-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	72000		1200	340	ug/Kg	10	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	20000	*	1200	370	ug/Kg	10	☼	8260C	Total/NA
Ethylbenzene	15000		1200	360	ug/Kg	10	☼	8260C	Total/NA
Isopropylbenzene	1900		1200	180	ug/Kg	10	☼	8260C	Total/NA
m-Xylene & p-Xylene	71000		2400	680	ug/Kg	10	☼	8260C	Total/NA
N-Propylbenzene	9000		1200	320	ug/Kg	10	☼	8260C	Total/NA
o-Xylene	17000		1200	160	ug/Kg	10	☼	8260C	Total/NA
sec-Butylbenzene	1200	*	1200	450	ug/Kg	10	☼	8260C	Total/NA
Toluene	980	J	1200	330	ug/Kg	10	☼	8260C	Total/NA
Xylenes, Total	88000		2400	680	ug/Kg	10	☼	8260C	Total/NA

Client Sample ID: SB-5 (2-4) — Lab Sample ID: 480-134111-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	24000		6400	1800	ug/Kg	50	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	8900	*	6400	1900	ug/Kg	50	☼	8260C	Total/NA
Ethylbenzene	2600	J	6400	1900	ug/Kg	50	☼	8260C	Total/NA
m-Xylene & p-Xylene	11000	J	13000	3500	ug/Kg	50	☼	8260C	Total/NA
Xylenes, Total	11000	J	13000	3500	ug/Kg	50	☼	8260C	Total/NA

Client Sample ID: SB-7 (6"-2.5) — Lab Sample ID: 480-134111-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	690	J	3900	580	ug/Kg	20	☼	8270D	Total/NA
Anthracene	1600	J	3900	970	ug/Kg	20	☼	8270D	Total/NA
Benzo(a)anthracene	4300		3900	390	ug/Kg	20	☼	8270D	Total/NA
Benzo(a)pyrene	4300		3900	580	ug/Kg	20	☼	8270D	Total/NA
Benzo(b)fluoranthene	4500		3900	620	ug/Kg	20	☼	8270D	Total/NA
Benzo(g,h,i)perylene	3500	J	3900	420	ug/Kg	20	☼	8270D	Total/NA
Benzo(k)fluoranthene	4300		3900	510	ug/Kg	20	☼	8270D	Total/NA
Chrysene	5200		3900	880	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	13000		3900	420	ug/Kg	20	☼	8270D	Total/NA
Fluorene	700	J	3900	460	ug/Kg	20	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	3100	J	3900	480	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	8200		3900	580	ug/Kg	20	☼	8270D	Total/NA
Pyrene	10000		3900	460	ug/Kg	20	☼	8270D	Total/NA
Arsenic	4.4		2.3		mg/Kg	1	☼	6010C	Total/NA
Barium	98.0	F2 F1	0.58		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.58		0.23		mg/Kg	1	☼	6010C	Total/NA
Chromium	7.5		0.58		mg/Kg	1	☼	6010C	Total/NA
Lead	183	F2 F1	1.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.032		0.022		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Client Sample ID: SB-8 (6"-1.5)

Lab Sample ID: 480-134111-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo(a)anthracene	1800	J	3700	370	ug/Kg	20	☼	8270D	Total/NA
Benzo(a)pyrene	2200	J	3700	540	ug/Kg	20	☼	8270D	Total/NA
Benzo(b)fluoranthene	2400	J	3700	580	ug/Kg	20	☼	8270D	Total/NA
Benzo(g,h,i)perylene	2100	J	3700	390	ug/Kg	20	☼	8270D	Total/NA
Benzo(k)fluoranthene	1800	J	3700	470	ug/Kg	20	☼	8270D	Total/NA
Chrysene	2000	J	3700	820	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	4100		3700	390	ug/Kg	20	☼	8270D	Total/NA
Indeno(1,2,3-cd)pyrene	1800	J	3700	450	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	1500	J	3700	540	ug/Kg	20	☼	8270D	Total/NA
Pyrene	3200	J	3700	430	ug/Kg	20	☼	8270D	Total/NA
Arsenic	5.5		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	131		0.55		mg/Kg	1	☼	6010C	Total/NA
Cadmium	2.5		0.22		mg/Kg	1	☼	6010C	Total/NA
Chromium	11.7		0.55		mg/Kg	1	☼	6010C	Total/NA
Lead	369		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.21		0.021		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-10 (2-4)

Lab Sample ID: 480-134111-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	120000		3400	940	ug/Kg	25	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	22000	*	3400	1000	ug/Kg	25	☼	8260C	Total/NA
Ethylbenzene	6400	F1	3400	980	ug/Kg	25	☼	8260C	Total/NA
Isopropylbenzene	3700	F1	3400	510	ug/Kg	25	☼	8260C	Total/NA
m-Xylene & p-Xylene	33000		6800	1900	ug/Kg	25	☼	8260C	Total/NA
N-Propylbenzene	5900	F1	3400	890	ug/Kg	25	☼	8260C	Total/NA
o-Xylene	1600	J F1	3400	440	ug/Kg	25	☼	8260C	Total/NA
sec-Butylbenzene	3400	* F1	3400	1200	ug/Kg	25	☼	8260C	Total/NA
Xylenes, Total	35000		6800	1900	ug/Kg	25	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-2 (3"-1.5)

Date Collected: 04/10/18 10:57
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-1

Matrix: Solid
Percent Solids: 79.0

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		2100	320	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Acenaphthylene	ND		2100	280	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Anthracene	ND		2100	530	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Benzo(a)anthracene	ND		2100	210	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Benzo(a)pyrene	ND		2100	320	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Benzo(b)fluoranthene	ND		2100	340	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Benzo(g,h,i)perylene	ND		2100	230	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Benzo(k)fluoranthene	ND		2100	280	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Chrysene	ND		2100	480	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Dibenz(a,h)anthracene	ND		2100	380	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Fluoranthene	ND		2100	230	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Fluorene	ND		2100	250	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Indeno(1,2,3-cd)pyrene	ND		2100	260	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Naphthalene	ND		2100	280	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Phenanthrene	ND		2100	320	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10
Pyrene	ND		2100	250	ug/Kg	☼	04/14/18 06:42	04/16/18 23:14	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*82*		*54 - 120*	*04/14/18 06:42*	*04/16/18 23:14*	*10*
2-Fluorobiphenyl	*93*		*60 - 120*	*04/14/18 06:42*	*04/16/18 23:14*	*10*
2-Fluorophenol	*78*		*52 - 120*	*04/14/18 06:42*	*04/16/18 23:14*	*10*
Nitrobenzene-d5	*79*		*53 - 120*	*04/14/18 06:42*	*04/16/18 23:14*	*10*
Phenol-d5	*91*		*54 - 120*	*04/14/18 06:42*	*04/16/18 23:14*	*10*
p-Terphenyl-d14	*108*		*65 - 121*	*04/14/18 06:42*	*04/16/18 23:14*	*10*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.0**		2.5		mg/Kg	☼	04/14/18 14:00	04/17/18 04:17	1
Barium	**226**		0.63		mg/Kg	☼	04/14/18 14:00	04/17/18 04:17	1
Cadmium	ND		0.25		mg/Kg	☼	04/14/18 14:00	04/17/18 04:17	1
Chromium	**19.6**		0.63		mg/Kg	☼	04/14/18 14:00	04/17/18 04:17	1
Lead	**121**		1.3		mg/Kg	☼	04/14/18 14:00	04/17/18 04:17	1
Selenium	ND		5.1		mg/Kg	☼	04/14/18 14:00	04/17/18 04:17	1
Silver	ND		0.76		mg/Kg	☼	04/14/18 14:00	04/17/18 04:17	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.39**		0.025		mg/Kg	☼	04/16/18 18:00	04/16/18 19:58	1

Client Sample ID: SB-2 (8-10)
Date Collected: 04/10/18 11:09
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-2
Matrix: Solid
Percent Solids: 85.8

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**2300**		490	140	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
1,3,5-Trimethylbenzene	**790**	*	490	150	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
4-Isopropyltoluene	ND	*	490	170	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
Benzene	ND		490	94	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
Ethylbenzene	**520**		490	140	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
Isopropylbenzene	ND		490	74	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
Methyl tert-butyl ether	ND		490	190	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
m-Xylene & p-Xylene	**3200**		990	270	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
n-Butylbenzene	**190**	**J**	490	140	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
N-Propylbenzene	ND		490	130	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
o-Xylene	**1000**		490	64	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
sec-Butylbenzene	ND	*	490	180	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
tert-Butylbenzene	ND	*	490	140	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
Toluene	**1100**		490	130	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4
Xylenes, Total	**4200**		990	270	ug/Kg	☼	04/13/18 15:14	04/17/18 00:22	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Methane, dibromofluoro-	*4700*	*T J N*	*ug/Kg*	☼	*4.83*	*1868-53-7*	*04/13/18 15:14*	*04/17/18 00:22*	*4*
Benzene, 1-ethyl-2-methyl-	*1800*	*T J N*	*ug/Kg*	☼	*9.98*	*611-14-3*	*04/13/18 15:14*	*04/17/18 00:22*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*53 - 146*	*04/13/18 15:14*	*04/17/18 00:22*	*4*
4-Bromofluorobenzene (Surr)	*96*		*49 - 148*	*04/13/18 15:14*	*04/17/18 00:22*	*4*
Toluene-d8 (Surr)	*98*		*50 - 149*	*04/13/18 15:14*	*04/17/18 00:22*	*4*

Client Sample ID: SB-3 (6"-2.5)

Date Collected: 04/10/18 10:22
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-3

Matrix: Solid
Percent Solids: 75.6

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1100	160	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Acenaphthylene	**420**	**J**	1100	140	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Anthracene	**710**	**J**	1100	280	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Benzo(a)anthracene	**2400**		1100	110	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Benzo(a)pyrene	**2300**		1100	160	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Benzo(b)fluoranthene	**2400**		1100	180	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Benzo(g,h,i)perylene	**1600**		1100	120	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Benzo(k)fluoranthene	**2000**		1100	140	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Chrysene	**2700**		1100	250	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Dibenz(a,h)anthracene	ND		1100	200	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Fluoranthene	**5700**		1100	120	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Fluorene	**290**	**J**	1100	130	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Indeno(1,2,3-cd)pyrene	**1300**		1100	140	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Naphthalene	**150**	**J**	1100	140	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Phenanthrene	**4200**		1100	160	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5
Pyrene	**4900**		1100	130	ug/Kg	☼	04/14/18 06:42	04/16/18 23:41	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*85*		*54 - 120*	*04/14/18 06:42*	*04/16/18 23:41*	*5*
2-Fluorobiphenyl	*90*		*60 - 120*	*04/14/18 06:42*	*04/16/18 23:41*	*5*
2-Fluorophenol	*76*		*52 - 120*	*04/14/18 06:42*	*04/16/18 23:41*	*5*
Nitrobenzene-d5	*77*		*53 - 120*	*04/14/18 06:42*	*04/16/18 23:41*	*5*
Phenol-d5	*74*		*54 - 120*	*04/14/18 06:42*	*04/16/18 23:41*	*5*
p-Terphenyl-d14	*101*		*65 - 121*	*04/14/18 06:42*	*04/16/18 23:41*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.4**		2.6		mg/Kg	☼	04/14/18 14:00	04/17/18 04:21	1
Barium	**209**		0.65		mg/Kg	☼	04/14/18 14:00	04/17/18 04:21	1
Cadmium	**0.47**		0.26		mg/Kg	☼	04/14/18 14:00	04/17/18 04:21	1
Chromium	**10.7**		0.65		mg/Kg	☼	04/14/18 14:00	04/17/18 04:21	1
Lead	**479**		6.5		mg/Kg	☼	04/14/18 14:00	04/17/18 13:52	5
Selenium	ND		5.2		mg/Kg	☼	04/14/18 14:00	04/17/18 04:21	1
Silver	ND		0.78		mg/Kg	☼	04/14/18 14:00	04/17/18 04:21	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.062**		0.025		mg/Kg	☼	04/16/18 18:00	04/16/18 20:00	1

Client Sample ID: SB-3 (6-8)
Date Collected: 04/10/18 10:30
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-4
Matrix: Solid
Percent Solids: 85.4

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**15000**		500	140	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
1,3,5-Trimethylbenzene	**4800**	*	500	150	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
4-Isopropyltoluene	ND	*	500	170	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
Benzene	ND		500	95	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
Ethylbenzene	**5200**		500	140	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
Isopropylbenzene	**440**	**J**	500	75	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
Methyl tert-butyl ether	ND		500	190	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
m-Xylene & p-Xylene	**21000**		1000	280	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
n-Butylbenzene	ND		500	150	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
N-Propylbenzene	**2000**		500	130	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
o-Xylene	**1300**		500	65	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
sec-Butylbenzene	ND	*	500	180	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
tert-Butylbenzene	ND	*	500	140	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
Toluene	ND		500	130	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4
Xylenes, Total	**22000**		1000	280	ug/Kg	☼	04/13/18 15:14	04/17/18 00:45	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Methane, dibromofluoro-	*6400*	*T J N*	*ug/Kg*	☼	*4.83*	*1868-53-7*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Hexane, 3-methyl-	*2800*	*T J N*	*ug/Kg*	☼	*4.92*	*589-34-4*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Pentane, 2,3,4-trimethyl-	*4400*	*T J N*	*ug/Kg*	☼	*6.28*	*565-75-3*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Pentane, 2,3,3-trimethyl-	*5400*	*T J N*	*ug/Kg*	☼	*6.39*	*560-21-4*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Benzene, 1-ethyl-4-methyl-	*14000*	*T J N*	*ug/Kg*	☼	*9.98*	*622-96-8*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Benzene, 1-ethyl-2-methyl-	*3400*	*T J N*	*ug/Kg*	☼	*10.27*	*611-14-3*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Benzene, 1,2,3-trimethyl-	*3800*	*T J N*	*ug/Kg*	☼	*10.85*	*526-73-8*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Unknown	*4100*	*T J*	*ug/Kg*	☼	*11.04*		*04/13/18 15:14*	*04/17/18 00:45*	*4*
Benzene, 1-methyl-2-(1-methylethyl)-	*3800*	*T J N*	*ug/Kg*	☼	*11.11*	*527-84-4*	*04/13/18 15:14*	*04/17/18 00:45*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
4-Bromofluorobenzene (Surr)	*95*		*49 - 148*	*04/13/18 15:14*	*04/17/18 00:45*	*4*
Toluene-d8 (Surr)	*97*		*50 - 149*	*04/13/18 15:14*	*04/17/18 00:45*	*4*

Client Sample ID: SB-4 (6-8)
Date Collected: 04/10/18 09:26
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-5
Matrix: Solid
Percent Solids: 86.2

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**72000**		1200	340	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
1,3,5-Trimethylbenzene	**20000**	*	1200	370	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
4-Isopropyltoluene	ND	*	1200	410	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
Benzene	ND		1200	230	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
Ethylbenzene	**15000**		1200	360	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
Isopropylbenzene	**1900**		1200	180	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
Methyl tert-butyl ether	ND		1200	460	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
m-Xylene & p-Xylene	**71000**		2400	680	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
n-Butylbenzene	ND		1200	360	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
N-Propylbenzene	**9000**		1200	320	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
o-Xylene	**17000**		1200	160	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
sec-Butylbenzene	**1200**	*	1200	450	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
tert-Butylbenzene	ND	*	1200	340	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
Toluene	**980**	**J**	1200	330	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10
Xylenes, Total	**88000**		2400	680	ug/Kg	☼	04/13/18 15:14	04/17/18 01:09	10

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Methane, dibromofluoro-	*29000*	*T J N*	*ug/Kg*	☼	*4.83*	*1868-53-7*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
Pentane, 2,3,4-trimethyl-	*31000*	*T J N*	*ug/Kg*	☼	*6.28*	*565-75-3*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
Pentane, 2,3,3-trimethyl-	*36000*	*T J N*	*ug/Kg*	☼	*6.39*	*560-21-4*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
Benzene, 1-ethyl-4-methyl-	*59000*	*T J N*	*ug/Kg*	☼	*9.98*	*622-96-8*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
Benzene, 1-ethyl-2-methyl-	*18000*	*T J N*	*ug/Kg*	☼	*10.27*	*611-14-3*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
Benzene, 1,2,3-trimethyl-	*30000*	*T J N*	*ug/Kg*	☼	*10.85*	*526-73-8*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
Unknown	*28000*	*T J*	*ug/Kg*	☼	*11.04*		*04/13/18 15:14*	*04/17/18 01:09*	*10*
Benzene, 2-ethyl-1,4-dimethyl-	*26000*	*T J N*	*ug/Kg*	☼	*11.10*	*1758-88-9*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
3-Phenylbut-1-ene	*19000*	*T J N*	*ug/Kg*	☼	*12.23*	*934-10-1*	*04/13/18 15:14*	*04/17/18 01:09*	*10*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
4-Bromofluorobenzene (Surr)	*91*		*49 - 148*	*04/13/18 15:14*	*04/17/18 01:09*	*10*
Toluene-d8 (Surr)	*96*		*50 - 149*	*04/13/18 15:14*	*04/17/18 01:09*	*10*

Client Sample ID: SB-5 (2-4)
Date Collected: 04/10/18 15:09
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-6
Matrix: Solid
Percent Solids: 84.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**24000**		6400	1800	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
1,3,5-Trimethylbenzene	**8900**	*	6400	1900	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
4-Isopropyltoluene	ND	*	6400	2100	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
Benzene	ND		6400	1200	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
Ethylbenzene	**2600**	J	6400	1900	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
Isopropylbenzene	ND		6400	950	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
Methyl tert-butyl ether	ND		6400	2400	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
m-Xylene & p-Xylene	**11000**	J	13000	3500	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
n-Butylbenzene	ND		6400	1900	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
N-Propylbenzene	ND		6400	1700	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
o-Xylene	ND		6400	830	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
sec-Butylbenzene	ND	*	6400	2300	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
tert-Butylbenzene	ND	*	6400	1800	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
Toluene	ND		6400	1700	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50
Xylenes, Total	**11000**	J	13000	3500	ug/Kg	☼	04/13/18 15:14	04/17/18 01:32	50

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Methane, dibromofluoro-	*63000*	*T J N*	*ug/Kg*	☼	*4.83*	*1868-53-7*	*04/13/18 15:14*	*04/17/18 01:32*	*50*
Cyclohexane, methyl-	*17000*	*T J N*	*ug/Kg*	☼	*5.88*	*108-87-2*	*04/13/18 15:14*	*04/17/18 01:32*	*50*
Unknown	*24000*	*T J*	*ug/Kg*	☼	*7.05*		*04/13/18 15:14*	*04/17/18 01:32*	*50*
Unknown	*21000*	*T J*	*ug/Kg*	☼	*8.09*		*04/13/18 15:14*	*04/17/18 01:32*	*50*
Unknown	*21000*	*T J*	*ug/Kg*	☼	*9.30*		*04/13/18 15:14*	*04/17/18 01:32*	*50*
Unknown	*16000*	*T J*	*ug/Kg*	☼	*9.54*		*04/13/18 15:14*	*04/17/18 01:32*	*50*
Benzene, 1-ethyl-2-methyl-	*31000*	*T J N*	*ug/Kg*	☼	*9.99*	*611-14-3*	*04/13/18 15:14*	*04/17/18 01:32*	*50*
Benzene, 4-ethyl-1,2-dimethyl-	*17000*	*T J N*	*ug/Kg*	☼	*11.10*	*934-80-5*	*04/13/18 15:14*	*04/17/18 01:32*	*50*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*53 - 146*	*04/13/18 15:14*	*04/17/18 01:32*	*50*
4-Bromofluorobenzene (Surr)	*94*		*49 - 148*	*04/13/18 15:14*	*04/17/18 01:32*	*50*
Toluene-d8 (Surr)	*95*		*50 - 149*	*04/13/18 15:14*	*04/17/18 01:32*	*50*

Client Sample ID: SB-7 (6"-2.5)

Date Collected: 04/10/18 15:40
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-7

Matrix: Solid
Percent Solids: 85.2

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	690	J	3900	580	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Acenaphthylene	ND		3900	510	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Anthracene	1600	J	3900	970	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Benzo(a)anthracene	4300		3900	390	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Benzo(a)pyrene	4300		3900	580	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Benzo(b)fluoranthene	4500		3900	620	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Benzo(g,h,i)perylene	3500	J	3900	420	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Benzo(k)fluoranthene	4300		3900	510	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Chrysene	5200		3900	880	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Dibenz(a,h)anthracene	ND		3900	690	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Fluoranthene	13000		3900	420	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Fluorene	700	J	3900	460	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Indeno(1,2,3-cd)pyrene	3100	J	3900	480	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Naphthalene	ND		3900	510	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Phenanthrene	8200		3900	580	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20
Pyrene	10000		3900	460	ug/Kg	☼	04/14/18 06:42	04/17/18 00:08	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*0*	*X*	*54 - 120*	*04/14/18 06:42*	*04/17/18 00:08*	*20*
2-Fluorobiphenyl	*71*		*60 - 120*	*04/14/18 06:42*	*04/17/18 00:08*	*20*
2-Fluorophenol	*71*		*52 - 120*	*04/14/18 06:42*	*04/17/18 00:08*	*20*
Nitrobenzene-d5	*64*		*53 - 120*	*04/14/18 06:42*	*04/17/18 00:08*	*20*
Phenol-d5	*71*		*54 - 120*	*04/14/18 06:42*	*04/17/18 00:08*	*20*
p-Terphenyl-d14	*75*		*65 - 121*	*04/14/18 06:42*	*04/17/18 00:08*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	4.4		2.3		mg/Kg	☼	04/14/18 14:00	04/17/18 04:25	1
Barium	98.0	F2 F1	0.58		mg/Kg	☼	04/14/18 14:00	04/17/18 04:25	1
Cadmium	0.58		0.23		mg/Kg	☼	04/14/18 14:00	04/17/18 04:25	1
Chromium	7.5		0.58		mg/Kg	☼	04/14/18 14:00	04/17/18 04:25	1
Lead	183	F2 F1	1.2		mg/Kg	☼	04/14/18 14:00	04/17/18 04:25	1
Selenium	ND		4.6		mg/Kg	☼	04/14/18 14:00	04/17/18 04:25	1
Silver	ND		0.69		mg/Kg	☼	04/14/18 14:00	04/17/18 04:25	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.032		0.022		mg/Kg	☼	04/16/18 18:00	04/16/18 20:01	1

Client Sample ID: SB-8 (6"-1.5)

Date Collected: 04/10/18 13:14
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-8

Matrix: Solid
Percent Solids: 89.9

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3700	540	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Acenaphthylene	ND		3700	470	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Anthracene	ND		3700	910	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Benzo(a)anthracene	**1800**	**J**	3700	370	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Benzo(a)pyrene	**2200**	**J**	3700	540	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Benzo(b)fluoranthene	**2400**	**J**	3700	580	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Benzo(g,h,i)perylene	**2100**	**J**	3700	390	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Benzo(k)fluoranthene	**1800**	**J**	3700	470	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Chrysene	**2000**	**J**	3700	820	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Dibenz(a,h)anthracene	ND		3700	650	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Fluoranthene	**4100**		3700	390	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Fluorene	ND		3700	430	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Indeno(1,2,3-cd)pyrene	**1800**	**J**	3700	450	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Naphthalene	ND		3700	470	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Phenanthrene	**1500**	**J**	3700	540	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20
Pyrene	**3200**	**J**	3700	430	ug/Kg	☼	04/14/18 06:42	04/17/18 00:35	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*0*	*X*	*54 - 120*	*04/14/18 06:42*	*04/17/18 00:35*	*20*
2-Fluorobiphenyl	*69*		*60 - 120*	*04/14/18 06:42*	*04/17/18 00:35*	*20*
2-Fluorophenol	*88*		*52 - 120*	*04/14/18 06:42*	*04/17/18 00:35*	*20*
Nitrobenzene-d5	*56*		*53 - 120*	*04/14/18 06:42*	*04/17/18 00:35*	*20*
Phenol-d5	*76*		*54 - 120*	*04/14/18 06:42*	*04/17/18 00:35*	*20*
p-Terphenyl-d14	*70*		*65 - 121*	*04/14/18 06:42*	*04/17/18 00:35*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.5**		2.2		mg/Kg	☼	04/14/18 14:00	04/17/18 04:54	1
Barium	**131**		0.55		mg/Kg	☼	04/14/18 14:00	04/17/18 04:54	1
Cadmium	**2.5**		0.22		mg/Kg	☼	04/14/18 14:00	04/17/18 04:54	1
Chromium	**11.7**		0.55		mg/Kg	☼	04/14/18 14:00	04/17/18 04:54	1
Lead	**369**		1.1		mg/Kg	☼	04/14/18 14:00	04/17/18 04:54	1
Selenium	ND		4.4		mg/Kg	☼	04/14/18 14:00	04/17/18 04:54	1
Silver	ND		0.66		mg/Kg	☼	04/14/18 14:00	04/17/18 04:54	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.21**		0.021		mg/Kg	☼	04/16/18 18:00	04/16/18 20:03	1

Client Sample ID: SB-10 (2-4)
Date Collected: 04/10/18 14:56
Date Received: 04/11/18 15:30

Lab Sample ID: 480-134111-9
Matrix: Solid
Percent Solids: 80.6

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**120000**		3400	940	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
1,3,5-Trimethylbenzene	**22000**	*	3400	1000	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
4-Isopropyltoluene	ND	* F1	3400	1100	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
Benzene	ND		3400	640	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
Ethylbenzene	**6400**	**F1**	3400	980	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
Isopropylbenzene	**3700**	**F1**	3400	510	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
Methyl tert-butyl ether	ND		3400	1300	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
m-Xylene & p-Xylene	**33000**		6800	1900	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
n-Butylbenzene	ND	F1	3400	990	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
N-Propylbenzene	**5900**	**F1**	3400	890	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
o-Xylene	**1600**	**J F1**	3400	440	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
sec-Butylbenzene	**3400**	*** F1**	3400	1200	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
tert-Butylbenzene	ND	*	3400	940	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
Toluene	ND		3400	910	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25
Xylenes, Total	**35000**		6800	1900	ug/Kg	☼	04/13/18 15:14	04/17/18 01:55	25

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Heptane	*92000*	*T J N*	*ug/Kg*	☼	*5.34*	*142-82-5*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
Cyclohexane, methyl-	*160000*	*T J N*	*ug/Kg*	☼	*5.88*	*108-87-2*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
Heptane, 2-methyl-	*99000*	*T J N*	*ug/Kg*	☼	*6.48*	*592-27-8*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
1,3-Dimethylcyclohexane,c&t	*130000*	*T J N*	*ug/Kg*	☼	*6.82*	*591-21-9*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
Unknown	*110000*	*T J*	*ug/Kg*	☼	*7.05*		*04/13/18 15:14*	*04/17/18 01:55*	*25*
Cyclohexane, 1,1,3-trimethyl-	*88000*	*T J N*	*ug/Kg*	☼	*7.83*	*3073-66-3*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
Unknown	*110000*	*T J*	*ug/Kg*	☼	*8.09*		*04/13/18 15:14*	*04/17/18 01:55*	*25*
Unknown	*120000*	*T J*	*ug/Kg*	☼	*9.30*		*04/13/18 15:14*	*04/17/18 01:55*	*25*
Nonane, 4-methyl-	*88000*	*T J N*	*ug/Kg*	☼	*9.54*	*17301-94-9*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
Benzene, 1-ethyl-2-methyl-	*110000*	*T J N*	*ug/Kg*	☼	*9.99*	*611-14-3*	*04/13/18 15:14*	*04/17/18 01:55*	*25*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
4-Bromofluorobenzene (Surr)	*77*		*49 - 148*	*04/13/18 15:14*	*04/17/18 01:55*	*25*
Toluene-d8 (Surr)	*82*		*50 - 149*	*04/13/18 15:14*	*04/17/18 01:55*	*25*

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(53-146)	(49-148)	(50-149)
480-134111-2	SB-2 (8-10)	94	96	98
480-134111-4	SB-3 (6-8)	103	95	97
480-134111-5	SB-4 (6-8)	103	91	96
480-134111-6	SB-5 (2-4)	97	94	95
480-134111-9	SB-10 (2-4)	98	77	82
480-134111-9 MS	SB-10 (2-4)	97	90	89
480-134111-9 MSD	SB-10 (2-4)	101	89	89
LCS 480-408797/1-A	Lab Control Sample	98	99	96
MB 480-408797/2-A	Method Blank	95	94	95

Surrogate Legend

DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPHd14
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(53-120)	(54-120)	(65-121)
480-134111-1	SB-2 (3"-1.5)	82	93	78	79	91	108
480-134111-3	SB-3 (6"-2.5)	85	90	76	77	74	101
480-134111-7	SB-7 (6"-2.5)	0 X	71	71	64	71	75
480-134111-8	SB-8 (6"-1.5)	0 X	69	88	56	76	70
LCS 480-408850/2-A	Lab Control Sample	86	82	59	68	65	90
MB 480-408850/1-A	Method Blank	67	84	64	71	67	96

Surrogate Legend

TBP = 2,4,6-Tribromophenol
FBP = 2-Fluorobiphenyl
2FP = 2-Fluorophenol
NBZ = Nitrobenzene-d5
PHL = Phenol-d5
TPHd14 = p-Terphenyl-d14

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-408797/2-A
Matrix: Solid
Analysis Batch: 409117

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408797

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
4-Isopropyltoluene	ND		100	34	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
Benzene	ND		100	19	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
Ethylbenzene	ND		100	29	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
Isopropylbenzene	ND		100	15	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
m-Xylene & p-Xylene	ND		200	55	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
n-Butylbenzene	ND		100	29	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
N-Propylbenzene	ND		100	26	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
o-Xylene	ND		100	13	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
sec-Butylbenzene	ND		100	37	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
tert-Butylbenzene	ND		100	28	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
Toluene	ND		100	27	ug/Kg		04/13/18 15:14	04/16/18 23:45	1
Xylenes, Total	ND		200	55	ug/Kg		04/13/18 15:14	04/16/18 23:45	1

Tentatively Identified Compound	MB Est. Result	MB Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Tentatively Identified Compound	*None*		*ug/Kg*				*04/13/18 15:14*	*04/16/18 23:45*	*1*
Methylene Chloride	*30.3*	*J*	*ug/Kg*		*3.16*	*75-09-2*	*04/13/18 15:14*	*04/16/18 23:45*	*1*

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	*95*		*53 - 146*	*04/13/18 15:14*	*04/16/18 23:45*	*1*
4-Bromofluorobenzene (Surr)	*94*		*49 - 148*	*04/13/18 15:14*	*04/16/18 23:45*	*1*
Toluene-d8 (Surr)	*95*		*50 - 149*	*04/13/18 15:14*	*04/16/18 23:45*	*1*

Lab Sample ID: LCS 480-408797/1-A
Matrix: Solid
Analysis Batch: 409117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408797

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	2500	2960		ug/Kg		118	77 - 127
1,3,5-Trimethylbenzene	2500	3020	*	ug/Kg		121	79 - 120
4-Isopropyltoluene	2500	3020	*	ug/Kg		121	80 - 120
Benzene	2500	2830		ug/Kg		113	77 - 125
Ethylbenzene	2500	2950		ug/Kg		118	78 - 124
Isopropylbenzene	2500	2940		ug/Kg		118	76 - 120
Methyl tert-butyl ether	2500	2800		ug/Kg		112	67 - 137
m-Xylene & p-Xylene	2500	2920		ug/Kg		117	77 - 125
n-Butylbenzene	2500	2960		ug/Kg		118	80 - 120
N-Propylbenzene	2500	2960		ug/Kg		118	76 - 120
o-Xylene	2500	2850		ug/Kg		114	80 - 124
sec-Butylbenzene	2500	3040	*	ug/Kg		122	79 - 120
tert-Butylbenzene	2500	3020	*	ug/Kg		121	78 - 120
Toluene	2500	2890		ug/Kg		115	75 - 124

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-408797/1-A
Matrix: Solid
Analysis Batch: 409117

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408797

Surrogate	LCS %Recovery	LCS Qualifier	Limits
4-Bromofluorobenzene (Surr)	*99*		*49 - 148*
Toluene-d8 (Surr)	*96*		*50 - 149*

Lab Sample ID: 480-134111-9 MS
Matrix: Solid
Analysis Batch: 409117

Client Sample ID: SB-10 (2-4)
Prep Type: Total/NA
Prep Batch: 408797

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	120000		3080	37700	4	ug/Kg	☼	-2602	67 - 139
1,3,5-Trimethylbenzene	22000	*	3080	9340	4	ug/Kg	☼	-413	67 - 142
4-Isopropyltoluene	ND	* F1	3080	6230	F1	ug/Kg	☼	202	67 - 143
Benzene	ND		3080	3560		ug/Kg	☼	116	68 - 137
Ethylbenzene	6400	F1	3080	5510	F1	ug/Kg	☼	-27	67 - 136
Isopropylbenzene	3700	F1	3080	4510	F1	ug/Kg	☼	26	65 - 147
Methyl tert-butyl ether	ND		3080	3190	J	ug/Kg	☼	104	60 - 130
m-Xylene & p-Xylene	33000		3080	13700	4	ug/Kg	☼	-624	68 - 138
n-Butylbenzene	ND	F1	3080	6990	F1	ug/Kg	☼	227	64 - 144
N-Propylbenzene	5900	F1	3080	5530	F1	ug/Kg	☼	-11	64 - 144
o-Xylene	1600	J F1	3080	3620	F1	ug/Kg	☼	66	67 - 135
sec-Butylbenzene	3400	* F1	3080	4770	F1	ug/Kg	☼	45	66 - 145
tert-Butylbenzene	ND	*	3080	3800		ug/Kg	☼	123	67 - 146
Toluene	ND		3080	3490		ug/Kg	☼	113	68 - 137

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*97*		*53 - 146*
4-Bromofluorobenzene (Surr)	*90*		*49 - 148*
Toluene-d8 (Surr)	*89*		*50 - 149*

Lab Sample ID: 480-134111-9 MSD
Matrix: Solid
Analysis Batch: 409117

Client Sample ID: SB-10 (2-4)
Prep Type: Total/NA
Prep Batch: 408797

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	120000		3060	36000	4	ug/Kg	☼	-2680	67 - 139	5	20
1,3,5-Trimethylbenzene	22000	*	3060	8700	4	ug/Kg	☼	-437	67 - 142	7	20
4-Isopropyltoluene	ND	* F1	3060	5730	F1	ug/Kg	☼	187	67 - 143	8	20
Benzene	ND		3060	3390	J	ug/Kg	☼	111	68 - 137	5	20
Ethylbenzene	6400	F1	3060	4860	F1	ug/Kg	☼	-49	67 - 136	13	20
Isopropylbenzene	3700	F1	3060	4540	F1	ug/Kg	☼	28	65 - 147	1	20
Methyl tert-butyl ether	ND		3060	3160	J	ug/Kg	☼	103	60 - 130	1	20
m-Xylene & p-Xylene	33000		3060	12700	4	ug/Kg	☼	-663	68 - 138	8	20
n-Butylbenzene	ND	F1	3060	6260	F1	ug/Kg	☼	205	64 - 144	11	20
N-Propylbenzene	5900	F1	3060	5180	F1	ug/Kg	☼	-22	64 - 144	7	20
o-Xylene	1600	J F1	3060	3510	F1	ug/Kg	☼	63	67 - 135	3	20
sec-Butylbenzene	3400	* F1	3060	4480	F1	ug/Kg	☼	36	66 - 145	6	20
tert-Butylbenzene	ND	*	3060	3460		ug/Kg	☼	113	67 - 146	9	20
Toluene	ND		3060	3140	J	ug/Kg	☼	103	68 - 137	11	20

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: 480-134111-9 MSD
Matrix: Solid
Analysis Batch: 409117

Client Sample ID: SB-10 (2-4)
Prep Type: Total/NA
Prep Batch: 408797

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*53 - 146*
4-Bromofluorobenzene (Surr)	*89*		*49 - 148*
Toluene-d8 (Surr)	*89*		*50 - 149*

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 480-408850/1-A
Matrix: Solid
Analysis Batch: 409039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408850

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Acenaphthylene	ND		170	22	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Anthracene	ND		170	42	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Benzo(a)anthracene	ND		170	17	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Benzo(a)pyrene	ND		170	25	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Benzo(b)fluoranthene	ND		170	27	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Benzo(g,h,i)perylene	ND		170	18	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Benzo(k)fluoranthene	ND		170	22	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Chrysene	ND		170	38	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Fluoranthene	ND		170	18	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Fluorene	ND		170	20	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Indeno(1,2,3-cd)pyrene	ND		170	21	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Naphthalene	ND		170	22	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Phenanthrene	ND		170	25	ug/Kg		04/14/18 06:42	04/16/18 18:18	1
Pyrene	ND		170	20	ug/Kg		04/14/18 06:42	04/16/18 18:18	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol	*67*		*54 - 120*	*04/14/18 06:42*	*04/16/18 18:18*	*1*
2-Fluorobiphenyl	*84*		*60 - 120*	*04/14/18 06:42*	*04/16/18 18:18*	*1*
2-Fluorophenol	*64*		*52 - 120*	*04/14/18 06:42*	*04/16/18 18:18*	*1*
Nitrobenzene-d5	*71*		*53 - 120*	*04/14/18 06:42*	*04/16/18 18:18*	*1*
Phenol-d5	*67*		*54 - 120*	*04/14/18 06:42*	*04/16/18 18:18*	*1*
p-Terphenyl-d14	*96*		*65 - 121*	*04/14/18 06:42*	*04/16/18 18:18*	*1*

Lab Sample ID: LCS 480-408850/2-A
Matrix: Solid
Analysis Batch: 409039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1630	1260		ug/Kg		77	62 - 120
Acenaphthylene	1630	1180		ug/Kg		72	58 - 121
Anthracene	1630	1320		ug/Kg		81	62 - 120
Benzo(a)anthracene	1630	1390		ug/Kg		85	65 - 120
Benzo(a)pyrene	1630	1370		ug/Kg		84	64 - 120
Benzo(b)fluoranthene	1630	1370		ug/Kg		84	64 - 120

Method: 8270D - Semivolatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 480-408850/2-A
Matrix: Solid
Analysis Batch: 409039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408850

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Benzo(g,h,i)perylene	1630	1260		ug/Kg		77	45 - 145
Benzo(k)fluoranthene	1630	1460		ug/Kg		89	65 - 120
Chrysene	1630	1390		ug/Kg		85	64 - 120
Dibenz(a,h)anthracene	1630	1280		ug/Kg		79	54 - 132
Fluoranthene	1630	1260		ug/Kg		78	62 - 120
Fluorene	1630	1310		ug/Kg		80	63 - 120
Indeno(1,2,3-cd)pyrene	1630	1230		ug/Kg		76	56 - 134
Naphthalene	1630	1150		ug/Kg		70	55 - 120
Phenanthrene	1630	1310		ug/Kg		80	60 - 120
Pyrene	1630	1360		ug/Kg		83	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol	*86*		*54 - 120*
2-Fluorobiphenyl	*82*		*60 - 120*
2-Fluorophenol	*59*		*52 - 120*
Nitrobenzene-d5	*68*		*53 - 120*
Phenol-d5	*65*		*54 - 120*
p-Terphenyl-d14	*90*		*65 - 121*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-408868/1-A
Matrix: Solid
Analysis Batch: 409178

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 408868

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		1.9		mg/Kg		04/14/18 14:00	04/17/18 04:10	1
Barium	ND		0.48		mg/Kg		04/14/18 14:00	04/17/18 04:10	1
Cadmium	ND		0.19		mg/Kg		04/14/18 14:00	04/17/18 04:10	1
Chromium	ND		0.48		mg/Kg		04/14/18 14:00	04/17/18 04:10	1
Lead	ND		0.97		mg/Kg		04/14/18 14:00	04/17/18 04:10	1
Selenium	ND		3.9		mg/Kg		04/14/18 14:00	04/17/18 04:10	1
Silver	ND		0.58		mg/Kg		04/14/18 14:00	04/17/18 04:10	1

Lab Sample ID: LCSSRM 480-408868/2-A
Matrix: Solid
Analysis Batch: 409178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408868

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	146	117.3		mg/Kg		80.3	69.9 - 132.9
Barium	102	82.51		mg/Kg		80.9	71.5 - 136.3
Cadmium	63.2	54.21		mg/Kg		85.8	73.3 - 141.5
Chromium	89.3	74.94		mg/Kg		83.9	69.1 - 143.3
Lead	98.5	92.06		mg/Kg		93.5	70.8 - 137.1

Method: 6010C - Metals (ICP) (Continued)

Lab Sample ID: LCSSRM 480-408868/2-A
Matrix: Solid
Analysis Batch: 409178

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 408868

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Selenium			136	110.2		mg/Kg		81.0	67.1 - 136.8		
Silver			48.9	40.54		mg/Kg		82.9	66.5 - 139.5		

Lab Sample ID: 480-134111-7 MS
Matrix: Solid
Analysis Batch: 409178

Client Sample ID: SB-7 (6"-2.5)
Prep Type: Total/NA
Prep Batch: 408868

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Arsenic	4.4		47.8	45.80		mg/Kg	☼	87	75 - 125		
Barium	98.0	F2 F1	47.8	264.6	F1	mg/Kg	☼	348	75 - 125		
Cadmium	0.58		47.8	43.39		mg/Kg	☼	89	75 - 125		
Chromium	7.5		47.8	50.68		mg/Kg	☼	90	75 - 125		
Lead	183	F2 F1	47.8	194.1	F1	mg/Kg	☼	24	75 - 125		
Selenium	ND		47.8	41.07		mg/Kg	☼	86	75 - 125		
Silver	ND		12.0	11.07		mg/Kg	☼	93	75 - 125		

Lab Sample ID: 480-134111-7 MSD
Matrix: Solid
Analysis Batch: 409178

Client Sample ID: SB-7 (6"-2.5)
Prep Type: Total/NA
Prep Batch: 408868

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	4.4		46.1	45.84		mg/Kg	☼	90	75 - 125	0	20
Barium	98.0	F2 F1	46.1	182.3	F1 F2	mg/Kg	☼	183	75 - 125	37	20
Cadmium	0.58		46.1	42.29		mg/Kg	☼	90	75 - 125	3	20
Chromium	7.5		46.1	48.55		mg/Kg	☼	89	75 - 125	4	20
Lead	183	F2 F1	46.1	150.8	F2 F1	mg/Kg	☼	-69	75 - 125	25	20
Selenium	ND		46.1	40.50		mg/Kg	☼	88	75 - 125	1	20
Silver	ND		11.5	11.09		mg/Kg	☼	96	75 - 125	0	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-409088/1-A
Matrix: Solid
Analysis Batch: 409120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 409088

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		04/16/18 18:00	04/16/18 18:58	1

Lab Sample ID: LCDSRM 480-409088/3-A ^10
Matrix: Solid
Analysis Batch: 409120

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 409088

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury			13.3	13.21		mg/Kg		99.3	51.2 - 148.1	1	20

Method: 7471B - Mercury (CVAA) (Continued)

Lab Sample ID: LCSSRM 480-409088/2-A ^10
Matrix: Solid
Analysis Batch: 409120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 409088

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	13.3	13.13		mg/Kg		98.8	51.2 - 148.1

GC/MS VOA

Prep Batch: 408797

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-2	SB-2 (8-10)	Total/NA	Solid	5035A_H	
480-134111-4	SB-3 (6-8)	Total/NA	Solid	5035A_H	
480-134111-5	SB-4 (6-8)	Total/NA	Solid	5035A_H	
480-134111-6	SB-5 (2-4)	Total/NA	Solid	5035A_H	
480-134111-9	SB-10 (2-4)	Total/NA	Solid	5035A_H	
MB 480-408797/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-408797/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	
480-134111-9 MS	SB-10 (2-4)	Total/NA	Solid	5035A_H	
480-134111-9 MSD	SB-10 (2-4)	Total/NA	Solid	5035A_H	

Analysis Batch: 409117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-2	SB-2 (8-10)	Total/NA	Solid	8260C	408797
480-134111-4	SB-3 (6-8)	Total/NA	Solid	8260C	408797
480-134111-5	SB-4 (6-8)	Total/NA	Solid	8260C	408797
480-134111-6	SB-5 (2-4)	Total/NA	Solid	8260C	408797
480-134111-9	SB-10 (2-4)	Total/NA	Solid	8260C	408797
MB 480-408797/2-A	Method Blank	Total/NA	Solid	8260C	408797
LCS 480-408797/1-A	Lab Control Sample	Total/NA	Solid	8260C	408797
480-134111-9 MS	SB-10 (2-4)	Total/NA	Solid	8260C	408797
480-134111-9 MSD	SB-10 (2-4)	Total/NA	Solid	8260C	408797

GC/MS Semi VOA

Prep Batch: 408850

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-1	SB-2 (3"-1.5)	Total/NA	Solid	3550C	
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	3550C	
480-134111-7	SB-7 (6"-2.5)	Total/NA	Solid	3550C	
480-134111-8	SB-8 (6"-1.5)	Total/NA	Solid	3550C	
MB 480-408850/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-408850/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 409039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-1	SB-2 (3"-1.5)	Total/NA	Solid	8270D	408850
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	8270D	408850
480-134111-7	SB-7 (6"-2.5)	Total/NA	Solid	8270D	408850
480-134111-8	SB-8 (6"-1.5)	Total/NA	Solid	8270D	408850
MB 480-408850/1-A	Method Blank	Total/NA	Solid	8270D	408850
LCS 480-408850/2-A	Lab Control Sample	Total/NA	Solid	8270D	408850

Metals

Prep Batch: 408868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-1	SB-2 (3"-1.5)	Total/NA	Solid	3050B	
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	3050B	
480-134111-7	SB-7 (6"-2.5)	Total/NA	Solid	3050B	
480-134111-8	SB-8 (6"-1.5)	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 408868 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-408868/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-408868/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-134111-7 MS	SB-7 (6"-2.5)	Total/NA	Solid	3050B	
480-134111-7 MSD	SB-7 (6"-2.5)	Total/NA	Solid	3050B	

Prep Batch: 409088

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-1	SB-2 (3"-1.5)	Total/NA	Solid	7471B	
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	7471B	
480-134111-7	SB-7 (6"-2.5)	Total/NA	Solid	7471B	
480-134111-8	SB-8 (6"-1.5)	Total/NA	Solid	7471B	
MB 480-409088/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-409088/3-A ^1	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-409088/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 409120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-1	SB-2 (3"-1.5)	Total/NA	Solid	7471B	409088
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	7471B	409088
480-134111-7	SB-7 (6"-2.5)	Total/NA	Solid	7471B	409088
480-134111-8	SB-8 (6"-1.5)	Total/NA	Solid	7471B	409088
MB 480-409088/1-A	Method Blank	Total/NA	Solid	7471B	409088
LCDSRM 480-409088/3-A ^1	Lab Control Sample Dup	Total/NA	Solid	7471B	409088
LCSSRM 480-409088/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	409088

Analysis Batch: 409178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-1	SB-2 (3"-1.5)	Total/NA	Solid	6010C	408868
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	6010C	408868
480-134111-7	SB-7 (6"-2.5)	Total/NA	Solid	6010C	408868
480-134111-8	SB-8 (6"-1.5)	Total/NA	Solid	6010C	408868
MB 480-408868/1-A	Method Blank	Total/NA	Solid	6010C	408868
LCSSRM 480-408868/2-A	Lab Control Sample	Total/NA	Solid	6010C	408868
480-134111-7 MS	SB-7 (6"-2.5)	Total/NA	Solid	6010C	408868
480-134111-7 MSD	SB-7 (6"-2.5)	Total/NA	Solid	6010C	408868

Analysis Batch: 409444

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	6010C	408868

General Chemistry

Analysis Batch: 408874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-1	SB-2 (3"-1.5)	Total/NA	Solid	Moisture	
480-134111-2	SB-2 (8-10)	Total/NA	Solid	Moisture	
480-134111-3	SB-3 (6"-2.5)	Total/NA	Solid	Moisture	
480-134111-4	SB-3 (6-8)	Total/NA	Solid	Moisture	
480-134111-5	SB-4 (6-8)	Total/NA	Solid	Moisture	
480-134111-6	SB-5 (2-4)	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 408874 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-134111-7	SB-7 (6"-2.5)	Total/NA	Solid	Moisture	
480-134111-8	SB-8 (6"-1.5)	Total/NA	Solid	Moisture	
480-134111-9	SB-10 (2-4)	Total/NA	Solid	Moisture	

Client Sample ID: SB-2 (3"-1.5)
Lab Sample ID: 480-134111-1
Date Collected: 04/10/18 10:57
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-2 (3"-1.5)
Lab Sample ID: 480-134111-1
Date Collected: 04/10/18 10:57
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			408850	04/14/18 06:42	SMP	TAL BUF
Total/NA	Analysis	8270D		10	409039	04/16/18 23:14	DMR	TAL BUF
Total/NA	Prep	3050B			408868	04/14/18 14:00	JAK	TAL BUF
Total/NA	Analysis	6010C		1	409178	04/17/18 04:17	LMH	TAL BUF
Total/NA	Prep	7471B			409088	04/16/18 18:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	409120	04/16/18 19:58	BMB	TAL BUF

Client Sample ID: SB-2 (8-10)
Lab Sample ID: 480-134111-2
Date Collected: 04/10/18 11:09
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-2 (8-10)
Lab Sample ID: 480-134111-2
Date Collected: 04/10/18 11:09
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			408797	04/13/18 15:14	LMS	TAL BUF
Total/NA	Analysis	8260C		4	409117	04/17/18 00:22	AMM	TAL BUF

Client Sample ID: SB-3 (6"-2.5)
Lab Sample ID: 480-134111-3
Date Collected: 04/10/18 10:22
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-3 (6"-2.5)
Lab Sample ID: 480-134111-3
Date Collected: 04/10/18 10:22
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 75.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			408850	04/14/18 06:42	SMP	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Client Sample ID: SB-3 (6"-2.5)

Lab Sample ID: 480-134111-3
Date Collected: 04/10/18 10:22
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 75.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		5	409039	04/16/18 23:41	DMR	TAL BUF
Total/NA	Prep	3050B			408868	04/14/18 14:00	JAK	TAL BUF
Total/NA	Analysis	6010C		1	409178	04/17/18 04:21	LMH	TAL BUF
Total/NA	Prep	3050B			408868	04/14/18 14:00	JAK	TAL BUF
Total/NA	Analysis	6010C		5	409444	04/17/18 13:52	LMH	TAL BUF
Total/NA	Prep	7471B			409088	04/16/18 18:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	409120	04/16/18 20:00	BMB	TAL BUF

Client Sample ID: SB-3 (6-8)

Lab Sample ID: 480-134111-4
Date Collected: 04/10/18 10:30
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-3 (6-8)

Lab Sample ID: 480-134111-4
Date Collected: 04/10/18 10:30
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			408797	04/13/18 15:14	LMS	TAL BUF
Total/NA	Analysis	8260C		4	409117	04/17/18 00:45	AMM	TAL BUF

Client Sample ID: SB-4 (6-8)

Lab Sample ID: 480-134111-5
Date Collected: 04/10/18 09:26
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-4 (6-8)

Lab Sample ID: 480-134111-5
Date Collected: 04/10/18 09:26
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 86.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			408797	04/13/18 15:14	LMS	TAL BUF
Total/NA	Analysis	8260C		10	409117	04/17/18 01:09	AMM	TAL BUF

Client Sample ID: SB-5 (2-4)

Lab Sample ID: 480-134111-6
Date Collected: 04/10/18 15:09
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-5 (2-4)

Lab Sample ID: 480-134111-6
Date Collected: 04/10/18 15:09
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 84.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			408797	04/13/18 15:14	LMS	TAL BUF
Total/NA	Analysis	8260C		50	409117	04/17/18 01:32	AMM	TAL BUF

Client Sample ID: SB-7 (6"-2.5)

Lab Sample ID: 480-134111-7
Date Collected: 04/10/18 15:40
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-7 (6"-2.5)

Lab Sample ID: 480-134111-7
Date Collected: 04/10/18 15:40
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			408850	04/14/18 06:42	SMP	TAL BUF
Total/NA	Analysis	8270D		20	409039	04/17/18 00:08	DMR	TAL BUF
Total/NA	Prep	3050B			408868	04/14/18 14:00	JAK	TAL BUF
Total/NA	Analysis	6010C		1	409178	04/17/18 04:25	LMH	TAL BUF
Total/NA	Prep	7471B			409088	04/16/18 18:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	409120	04/16/18 20:01	BMB	TAL BUF

Client Sample ID: SB-8 (6"-1.5)

Lab Sample ID: 480-134111-8
Date Collected: 04/10/18 13:14
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-8 (6"-1.5)

Lab Sample ID: 480-134111-8
Date Collected: 04/10/18 13:14
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			408850	04/14/18 06:42	SMP	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Client Sample ID: SB-8 (6"-1.5)

Lab Sample ID: 480-134111-8
Date Collected: 04/10/18 13:14
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 89.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		20	409039	04/17/18 00:35	DMR	TAL BUF
Total/NA	Prep	3050B			408868	04/14/18 14:00	JAK	TAL BUF
Total/NA	Analysis	6010C		1	409178	04/17/18 04:54	LMH	TAL BUF
Total/NA	Prep	7471B			409088	04/16/18 18:00	BMB	TAL BUF
Total/NA	Analysis	7471B		1	409120	04/16/18 20:03	BMB	TAL BUF

Client Sample ID: SB-10 (2-4)

Lab Sample ID: 480-134111-9
Date Collected: 04/10/18 14:56
Matrix: Solid
Date Received: 04/11/18 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	408874	04/14/18 12:14	MDH	TAL BUF

Client Sample ID: SB-10 (2-4)

Lab Sample ID: 480-134111-9
Date Collected: 04/10/18 14:56
Matrix: Solid
Date Received: 04/11/18 15:30
Percent Solids: 80.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			408797	04/13/18 15:14	LMS	TAL BUF
Total/NA	Analysis	8260C		25	409117	04/17/18 01:55	AMM	TAL BUF

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Laboratory: TestAmerica Buffalo

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18 *

The following analytes are included in this report, but accreditation/certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

* Accreditation/Certification renewal pending - accreditation/certification considered valid.

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = TestAmerica Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1395 Delaware

TestAmerica Job ID: 480-134111-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-134111-1	SB-2 (3"-1.5)	Solid	04/10/18 10:57	04/11/18 15:30
480-134111-2	SB-2 (8-10)	Solid	04/10/18 11:09	04/11/18 15:30
480-134111-3	SB-3 (6"-2.5)	Solid	04/10/18 10:22	04/11/18 15:30
480-134111-4	SB-3 (6-8)	Solid	04/10/18 10:30	04/11/18 15:30
480-134111-5	SB-4 (6-8)	Solid	04/10/18 09:26	04/11/18 15:30
480-134111-6	SB-5 (2-4)	Solid	04/10/18 15:09	04/11/18 15:30
480-134111-7	SB-7 (6"-2.5)	Solid	04/10/18 15:40	04/11/18 15:30
480-134111-8	SB-8 (6"-1.5)	Solid	04/10/18 13:14	04/11/18 15:30
480-134111-9	SB-10 (2-4)	Solid	04/10/18 14:56	04/11/18 15:30

TestAmerica Buffalo

10 Hazelwood Drive

Amherst, NY 14228

Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 242617

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica Laboratories, Inc.

TAL-8210 (0713)

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other:

Client Contact	Project Manager: NATE MUNLEY	Site Contact: CHAD SCHUSTER	Date: 4/11/18	COC No:
Company Name: TURNKEY ENVIRONMENTAL	Tel/Fax:	Lab Contact: BRIAN FISCHER	Carrier:	____ of ____ COCs
Address: 2558 HAMBURG TURNPIKE	Analysis Turnaround Time			Sampler: CMS
City/State/Zip: BUFFALO, NY 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 716 856 0599	TAT if different from Below ____			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: 135 DELAWARE	☐ 1 week			
Site:	☐ 2 days STD			Job / SDG No.: 111 3674
PO # 0136-018-005	☐ 1 day			

480-134111 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	CP 51 VOCs +TICs	CP 51 SVOCs	RCRA METALS	Sample Specific Notes:
SB-2 (3"-1.5)	4/10/18	1057	G	Soil	1	N	N		X	X	
SB-2 (8-10)		1109			1			X			
SB-3 (6"-2.5)		1022			1				X	X	
SB-3 (6-8)		1030			1			X			
SB-4 (6-8)		926			1			X			
SB-5 (2-4)		1509			1			X			
SB-7 (6"-2.5)		1540			1				X	X	
SB-8 (6"-1.5)		1314			1				X	X	
SB-10 (2-4)		1456			1			X			

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other ____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 2.6 Corr'd: ____ | Therm ID No.: #1

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Chad M Schuster	TURNKEY	4/11/18	Nick Lvh	TA	4/11/18 1240
Relinquished by: Nick Lvh	Company: TA	Date/Time: 4/11/18 1530	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: Andrew Likely	Company: TA	Date/Time: 04/11/18 1530

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-134111-1

Login Number: 134111

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kinecki, Kenneth P

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	VOAS received in bulk containers
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	Turnkey
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	