
LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT

188 WEST UTICA STREET SITE
BUFFALO, NEW YORK

March 2018

0136-018-002

Prepared for:

Elmwood Crossing, LLC

Prepared By:



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

**LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT
188 WEST UTICA STREET SITE**

Table of Contents

1.0	INTRODUCTION.....	1
1.1	Background.....	1
1.2	Site Description.....	1
1.3	Previous Study	1
2.0	SOIL/FILL INVESTIGATION.....	2
2.1	Soil Boring Investigation	2
2.2	Laboratory Analysis.....	2
3.0	INVESTIGATION FINDINGS.....	3
3.1	Qualitative Soil Screening	3
3.2	Soil Analytical Results.....	3
4.0	CONCLUSIONS AND RECOMMENDATIONS	4
5.0	LIMITATIONS	5

**LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT
188 WEST UTICA STREET SITE**

LIST OF TABLES

Table 1	Summary of Soil Boring Findings
Table 2	Summary of Subsurface Soil/Fill Analytical Results

LIST OF FIGURES

Figure 1	Site Location and Vicinity Map
Figure 2	Investigation Locations

APPENDICES

Appendix A	Laboratory Analytical Data Summary Package
------------	--

1.0 INTRODUCTION

1.1 Background

TurnKey Environmental Restoration, LLC (TurnKey) conducted a Limited Phase II Environmental Investigation on behalf of Elmwood Crossing, LLC, at 188 West Utica Street, City of Buffalo, Erie County, New York, (see Figures 1 and 2).

Historic records indicate that commercial operations including multiple automotive repair operations, an automotive parts manufacturing company, city electric garage, and multiple underground storage tanks (USTs) were identified across the Site. The Site is utilized as a parking lot. Surrounding properties include residential and commercial uses.

The purpose of this investigation was to assess subsurface conditions related to the historic use of the 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 subject Site, addressed as 188 West Utica Street is a 1.2 acre vacant parking lot. Most recently the site was used as parking for the former Women's and Children's hospital. Surrounding properties include residential and commercial use.

1.3 Previous Study

A Phase I Environmental Site Assessment was completed by Stohl Environmental for the larger 188-204 West Utica Street property, which included this Site. The following recognized environmental conditions ((RECs) were identified for the 188 West Utica parcel, including:

- Historic operations including automotive repair facilities, automotive parts manufacturing, and the City electric garage.
- Municipal records indicate that three (3) USTs were closed in place on-Site. Records also indicate a former pump island and tank vents were located on Site.
- The former buildings and historic uses indicate likely disposal of fill material on the Site.

2.0 SOIL/FILL INVESTIGATION

This Limited Phase II Site Investigation included completion of a subsurface soil boring investigation to assess potential environmental impacts from the previous use of the Site.

2.1 Soil Boring Investigation

On January 25, 2018, TurnKey's drilling subcontractor, Trec Environmental, Inc. (Trec) mobilized a direct-push drill rig to the Site. A total of 10 soil borings, identified as SB-1 through SB-10, were advanced in areas of suspected RECs to a target depth of 12-16 feet below ground surface (fbgs). Investigation locations are presented on Figure 2.

The soil borings were advanced using 1.5-inch diameter samplers that are 4-feet in length. Continuous four foot 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 samples by TurnKey's Environmental Scientist. Retrieved soil-fill from each boring was 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

Soil/fill samples were collected using dedicated stainless steel sampling tools. Representative soil samples were placed in pre-cleaned laboratory provided sample bottles, cooled to 4°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 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 field findings for the soil boring investigation. Tables 2 summarizes the soil/fill sample results. For comparison purposes, Tables 2 present the representative soil cleanup objectives (SCOs) for each of the detected parameters as published in 6 NYCRR Part 375 Soil Cleanup Objectives dated May 2010. Laboratory analytical data package is provided electronically in Appendix A.

3.1 Qualitative Soil Screening

Shallow fill, collectively including brick, block, concrete, glass, wood, cinders, coal, and ash (fill) was identified in all 10 of the soil boring (SB) locations across the Site. The presence of fill materials was primarily identified in the upper 0-4 ft, with the deepest fill identified to 12 fbgs. Table 1 summarizes the soil boring findings.

Odors were noted in seven (7) SB locations, and PID readings ranged between 0 and 3 ppm, likely related to historic USTs and fuel pumps noted on-Site.

Shallow water was encountered at only one location, at a depth of approximately 4 fbgs. No water samples were collected as part of this investigation.

3.2 Soil Analytical Results

Eight (8) SB locations were selected for laboratory analysis (see Table 2). Elevated polycyclic aromatic hydrocarbons (PAHs) exceeding 6NYCRR Part 375 Residential Use Soil Cleanup Objectives (SCOs) were detected in five (5) of the six (6) samples, including three (3) locations exceeding the Industrial Use SCOs. It should be noted that that shallow fill was detected in all 10 SB locations across the Site. Total PAHs exceeding 100 ppm were detected at SB-4.

Elevated metals exceeding Residential Use SCOs were detected in three (3) of the six (6) sample locations analyzed for RCRA metals, including arsenic, lead, and mercury, with exceedance of Commercial Use SCOs for lead and arsenic.

In total, exceedances of the Residential Use SCOs were detected in 5 of 8 sample locations.

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:

- Fill material, including brick, block, concrete, glass, cinders, coal, and ash, was detected in all 10 investigation locations across the site. Fill was primarily identified in the upper 0-4 fbgs.
- Odors were noted in seven (7) SB locations, likely related to historic USTs and fuel pumps noted on-Site.
- Historic municipal records indicate three (3) USTs were closed in place on-Site.
- Elevated PAHs were detected exceeding Residential Use SCOs in 5 of 6 sample locations analyzed for PAHs, with several detections exceeding Industrial Use SCOs. Total PAHs exceeding 100 ppm were detected at SB-4.
- Elevated metals, including arsenic, lead and mercury, were detected exceeding Residential Use SCOs, with several detections exceeding Commercial and Industrial Use SCOs.
- Based on the widespread presence of shallow soil-fill across the site, with multiple exceedances of the Residential, Commercial and Industrial Use SCOs, excavated fill material would need to be handled as a potential solid waste, in accordance with all local, state and federal soil-fill regulations.
- Based on the findings of this investigation and the planned redevelopment of the Site for residential use, additional Site investigation and remediation appears warranted. Based on the environmental impacts noted during this investigation, the Site may be eligible for the New York Brownfield Cleanup Program.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of Elmwood Crossing, 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 Elmwood Crossing, 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.

TABLES



TABLE 1
SUMMARY OF SOIL BORING FINDINGS
 LIMITED PHASE II ENVIRONMENTAL INVESTIGATION REPORT
 188 WEST UTICA STREET SITE
 BUFFALO, NEW YORK

Location	Date	Fill Present	Depth of Fill	Visually Impacted Soil/Fill?	Olfactory Odor	Maximum PID (ppm) Depth - Reading (fbgs)	Soil Description and Depth (fbgs)
Soil Boring Locations							
SB-1	01/25/18	Yes	12'	Yes, black	Yes	N/A	0.0-0.25 Asphalt .25-1.0 Fill: Black, moist, mostly urban fill ¹ , ash, coal, some fine sand, little silt. 1.0-6.0 Fill: Dark brown, moist, mostly silty sands, some urban fill, ash, little subangular gravel. 6.0-12.0 Fill: Tan, moist, mostly subrounded gravel, some coarse sand, little medium sand, urban fill, slight odors
SB-2	01/25/18	Yes	6"		Yes	N/A	0.0-0.25 Asphalt .25-.50 Fill: Grey, moist, mostly subrounded gravel, urban fill ¹ , loose when disturbed .50-10 Silty sand: dark brown/ tan, moist, mostly fine sands, little silt, few subrounded gravel, few peagravel, medium dense, odors. 10-12.0 Silty sand: dark brown/ tan, moist, mostly well graded sands, little silt, little well sorted gravel, few peagravel, medium dense, slight odors.
SB-3	01/25/18	Yes	9'			.5-3	0.0-0.25 Asphalt .25-.75 Fill: Grey, moist, mostly subrounded gravel, urban fill ¹ , cinders, loose when disturbed slight odors. .75-5.5 Silty sand: Tan, moist mostly fine to medium sands, little silt, few subrounded gravel. 5.5-10.0 Well graded sand with gravel: Tan, moist, mostly well graded sands, some peagravel, little subangular gravel. 10-12.0 Silty sand: dark brown/ tan, moist, mostly well graded sands, little silt, little well sorted gravel, medium dense.
SB-4	01/25/18	Yes	9'	Yes, black		N/A	0.0-0.25 Asphalt .25-.75 Fill: Grey, moist, mostly subrounded gravel, urban fill ¹ , some silty sands loose when disturbed. .75-4.0 Silty sand: Tan, moist mostly fine to medium sands, little silt, few subrounded gravel. 4.0-10 Well graded sand with gravel: Tan, moist, mostly well graded sands, little subangular gravel, refusal at 10'.
SB-5	01/25/18	Yes	1.25'	Yes, black		.5-2	0.0-0.25 Asphalt .25-.50 Fill: Grey, moist, mostly subrounded gravel, urban fill ¹ , some silty sands loose when disturbed. .50-1.25 Fill: Black, moist, mostly silty sand, urban fill ¹ , some cinders, loose when disturbed. 1.25-5.0 Silty sand: Tan, moist mostly fine to medium sands, little silt, few subrounded gravel. 4.0-10 Well graded sand with gravel: Tan, moist, mostly well graded sands, little subangular gravel, refusal at 10'.
SB-6	01/25/18	Yes	4'	Yes, black	Yes	N/A	0.0-0.25 Asphalt .25-.75 Fill: White/Grey, moist, mostly subrounded gravel, urban fill ¹ , ash, some coarse sands, loose when disturbed. .75-4.0 Fill: Black, moist/ wet, mostly silty sand, urban fill ¹ , some cinders, loose when disturbed, slight odors. 4.0-9.0 Silty sand: Brown, wet, mostly fine to medium sands, little silt, little medium plasticity fines, few subrounded gravel. 9.0-12.0 Sandy lean Clay: Reddish brown, moist, mostly medium plasticity fines, some fine sand, little subangular gravel.
SB-7	01/25/18	Yes	9"		Yes	N/A	0.0-0.25 Asphalt .25-.75 Fill: white, moist, mostly ash, urban fill ¹ , some well sorted gravel, loose when disturbed. .75-4.0 Silty sand: Tan, moist mostly fine to medium sands, little silt, few subrounded gravel, slight odors. 4.0-12 Well graded sand with gravel: Tan, moist, mostly well graded sands, little subangular gravel, slight odors.
SB-8	01/25/18	Yes	4'	Yes, black	Yes	N/A	0.0-0.25 Asphalt .25-.50 Fill: Grey, moist, mostly subrounded gravel, ash, urban fill ¹ , some well sorted gravel, loose when disturbed. .50-4.0 Fill: Black, moist, mostly silty sand, urban fill, some cinders, loose when disturbed. 4.0-8.0 Silty sand: Tan, moist mostly fine to medium sands, little silt, few subrounded gravel. 8.0-12 Well graded sand with gravel: Grey/ tan, moist, mostly well graded sands, little subangular gravel, slight odors.
SB-9	01/25/18	Yes	1'	Yes, white	Yes	N/A	0.0-0.25 Asphalt .25-.50 Fill: white, moist, mostly ash, subrounded gravel, urban fill ¹ , loose when disturbed. .50-1.0 Fill: Dark brown, moist, mostly silty sand, urban fill ¹ , some cinders, little subangular gravel, loose when disturbed. 1.0-2.5 Silty sand: Tan, moist mostly fine to medium sands, little silt, few subrounded gravel, odors. 2.5-12 Well graded sand with gravel: Grey/ tan, moist, mostly well graded sands, little subangular gravel, slight odors.
SB-10	01/25/18	Yes	6"	Yes, white	Yes	N/A	0.0-0.25 Asphalt .25-.50 Fill: white, moist, mostly ash, subrounded gravel, urban fill ¹ , loose when disturbed. .50-5.0 Silty sand: Tan, moist mostly fine to medium sands, little silt, few subrounded gravel, odors. 5.0-12 Well graded sand with gravel: Grey/ tan, moist, mostly well graded sands, little subangular gravel, slight odors.

Notes:
 1. Urban Fill: Consisting of brick, block, glass, metal, wood

Definitions:
 fbgs = feet below ground surface
 PID = MiniRae photoionization detector equipped with a 10.6 eV lamp
 ppm = parts per million
 N/A = Non applicable



TABLE 2
SUMMARY OF SUBSURFACE SOIL/FILL SAMPLE ANALYTICAL RESULTS
LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT
188 WEST UTICA STREET SITE
BUFFALO, NEW YORK

PARAMETER ¹	Unrestricted Use SCOs ²	Residential Use SCOs ²	Commercial Use SCOs ²	Industrial Use SCOs ²	Sample Location (Depth (ft))								
					SB-1 (0.25-1)	SB-2 (10-12)	SB-4 (0.25-1)	SB-5 (0.25-1)	SB-6 (0.75-2)	SB-7 (0.25-0.75)	SB-8 (0.25-1)	SB-9 (8-10)	
					1/25/2018								
Volatile Organic Compounds (VOCs) - mg/Kg³													
Chloroform	0.37	10	350	700	0.00039 J, vs	ND	--	--	--	--	--	--	ND
Methylene chloride	0.05	51	500	1000	0.0035 J, vs	ND	--	--	--	--	--	--	ND
Toluene	0.7	100	500	1000	0.00043 J, vs	0.00052 J, vs	--	--	--	--	--	--	0.00065 J, vs
Polycyclic Aromatic Hydrocarbons (PAHs) - mg/Kg³													
Acenaphthene	20	100	500	1000	ND	--	1.1 J	1.2 J	ND	ND	ND	ND	--
Acenaphthylene	100	100	500	1000	ND	--	1.5 J	ND	ND	ND	ND	ND	--
Anthracene	100	100	500	1000	ND	--	3.4 J	2.9	ND	ND	ND	ND	--
Benzo(a)anthracene	1	1	5.6	11	1.6 J	--	11	5.2	ND	0.63 J	0.61 J	ND	--
Benzo(a)pyrene	1	1	1	1.1	3.1 J	--	10	5.4	ND	0.82 J	0.62 J	ND	--
Benzo(b)fluoranthene	1	1	5.6	11	3.4 J	--	12	6.6	ND	1.2 J	0.75 J	ND	--
Benzo(ghi)perylene	100	100	500	1000	2.8 J	--	6.6	3.6	0.69 J	0.93 J	0.47 J	ND	--
Benzo(k)fluoranthene	0.8	1	56	110	1 J	--	7.2	2.5	ND	ND	0.26 J	ND	--
Chrysene	1	1	56	110	1.6 J	--	9.9	5.2	ND	ND	0.64 J	ND	--
Dibenzo(a,h)anthracene	0.33	0.33	0.56	1.1	1.2 J	--	2.4 J	1.3 J	ND	ND	ND	ND	--
Fluoranthene	100	100	500	1000	2.4 J	--	23	12	0.48 J	1.1 J	1.4	ND	--
Fluorene	30	100	500	1000	ND	--	1.2 J	1.1 J	ND	ND	ND	ND	--
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	11	2.6 J	--	6.3	3.1	0.83 J	0.98 J	0.48 J	ND	--
Phenanthrene	100	100	500	1000	1.2 J	--	15	11	ND	0.61 J	1.1	ND	--
Pyrene	100	100	500	1000	2.1 J	--	19	11	ND	0.78 J	1.1	ND	--
Metals - mg/Kg													
Arsenic	13	16	16	16	5.5	--	7.3	18.6	8.6	ND	3.2	ND	--
Barium	350	350	400	10000	54.1	--	212	131	189	153	116	ND	--
Cadmium	2.5	2.5	9.3	60	0.27	--	0.61	0.35	0.8	ND	0.27	ND	--
Chromium	30	36	1500	6800	11.9	--	8.3	17.6	17.7	4	12	ND	--
Lead	63	400	1000	3900	141	--	2750	503	1040	4.5	21.9	ND	--
Mercury	0.18	0.81	2.8	5.7	0.099	--	0.044 F1	0.28	0.28	ND	0.33	ND	--

- 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 6NYCRR Part 375 Unrestricted Soil Cleanup Objectives (SCOs).
 3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

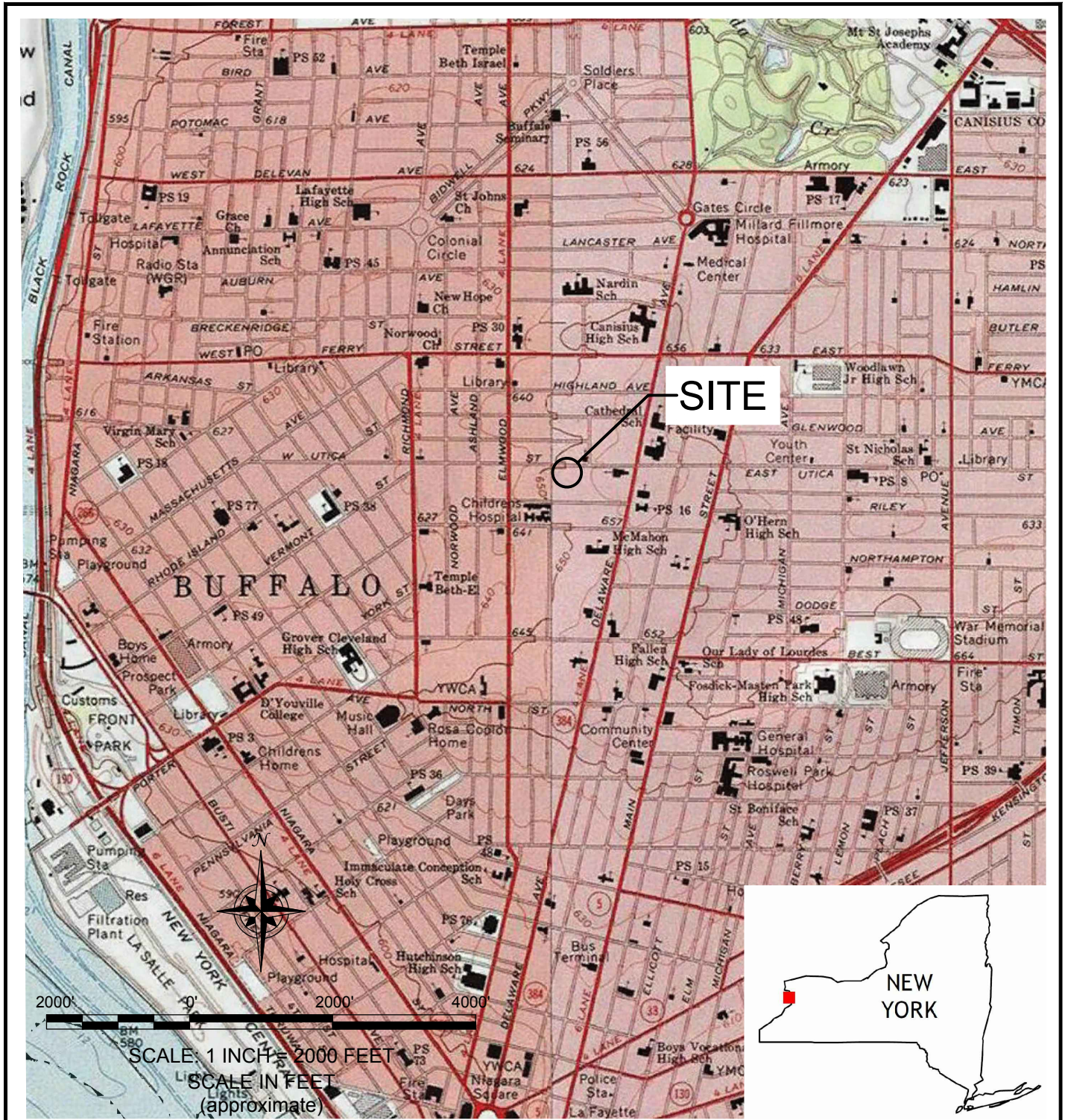
Definitions:

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.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.
Bold	= Result exceeds Industrial Use SCOs.

FIGURES

FIGURE 1



SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION

188 WEST UTICA STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

ELMWOOD CROSSING, LLC



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

PROJECT NO.: T0136-018-002

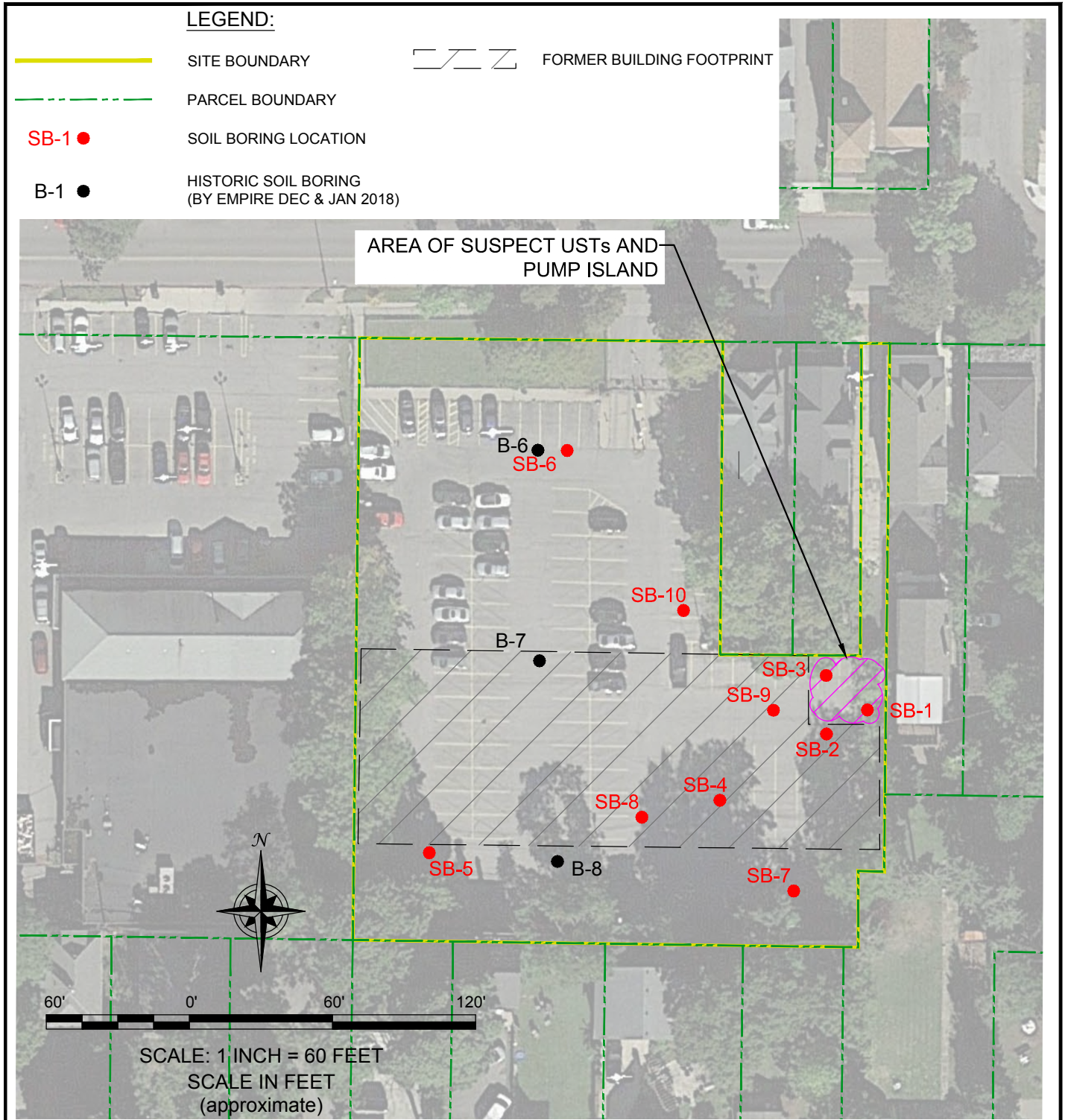

DATE: FEBRUARY 2018

DRAFTED BY: CMS

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

FIGURE 2

F:\CAD\TurnKey\Ellicott Development\188 West Utica\Phase II\Figure 1 and 2 - SILV and Investigation Locations.dwg

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

PROJECT NO.: T0136-018-002

DATE: FEBRUARY 2018

DRAFTED BY: CMS

INVESTIGATION LOCATIONS

LIMITED PHASE II ENVIRONMENTAL INVESTIGATION
188 WEST UTICA STREET SITE
BUFFALO, NEW YORK
PREPARED FOR
ELMWOOD CROSSING, LLC

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

APPENDIX A

LABORATORY ANALYTICAL DATA SUMMARY PACKAGE

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: 480-130646-1

Client Project/Site: Benchmark - 188 West Utica

For:

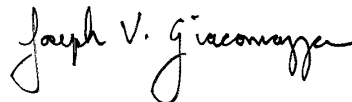
Turnkey Environmental Restoration, LLC

2558 Hamburg Turnpike

Suite 300

Lackawanna, New York 14218

Attn: Nate Munley



Authorized for release by:

2/2/2018 2:42:35 PM

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

LINKS

Review your project
results through

TotalAccess

Have a Question?



Visit us at:

www.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.

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



Table of Contents

Cover Page	1
Table of Contents	2
Definitions/Glossary	3
Case Narrative	4
Detection Summary	5
Client Sample Results	8
Surrogate Summary	23
QC Sample Results	25
QC Association Summary	32
Lab Chronicle	35
Certification Summary	39
Method Summary	40
Sample Summary	41
Chain of Custody	42
Receipt Checklists	43

Definitions/Glossary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.
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
X	Surrogate is outside control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
F2	MS/MSD RPD exceeds control limits
F4	MS/MSD RPD exceeds control limits due to sample size difference.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
E	Result exceeded calibration range.

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)

Case Narrative

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Job ID: 480-130646-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-130646-1

Comments

No additional comments.

Receipt

The samples were received on 1/26/2018 3:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 7.5° C.

GC/MS VOA

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

GC/MS Semi VOA

Method(s) 8270D: The following samples were diluted due to color and, viscosity: SB-7 (3"-9") (480-130646-6) and SB-8 (3"-1') (480-130646-7). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following sample required a dilution due to the nature of the sample matrix: SB-7 (3"-9") (480-130646-6). 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.

Method(s) 8270D: The following samples were diluted due to color and, viscosity: SB-1 (36"-1') (480-130646-1), SB-4 (3"-1') (480-130646-3), SB-5 (3"-1') (480-130646-4) and SB-6 (9"-2') (480-130646-5). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples required a dilution due to the nature of the sample matrix: SB-1 (36"-1') (480-130646-1) and SB-6 (9"-2') (480-130646-5). 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.

GC Semi VOA

Method(s) 8082A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-397683 and analytical batch 480-397728 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because all other QC criteria are within limits. Therefore, the data has been reported.

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

Metals

No analytical or quality issues were noted, other than those described 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: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-1 (36"-1')

Lab Sample ID: 480-130646-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.39	J vs	5.5	0.34	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	3.5	J vs	5.5	2.5	ug/Kg	1	☼	8260C	Total/NA
Toluene	0.43	J vs	5.5	0.41	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	1600	J	3700	370	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	3100	J	3700	550	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	3400	J	3700	590	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	2800	J	3700	390	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	1000	J	3700	480	ug/Kg	20	☼	8270D	Total/NA
Chrysene	1600	J	3700	830	ug/Kg	20	☼	8270D	Total/NA
Dibenz(a,h)anthracene	1200	J	3700	660	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	2400	J	3700	390	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	2600	J	3700	460	ug/Kg	20	☼	8270D	Total/NA
Pyrene	2100	J	3700	440	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	1200	J	3700	550	ug/Kg	20	☼	8270D	Total/NA
Arsenic	5.5		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	54.1		0.55		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.27		0.22		mg/Kg	1	☼	6010C	Total/NA
Chromium	11.9		0.55		mg/Kg	1	☼	6010C	Total/NA
Lead	141		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.099		0.022		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-2 (10-12')

Lab Sample ID: 480-130646-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Toluene	0.52	J vs	5.1	0.39	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-4 (3"-1')

Lab Sample ID: 480-130646-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	1100	J	3800	560	ug/Kg	20	☼	8270D	Total/NA
Acenaphthylene	1500	J	3800	490	ug/Kg	20	☼	8270D	Total/NA
Anthracene	3400	J	3800	930	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene	11000		3800	380	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	10000		3800	560	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	12000		3800	600	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	6600		3800	400	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	7200		3800	490	ug/Kg	20	☼	8270D	Total/NA
Chrysene	9900		3800	850	ug/Kg	20	☼	8270D	Total/NA
Dibenz(a,h)anthracene	2400	J	3800	670	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	23000		3800	400	ug/Kg	20	☼	8270D	Total/NA
Fluorene	1200	J	3800	450	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	6300		3800	470	ug/Kg	20	☼	8270D	Total/NA
Pyrene	19000		3800	450	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	15000		3800	560	ug/Kg	20	☼	8270D	Total/NA
Arsenic	7.3		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	212		0.55		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.61		0.22		mg/Kg	1	☼	6010C	Total/NA
Chromium	8.3		0.55		mg/Kg	1	☼	6010C	Total/NA
Lead	2750		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.044	F1	0.022		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-5 (3"-1')

Lab Sample ID: 480-130646-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	1200	J	2000	300	ug/Kg	10	☼	8270D	Total/NA
Anthracene	2900		2000	500	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]anthracene	5200		2000	200	ug/Kg	10	☼	8270D	Total/NA
Benzo[a]pyrene	5400		2000	300	ug/Kg	10	☼	8270D	Total/NA
Benzo[b]fluoranthene	6600		2000	320	ug/Kg	10	☼	8270D	Total/NA
Benzo[g,h,i]perylene	3600		2000	210	ug/Kg	10	☼	8270D	Total/NA
Benzo[k]fluoranthene	2500		2000	260	ug/Kg	10	☼	8270D	Total/NA
Chrysene	5200		2000	450	ug/Kg	10	☼	8270D	Total/NA
Dibenz(a,h)anthracene	1300	J	2000	360	ug/Kg	10	☼	8270D	Total/NA
Fluoranthene	12000		2000	210	ug/Kg	10	☼	8270D	Total/NA
Fluorene	1100	J	2000	240	ug/Kg	10	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3100		2000	250	ug/Kg	10	☼	8270D	Total/NA
Pyrene	11000		2000	240	ug/Kg	10	☼	8270D	Total/NA
Phenanthrene	11000		2000	300	ug/Kg	10	☼	8270D	Total/NA
Arsenic	18.6		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	131		0.59		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.35		0.24		mg/Kg	1	☼	6010C	Total/NA
Chromium	17.6		0.59		mg/Kg	1	☼	6010C	Total/NA
Lead	503		1.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.28		0.024		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-6 (9"-2')

Lab Sample ID: 480-130646-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[g,h,i]perylene	690	J	4200	450	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	480	J	4200	450	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	830	J	4200	520	ug/Kg	20	☼	8270D	Total/NA
Arsenic	8.6		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	189		0.61		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.80		0.25		mg/Kg	1	☼	6010C	Total/NA
Chromium	17.7		0.61		mg/Kg	1	☼	6010C	Total/NA
Lead	1040		1.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.28		0.026		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-7 (3"-9")

Lab Sample ID: 480-130646-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	630	J	3900	390	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	820	J	3900	570	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	1200	J	3900	620	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	930	J	3900	410	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	1100	J	3900	410	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	980	J	3900	480	ug/Kg	20	☼	8270D	Total/NA
Pyrene	780	J	3900	460	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	610	J	3900	570	ug/Kg	20	☼	8270D	Total/NA
Barium	153		0.54		mg/Kg	1	☼	6010C	Total/NA
Chromium	4.0		0.54		mg/Kg	1	☼	6010C	Total/NA
Lead	4.5		1.1		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: SB-8 (3"-1')

Lab Sample ID: 480-130646-7

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-8 (3"-1') (Continued)

Lab Sample ID: 480-130646-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Benzo[a]anthracene	610	J	950	95	ug/Kg	5		✱	8270D	Total/NA
Benzo[a]pyrene	620	J	950	140	ug/Kg	5		✱	8270D	Total/NA
Benzo[b]fluoranthene	750	J	950	150	ug/Kg	5		✱	8270D	Total/NA
Benzo[g,h,i]perylene	470	J	950	100	ug/Kg	5		✱	8270D	Total/NA
Benzo[k]fluoranthene	260	J	950	120	ug/Kg	5		✱	8270D	Total/NA
Chrysene	640	J	950	210	ug/Kg	5		✱	8270D	Total/NA
Fluoranthene	1400		950	100	ug/Kg	5		✱	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	480	J	950	120	ug/Kg	5		✱	8270D	Total/NA
Pyrene	1100		950	110	ug/Kg	5		✱	8270D	Total/NA
Phenanthrene	1100		950	140	ug/Kg	5		✱	8270D	Total/NA
Arsenic	3.2		2.2		mg/Kg	1		✱	6010C	Total/NA
Barium	116		0.56		mg/Kg	1		✱	6010C	Total/NA
Cadmium	0.27		0.22		mg/Kg	1		✱	6010C	Total/NA
Chromium	12.0		0.56		mg/Kg	1		✱	6010C	Total/NA
Lead	21.9		1.1		mg/Kg	1		✱	6010C	Total/NA
Mercury	0.33		0.022		mg/Kg	1		✱	7471B	Total/NA

Client Sample ID: SB-9 (8-10')

Lab Sample ID: 480-130646-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil	Fac	D	Method	Prep Type
Toluene	0.65	J vs	5.1	0.39	ug/Kg	1		✱	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-1 (36"-1')

Lab Sample ID: 480-130646-1

Date Collected: 01/25/18 08:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.5	0.40	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,1,2,2-Tetrachloroethane	ND	vs	5.5	0.89	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.5	1.2	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,1,2-Trichloroethane	ND	vs	5.5	0.71	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,1-Dichloroethane	ND	vs	5.5	0.67	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,1-Dichloroethene	ND	vs	5.5	0.67	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,2,4-Trichlorobenzene	ND	vs	5.5	0.33	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,2,4-Trimethylbenzene	ND	vs	5.5	1.0	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.5	2.7	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,2-Dibromoethane	ND	vs	5.5	0.70	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,2-Dichlorobenzene	ND	vs	5.5	0.43	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,2-Dichloroethane	ND	vs	5.5	0.27	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,2-Dichloropropane	ND	vs	5.5	2.7	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,3,5-Trimethylbenzene	ND	vs	5.5	0.35	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,3-Dichlorobenzene	ND	vs	5.5	0.28	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
1,4-Dichlorobenzene	ND	vs	5.5	0.76	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
2-Butanone (MEK)	ND	vs	27	2.0	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
2-Hexanone	ND	vs	27	2.7	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
4-Isopropyltoluene	ND	vs	5.5	0.44	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
4-Methyl-2-pentanone (MIBK)	ND	vs	27	1.8	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Acetone	ND	vs	27	4.6	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Benzene	ND	vs	5.5	0.27	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Bromodichloromethane	ND	vs	5.5	0.73	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Bromoform	ND	vs	5.5	2.7	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Bromomethane	ND	vs	5.5	0.49	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Carbon disulfide	ND	vs	5.5	2.7	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Carbon tetrachloride	ND	vs	5.5	0.53	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Chlorobenzene	ND	vs	5.5	0.72	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Chloroethane	ND	vs	5.5	1.2	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Chloroform	0.39	J vs	5.5	0.34	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Chloromethane	ND	vs	5.5	0.33	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
cis-1,2-Dichloroethene	ND	vs	5.5	0.70	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
cis-1,3-Dichloropropene	ND	vs	5.5	0.79	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Cyclohexane	ND	vs	5.5	0.76	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Dibromochloromethane	ND	vs	5.5	0.70	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Dichlorodifluoromethane	ND	vs	5.5	0.45	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Ethylbenzene	ND	vs	5.5	0.38	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Isopropylbenzene	ND	vs	5.5	0.82	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
m,p-Xylene	ND	vs	11	0.92	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Methyl acetate	ND	vs	27	3.3	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Methyl tert-butyl ether	ND	vs	5.5	0.54	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Methylcyclohexane	ND	vs	5.5	0.83	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Methylene Chloride	3.5	J vs	5.5	2.5	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
n-Butylbenzene	ND	vs	5.5	0.47	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
N-Propylbenzene	ND	vs	5.5	0.44	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
o-Xylene	ND	vs	5.5	0.71	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
sec-Butylbenzene	ND	vs	5.5	0.47	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Styrene	ND	vs	5.5	0.27	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
tert-Butylbenzene	ND	vs	5.5	0.57	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-1 (36"-1')

Lab Sample ID: 480-130646-1

Date Collected: 01/25/18 08:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND	vs	5.5	0.73	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Toluene	0.43	J vs	5.5	0.41	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
trans-1,2-Dichloroethene	ND	vs	5.5	0.56	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
trans-1,3-Dichloropropene	ND	vs	5.5	2.4	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Trichloroethene	ND	vs	5.5	1.2	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Trichlorofluoromethane	ND	vs	5.5	0.52	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Vinyl chloride	ND	vs	5.5	0.67	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Xylenes, Total	ND	vs	11	0.92	ug/Kg	☼	02/01/18 09:58	02/01/18 13:47	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 126				02/01/18 09:58	02/01/18 13:47	1
4-Bromofluorobenzene (Surr)	98		72 - 126				02/01/18 09:58	02/01/18 13:47	1
Dibromofluoromethane (Surr)	104		60 - 140				02/01/18 09:58	02/01/18 13:47	1
Toluene-d8 (Surr)	100		71 - 125				02/01/18 09:58	02/01/18 13:47	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3700	550	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Acenaphthylene	ND		3700	480	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Anthracene	ND		3700	920	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Benzo[a]anthracene	1600	J	3700	370	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Benzo[a]pyrene	3100	J	3700	550	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Benzo[b]fluoranthene	3400	J	3700	590	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Benzo[g,h,i]perylene	2800	J	3700	390	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Benzo[k]fluoranthene	1000	J	3700	480	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Chrysene	1600	J	3700	830	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Dibenz(a,h)anthracene	1200	J	3700	660	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Fluoranthene	2400	J	3700	390	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Fluorene	ND		3700	440	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Indeno[1,2,3-cd]pyrene	2600	J	3700	460	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Naphthalene	ND		3700	480	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Pyrene	2100	J	3700	440	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Phenanthrene	1200	J	3700	550	ug/Kg	☼	01/29/18 14:08	01/31/18 15:46	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	122	X	54 - 120				01/29/18 14:08	01/31/18 15:46	20
2-Fluorobiphenyl	80		60 - 120				01/29/18 14:08	01/31/18 15:46	20
2-Fluorophenol (Surr)	77		52 - 120				01/29/18 14:08	01/31/18 15:46	20
Phenol-d5 (Surr)	68		54 - 120				01/29/18 14:08	01/31/18 15:46	20
p-Terphenyl-d14 (Surr)	76		65 - 121				01/29/18 14:08	01/31/18 15:46	20
Nitrobenzene-d5 (Surr)	108		53 - 120				01/29/18 14:08	01/31/18 15:46	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.5		2.2		mg/Kg	☼	01/29/18 13:30	01/30/18 18:15	1
Barium	54.1		0.55		mg/Kg	☼	01/29/18 13:30	01/30/18 18:15	1
Cadmium	0.27		0.22		mg/Kg	☼	01/29/18 13:30	01/30/18 18:15	1
Chromium	11.9		0.55		mg/Kg	☼	01/29/18 13:30	01/30/18 18:15	1
Lead	141		1.1		mg/Kg	☼	01/29/18 13:30	01/30/18 18:15	1
Selenium	ND		4.4		mg/Kg	☼	01/29/18 13:30	01/30/18 18:15	1

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-1 (36"-1')

Lab Sample ID: 480-130646-1

Date Collected: 01/25/18 08:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 89.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.67		mg/Kg	☼	01/29/18 13:30	01/30/18 18:15	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.099		0.022		mg/Kg	☼	02/01/18 11:55	02/01/18 14:52	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-2 (10-12')

Lab Sample ID: 480-130646-2

Date Collected: 01/25/18 09:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.1	0.37	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,1,1,2,2-Tetrachloroethane	ND	vs	5.1	0.83	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.1	1.2	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,1,2-Trichloroethane	ND	vs	5.1	0.67	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,1-Dichloroethane	ND	vs	5.1	0.63	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,1-Dichloroethene	ND	vs	5.1	0.63	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,2,4-Trichlorobenzene	ND	vs	5.1	0.31	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,2,4-Trimethylbenzene	ND	vs	5.1	0.98	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.1	2.6	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,2-Dibromoethane	ND	vs	5.1	0.66	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,2-Dichlorobenzene	ND	vs	5.1	0.40	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,2-Dichloroethane	ND	vs	5.1	0.26	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,2-Dichloropropane	ND	vs	5.1	2.6	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,3,5-Trimethylbenzene	ND	vs	5.1	0.33	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,3-Dichlorobenzene	ND	vs	5.1	0.26	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
1,4-Dichlorobenzene	ND	vs	5.1	0.72	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
2-Butanone (MEK)	ND	vs	26	1.9	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
2-Hexanone	ND	vs	26	2.6	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
4-Isopropyltoluene	ND	vs	5.1	0.41	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
4-Methyl-2-pentanone (MIBK)	ND	vs	26	1.7	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Acetone	ND	vs	26	4.3	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Benzene	ND	vs	5.1	0.25	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Bromodichloromethane	ND	vs	5.1	0.69	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Bromoform	ND	vs	5.1	2.6	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Bromomethane	ND	vs	5.1	0.46	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Carbon disulfide	ND	vs	5.1	2.6	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Carbon tetrachloride	ND	vs	5.1	0.50	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Chlorobenzene	ND	vs	5.1	0.68	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Chloroethane	ND	vs	5.1	1.2	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Chloroform	ND	vs	5.1	0.32	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Chloromethane	ND	vs	5.1	0.31	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
cis-1,2-Dichloroethene	ND	vs	5.1	0.66	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
cis-1,3-Dichloropropene	ND	vs	5.1	0.74	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Cyclohexane	ND	vs	5.1	0.72	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Dibromochloromethane	ND	vs	5.1	0.66	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Dichlorodifluoromethane	ND	vs	5.1	0.42	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Ethylbenzene	ND	vs	5.1	0.35	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Isopropylbenzene	ND	vs	5.1	0.77	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
m,p-Xylene	ND	vs	10	0.86	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Methyl acetate	ND	vs	26	3.1	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Methyl tert-butyl ether	ND	vs	5.1	0.50	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Methylcyclohexane	ND	vs	5.1	0.78	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Methylene Chloride	ND	vs	5.1	2.4	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
n-Butylbenzene	ND	vs	5.1	0.45	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
N-Propylbenzene	ND	vs	5.1	0.41	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
o-Xylene	ND	vs	5.1	0.67	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
sec-Butylbenzene	ND	vs	5.1	0.45	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
Styrene	ND	vs	5.1	0.26	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1
tert-Butylbenzene	ND	vs	5.1	0.53	ug/Kg	*	02/01/18 09:58	02/01/18 14:13	1

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-2 (10-12')

Lab Sample ID: 480-130646-2

Date Collected: 01/25/18 09:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 95.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND	vs	5.1	0.69	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
Toluene	0.52	J vs	5.1	0.39	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
trans-1,2-Dichloroethene	ND	vs	5.1	0.53	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
trans-1,3-Dichloropropene	ND	vs	5.1	2.3	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
Trichloroethene	ND	vs	5.1	1.1	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
Trichlorofluoromethane	ND	vs	5.1	0.48	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
Vinyl chloride	ND	vs	5.1	0.63	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
Xylenes, Total	ND	vs	10	0.86	ug/Kg	☼	02/01/18 09:58	02/01/18 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		64 - 126				02/01/18 09:58	02/01/18 14:13	1
4-Bromofluorobenzene (Surr)	97		72 - 126				02/01/18 09:58	02/01/18 14:13	1
Dibromofluoromethane (Surr)	105		60 - 140				02/01/18 09:58	02/01/18 14:13	1
Toluene-d8 (Surr)	98		71 - 125				02/01/18 09:58	02/01/18 14:13	1

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-4 (3"-1')

Lab Sample ID: 480-130646-3

Date Collected: 01/25/18 10:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 87.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1100	J	3800	560	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Acenaphthylene	1500	J	3800	490	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Anthracene	3400	J	3800	930	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Benzo[a]anthracene	11000		3800	380	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Benzo[a]pyrene	10000		3800	560	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Benzo[b]fluoranthene	12000		3800	600	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Benzo[g,h,i]perylene	6600		3800	400	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Benzo[k]fluoranthene	7200		3800	490	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Chrysene	9900		3800	850	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Dibenz(a,h)anthracene	2400	J	3800	670	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Fluoranthene	23000		3800	400	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Fluorene	1200	J	3800	450	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Indeno[1,2,3-cd]pyrene	6300		3800	470	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Naphthalene	ND		3800	490	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Pyrene	19000		3800	450	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Phenanthrene	15000		3800	560	ug/Kg	☼	01/29/18 14:08	01/31/18 16:13	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	113		54 - 120				01/29/18 14:08	01/31/18 16:13	20
2-Fluorobiphenyl	79		60 - 120				01/29/18 14:08	01/31/18 16:13	20
2-Fluorophenol (Surr)	77		52 - 120				01/29/18 14:08	01/31/18 16:13	20
Phenol-d5 (Surr)	64		54 - 120				01/29/18 14:08	01/31/18 16:13	20
p-Terphenyl-d14 (Surr)	71		65 - 121				01/29/18 14:08	01/31/18 16:13	20
Nitrobenzene-d5 (Surr)	108		53 - 120				01/29/18 14:08	01/31/18 16:13	20

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.046	mg/Kg	☼	01/29/18 08:26	01/29/18 17:54	1
PCB-1221	ND		0.23	0.046	mg/Kg	☼	01/29/18 08:26	01/29/18 17:54	1
PCB-1232	ND		0.23	0.046	mg/Kg	☼	01/29/18 08:26	01/29/18 17:54	1
PCB-1242	ND		0.23	0.046	mg/Kg	☼	01/29/18 08:26	01/29/18 17:54	1
PCB-1248	ND		0.23	0.046	mg/Kg	☼	01/29/18 08:26	01/29/18 17:54	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	01/29/18 08:26	01/29/18 17:54	1
PCB-1260	ND	F2	0.23	0.11	mg/Kg	☼	01/29/18 08:26	01/29/18 17:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	103		60 - 154				01/29/18 08:26	01/29/18 17:54	1
DCB Decachlorobiphenyl	72		65 - 174				01/29/18 08:26	01/29/18 17:54	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.3		2.2		mg/Kg	☼	01/29/18 13:30	01/30/18 18:18	1
Barium	212		0.55		mg/Kg	☼	01/29/18 13:30	01/30/18 18:18	1
Cadmium	0.61		0.22		mg/Kg	☼	01/29/18 13:30	01/30/18 18:18	1
Chromium	8.3		0.55		mg/Kg	☼	01/29/18 13:30	01/30/18 18:18	1
Lead	2750		1.1		mg/Kg	☼	01/29/18 13:30	01/30/18 18:18	1
Selenium	ND		4.4		mg/Kg	☼	01/29/18 13:30	01/30/18 18:18	1
Silver	ND		0.66		mg/Kg	☼	01/29/18 13:30	01/30/18 18:18	1

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-4 (3"-1')

Lab Sample ID: 480-130646-3

Date Collected: 01/25/18 10:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 87.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.044	F1	0.022		mg/Kg	☼	02/01/18 11:55	02/01/18 14:53	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-5 (3"-1')

Lab Sample ID: 480-130646-4

Date Collected: 01/25/18 11:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 83.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1200	J	2000	300	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Acenaphthylene	ND		2000	260	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Anthracene	2900		2000	500	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Benzo[a]anthracene	5200		2000	200	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Benzo[a]pyrene	5400		2000	300	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Benzo[b]fluoranthene	6600		2000	320	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Benzo[g,h,i]perylene	3600		2000	210	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Benzo[k]fluoranthene	2500		2000	260	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Chrysene	5200		2000	450	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Dibenz(a,h)anthracene	1300	J	2000	360	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Fluoranthene	12000		2000	210	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Fluorene	1100	J	2000	240	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Indeno[1,2,3-cd]pyrene	3100		2000	250	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Naphthalene	ND		2000	260	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Pyrene	11000		2000	240	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Phenanthrene	11000		2000	300	ug/Kg	☼	01/29/18 14:08	01/31/18 16:39	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	96		54 - 120				01/29/18 14:08	01/31/18 16:39	10
2-Fluorobiphenyl	86		60 - 120				01/29/18 14:08	01/31/18 16:39	10
2-Fluorophenol (Surr)	72		52 - 120				01/29/18 14:08	01/31/18 16:39	10
Phenol-d5 (Surr)	68		54 - 120				01/29/18 14:08	01/31/18 16:39	10
p-Terphenyl-d14 (Surr)	86		65 - 121				01/29/18 14:08	01/31/18 16:39	10
Nitrobenzene-d5 (Surr)	89		53 - 120				01/29/18 14:08	01/31/18 16:39	10

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.044	mg/Kg	☼	01/29/18 08:26	01/29/18 18:10	1
PCB-1221	ND		0.23	0.044	mg/Kg	☼	01/29/18 08:26	01/29/18 18:10	1
PCB-1232	ND		0.23	0.044	mg/Kg	☼	01/29/18 08:26	01/29/18 18:10	1
PCB-1242	ND		0.23	0.044	mg/Kg	☼	01/29/18 08:26	01/29/18 18:10	1
PCB-1248	ND		0.23	0.044	mg/Kg	☼	01/29/18 08:26	01/29/18 18:10	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	01/29/18 08:26	01/29/18 18:10	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	01/29/18 08:26	01/29/18 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	105		60 - 154				01/29/18 08:26	01/29/18 18:10	1
DCB Decachlorobiphenyl	72		65 - 174				01/29/18 08:26	01/29/18 18:10	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	18.6		2.4		mg/Kg	☼	01/29/18 13:30	01/30/18 18:22	1
Barium	131		0.59		mg/Kg	☼	01/29/18 13:30	01/30/18 18:22	1
Cadmium	0.35		0.24		mg/Kg	☼	01/29/18 13:30	01/30/18 18:22	1
Chromium	17.6		0.59		mg/Kg	☼	01/29/18 13:30	01/30/18 18:22	1
Lead	503		1.2		mg/Kg	☼	01/29/18 13:30	01/30/18 18:22	1
Selenium	ND		4.7		mg/Kg	☼	01/29/18 13:30	01/30/18 18:22	1
Silver	ND		0.71		mg/Kg	☼	01/29/18 13:30	01/30/18 18:22	1

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-5 (3"-1')

Lab Sample ID: 480-130646-4

Date Collected: 01/25/18 11:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 83.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28		0.024		mg/Kg	☼	02/01/18 11:55	02/01/18 15:02	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-6 (9"-2')

Lab Sample ID: 480-130646-5

Date Collected: 01/25/18 12:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 78.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4200	620	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Acenaphthylene	ND		4200	550	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Anthracene	ND		4200	1000	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Benzo[a]anthracene	ND		4200	420	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Benzo[a]pyrene	ND		4200	620	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Benzo[b]fluoranthene	ND		4200	670	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Benzo[g,h,i]perylene	690	J	4200	450	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Benzo[k]fluoranthene	ND		4200	550	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Chrysene	ND		4200	950	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Dibenz(a,h)anthracene	ND		4200	750	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Fluoranthene	480	J	4200	450	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Fluorene	ND		4200	500	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Indeno[1,2,3-cd]pyrene	830	J	4200	520	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Naphthalene	ND		4200	550	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Pyrene	ND		4200	500	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Phenanthrene	ND		4200	620	ug/Kg	☼	01/29/18 14:08	01/31/18 17:05	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	127	X	54 - 120				01/29/18 14:08	01/31/18 17:05	20
2-Fluorobiphenyl	76		60 - 120				01/29/18 14:08	01/31/18 17:05	20
2-Fluorophenol (Surr)	80		52 - 120				01/29/18 14:08	01/31/18 17:05	20
Phenol-d5 (Surr)	65		54 - 120				01/29/18 14:08	01/31/18 17:05	20
p-Terphenyl-d14 (Surr)	64	X	65 - 121				01/29/18 14:08	01/31/18 17:05	20
Nitrobenzene-d5 (Surr)	106		53 - 120				01/29/18 14:08	01/31/18 17:05	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	8.6		2.5		mg/Kg	☼	01/29/18 13:30	01/30/18 18:26	1
Barium	189		0.61		mg/Kg	☼	01/29/18 13:30	01/30/18 18:26	1
Cadmium	0.80		0.25		mg/Kg	☼	01/29/18 13:30	01/30/18 18:26	1
Chromium	17.7		0.61		mg/Kg	☼	01/29/18 13:30	01/30/18 18:26	1
Lead	1040		1.2		mg/Kg	☼	01/29/18 13:30	01/30/18 18:26	1
Selenium	ND		4.9		mg/Kg	☼	01/29/18 13:30	01/30/18 18:26	1
Silver	ND		0.74		mg/Kg	☼	01/29/18 13:30	01/30/18 18:26	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.28		0.026		mg/Kg	☼	02/01/18 11:55	02/01/18 15:04	1

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-7 (3"-9")

Lab Sample ID: 480-130646-6

Date Collected: 01/25/18 13:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3900	570	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Acenaphthylene	ND		3900	500	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Anthracene	ND		3900	960	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Benzo[a]anthracene	630	J	3900	390	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Benzo[a]pyrene	820	J	3900	570	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Benzo[b]fluoranthene	1200	J	3900	620	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Benzo[g,h,i]perylene	930	J	3900	410	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Benzo[k]fluoranthene	ND		3900	500	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Chrysene	ND		3900	870	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Dibenz(a,h)anthracene	ND		3900	680	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Fluoranthene	1100	J	3900	410	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Fluorene	ND		3900	460	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Indeno[1,2,3-cd]pyrene	980	J	3900	480	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Naphthalene	ND		3900	500	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Pyrene	780	J	3900	460	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20
Phenanthrene	610	J	3900	570	ug/Kg	☼	01/29/18 14:08	01/30/18 21:19	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	0	X	54 - 120	01/29/18 14:08	01/30/18 21:19	20
2-Fluorobiphenyl	84		60 - 120	01/29/18 14:08	01/30/18 21:19	20
2-Fluorophenol (Surr)	72		52 - 120	01/29/18 14:08	01/30/18 21:19	20
Phenol-d5 (Surr)	75		54 - 120	01/29/18 14:08	01/30/18 21:19	20
p-Terphenyl-d14 (Surr)	78		65 - 121	01/29/18 14:08	01/30/18 21:19	20
Nitrobenzene-d5 (Surr)	105		53 - 120	01/29/18 14:08	01/30/18 21:19	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2		mg/Kg	☼	01/29/18 13:30	01/30/18 18:30	1
Barium	153		0.54		mg/Kg	☼	01/29/18 13:30	01/30/18 18:30	1
Cadmium	ND		0.22		mg/Kg	☼	01/29/18 13:30	01/30/18 18:30	1
Chromium	4.0		0.54		mg/Kg	☼	01/29/18 13:30	01/30/18 18:30	1
Lead	4.5		1.1		mg/Kg	☼	01/29/18 13:30	01/30/18 18:30	1
Selenium	ND		4.3		mg/Kg	☼	01/29/18 13:30	01/30/18 18:30	1
Silver	ND		0.65		mg/Kg	☼	01/29/18 13:30	01/30/18 18:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.023		mg/Kg	☼	02/01/18 11:55	02/01/18 15:05	1

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-8 (3"-1')

Lab Sample ID: 480-130646-7

Date Collected: 01/25/18 14:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 87.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		950	140	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Acenaphthylene	ND		950	120	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Anthracene	ND		950	240	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Benzo[a]anthracene	610	J	950	95	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Benzo[a]pyrene	620	J	950	140	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Benzo[b]fluoranthene	750	J	950	150	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Benzo[g,h,i]perylene	470	J	950	100	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Benzo[k]fluoranthene	260	J	950	120	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Chrysene	640	J	950	210	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Dibenz(a,h)anthracene	ND		950	170	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Fluoranthene	1400		950	100	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Fluorene	ND		950	110	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Indeno[1,2,3-cd]pyrene	480	J	950	120	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Naphthalene	ND		950	120	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Pyrene	1100		950	110	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Phenanthrene	1100		950	140	ug/Kg	☼	01/29/18 14:08	01/30/18 21:45	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	82		54 - 120				01/29/18 14:08	01/30/18 21:45	5
2-Fluorobiphenyl	88		60 - 120				01/29/18 14:08	01/30/18 21:45	5
2-Fluorophenol (Surr)	89		52 - 120				01/29/18 14:08	01/30/18 21:45	5
Phenol-d5 (Surr)	78		54 - 120				01/29/18 14:08	01/30/18 21:45	5
p-Terphenyl-d14 (Surr)	94		65 - 121				01/29/18 14:08	01/30/18 21:45	5
Nitrobenzene-d5 (Surr)	88		53 - 120				01/29/18 14:08	01/30/18 21:45	5

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg	☼	01/29/18 08:26	01/29/18 18:26	1
PCB-1221	ND		0.23	0.045	mg/Kg	☼	01/29/18 08:26	01/29/18 18:26	1
PCB-1232	ND		0.23	0.045	mg/Kg	☼	01/29/18 08:26	01/29/18 18:26	1
PCB-1242	ND		0.23	0.045	mg/Kg	☼	01/29/18 08:26	01/29/18 18:26	1
PCB-1248	ND		0.23	0.045	mg/Kg	☼	01/29/18 08:26	01/29/18 18:26	1
PCB-1254	ND		0.23	0.11	mg/Kg	☼	01/29/18 08:26	01/29/18 18:26	1
PCB-1260	ND		0.23	0.11	mg/Kg	☼	01/29/18 08:26	01/29/18 18:26	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	101		60 - 154				01/29/18 08:26	01/29/18 18:26	1
DCB Decachlorobiphenyl	74		65 - 174				01/29/18 08:26	01/29/18 18:26	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.2		2.2		mg/Kg	☼	01/29/18 13:30	01/30/18 18:34	1
Barium	116		0.56		mg/Kg	☼	01/29/18 13:30	01/30/18 18:34	1
Cadmium	0.27		0.22		mg/Kg	☼	01/29/18 13:30	01/30/18 18:34	1
Chromium	12.0		0.56		mg/Kg	☼	01/29/18 13:30	01/30/18 18:34	1
Lead	21.9		1.1		mg/Kg	☼	01/29/18 13:30	01/30/18 18:34	1
Selenium	ND		4.5		mg/Kg	☼	01/29/18 13:30	01/30/18 18:34	1
Silver	ND		0.67		mg/Kg	☼	01/29/18 13:30	01/30/18 18:34	1

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-8 (3"-1')

Lab Sample ID: 480-130646-7

Date Collected: 01/25/18 14:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 87.6

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.33		0.022		mg/Kg	☼	02/01/18 11:55	02/01/18 15:06	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-9 (8-10')

Lab Sample ID: 480-130646-8

Date Collected: 01/25/18 15:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 95.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.1	0.37	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,1,1,2,2-Tetrachloroethane	ND	vs	5.1	0.83	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.1	1.2	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,1,2-Trichloroethane	ND	vs	5.1	0.67	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,1-Dichloroethane	ND	vs	5.1	0.63	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,1-Dichloroethene	ND	vs	5.1	0.63	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,2,4-Trichlorobenzene	ND	vs	5.1	0.31	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,2,4-Trimethylbenzene	ND	vs	5.1	0.99	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.1	2.6	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,2-Dibromoethane	ND	vs	5.1	0.66	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,2-Dichlorobenzene	ND	vs	5.1	0.40	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,2-Dichloroethane	ND	vs	5.1	0.26	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,2-Dichloropropane	ND	vs	5.1	2.6	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,3,5-Trimethylbenzene	ND	vs	5.1	0.33	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,3-Dichlorobenzene	ND	vs	5.1	0.26	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
1,4-Dichlorobenzene	ND	vs	5.1	0.72	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
2-Butanone (MEK)	ND	vs	26	1.9	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
2-Hexanone	ND	vs	26	2.6	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
4-Isopropyltoluene	ND	vs	5.1	0.41	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
4-Methyl-2-pentanone (MIBK)	ND	vs	26	1.7	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Acetone	ND	vs	26	4.3	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Benzene	ND	vs	5.1	0.25	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Bromodichloromethane	ND	vs	5.1	0.69	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Bromoform	ND	vs	5.1	2.6	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Bromomethane	ND	vs	5.1	0.46	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Carbon disulfide	ND	vs	5.1	2.6	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Carbon tetrachloride	ND	vs	5.1	0.50	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Chlorobenzene	ND	vs	5.1	0.68	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Chloroethane	ND	vs	5.1	1.2	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Chloroform	ND	vs	5.1	0.32	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Chloromethane	ND	vs	5.1	0.31	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
cis-1,2-Dichloroethene	ND	vs	5.1	0.66	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
cis-1,3-Dichloropropene	ND	vs	5.1	0.74	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Cyclohexane	ND	vs	5.1	0.72	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Dibromochloromethane	ND	vs	5.1	0.66	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Dichlorodifluoromethane	ND	vs	5.1	0.42	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Ethylbenzene	ND	vs	5.1	0.35	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Isopropylbenzene	ND	vs	5.1	0.78	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
m,p-Xylene	ND	vs	10	0.86	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Methyl acetate	ND	vs	26	3.1	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Methyl tert-butyl ether	ND	vs	5.1	0.50	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Methylcyclohexane	ND	vs	5.1	0.78	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Methylene Chloride	ND	vs	5.1	2.4	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
n-Butylbenzene	ND	vs	5.1	0.45	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
N-Propylbenzene	ND	vs	5.1	0.41	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
o-Xylene	ND	vs	5.1	0.67	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
sec-Butylbenzene	ND	vs	5.1	0.45	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Styrene	ND	vs	5.1	0.26	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
tert-Butylbenzene	ND	vs	5.1	0.53	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1

TestAmerica Buffalo

Client Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-9 (8-10')

Lab Sample ID: 480-130646-8

Date Collected: 01/25/18 15:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 95.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND	vs	5.1	0.69	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Toluene	0.65	J vs	5.1	0.39	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
trans-1,2-Dichloroethene	ND	vs	5.1	0.53	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
trans-1,3-Dichloropropene	ND	vs	5.1	2.3	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Trichloroethene	ND	vs	5.1	1.1	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Trichlorofluoromethane	ND	vs	5.1	0.49	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Vinyl chloride	ND	vs	5.1	0.63	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Xylenes, Total	ND	vs	10	0.86	ug/Kg	☼	02/01/18 09:58	02/01/18 14:38	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		64 - 126				02/01/18 09:58	02/01/18 14:38	1
4-Bromofluorobenzene (Surr)	97		72 - 126				02/01/18 09:58	02/01/18 14:38	1
Dibromofluoromethane (Surr)	105		60 - 140				02/01/18 09:58	02/01/18 14:38	1
Toluene-d8 (Surr)	97		71 - 125				02/01/18 09:58	02/01/18 14:38	1

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (64-126)	BFB (72-126)	DBFM (60-140)	TOL (71-125)
480-130646-1	SB-1 (36"-1')	104	98	104	100
480-130646-2	SB-2 (10-12')	107	97	105	98
480-130646-8	SB-9 (8-10')	104	97	105	97
LCS 480-398269/1-A	Lab Control Sample	105	97	105	99
MB 480-398269/2-A	Method Blank	105	98	105	98

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (54-120)	FBP (60-120)	2FP (52-120)	PHL (54-120)	TPHd14 (65-121)	NBZ (53-120)
480-130646-1	SB-1 (36"-1')	122 X	80	77	68	76	108
480-130646-3	SB-4 (3"-1')	113	79	77	64	71	108
480-130646-4	SB-5 (3"-1')	96	86	72	68	86	89
480-130646-5	SB-6 (9"-2')	127 X	76	80	65	64 X	106
480-130646-6	SB-7 (3"-9")	0 X	84	72	75	78	105
480-130646-7	SB-8 (3"-1')	82	88	89	78	94	88
LCS 480-397787/2-A	Lab Control Sample	92	83	68	77	96	77
MB 480-397787/1-A	Method Blank	75	81	75	80	96	79

Surrogate Legend

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

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)	
		TCX1 (60-154)	DCBP1 (65-174)
480-130646-3	SB-4 (3"-1')	103	72
480-130646-3 MS	SB-4 (3"-1')	110	76
480-130646-3 MSD	SB-4 (3"-1')	123	87
480-130646-4	SB-5 (3"-1')	105	72
480-130646-7	SB-8 (3"-1')	101	74
LCS 480-397683/2-A	Lab Control Sample	134	90
MB 480-397683/1-A	Method Blank	88	83

Surrogate Legend

TestAmerica Buffalo

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

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

Lab Sample ID: MB 480-398269/2-A

Matrix: Solid

Analysis Batch: 398242

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 398269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
2-Hexanone	ND		25	2.5	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Acetone	ND		25	4.2	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Benzene	ND		5.0	0.25	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Bromoform	ND		5.0	2.5	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Bromomethane	ND		5.0	0.45	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Chloroethane	ND		5.0	1.1	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Chloroform	ND		5.0	0.31	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Chloromethane	ND		5.0	0.30	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Cyclohexane	ND		5.0	0.70	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
m,p-Xylene	ND		10	0.84	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Methyl acetate	ND		25	3.0	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
o-Xylene	ND		5.0	0.65	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Styrene	ND		5.0	0.25	ug/Kg		02/01/18 09:58	02/01/18 12:09	1

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

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

Lab Sample ID: MB 480-398269/2-A

Matrix: Solid

Analysis Batch: 398242

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 398269

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Toluene	ND		5.0	0.38	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Trichloroethene	ND		5.0	1.1	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		02/01/18 09:58	02/01/18 12:09	1
Xylenes, Total	ND		10	0.84	ug/Kg		02/01/18 09:58	02/01/18 12:09	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	02/01/18 09:58	02/01/18 12:09	1
4-Bromofluorobenzene (Surr)	98		72 - 126	02/01/18 09:58	02/01/18 12:09	1
Dibromofluoromethane (Surr)	105		60 - 140	02/01/18 09:58	02/01/18 12:09	1
Toluene-d8 (Surr)	98		71 - 125	02/01/18 09:58	02/01/18 12:09	1

Lab Sample ID: LCS 480-398269/1-A

Matrix: Solid

Analysis Batch: 398242

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 398269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	45.5		ug/Kg		91	77 - 121
1,1,2,2-Tetrachloroethane	50.0	44.0		ug/Kg		88	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.7		ug/Kg		99	60 - 140
1,1,2-Trichloroethane	50.0	43.9		ug/Kg		88	78 - 122
1,1-Dichloroethane	50.0	46.9		ug/Kg		94	73 - 126
1,1-Dichloroethene	50.0	49.1		ug/Kg		98	59 - 125
1,2,4-Trichlorobenzene	50.0	44.6		ug/Kg		89	64 - 120
1,2,4-Trimethylbenzene	50.0	46.1		ug/Kg		92	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	43.9		ug/Kg		88	63 - 124
1,2-Dibromoethane	50.0	45.1		ug/Kg		90	78 - 120
1,2-Dichlorobenzene	50.0	44.1		ug/Kg		88	75 - 120
1,2-Dichloroethane	50.0	45.5		ug/Kg		91	77 - 122
1,2-Dichloropropane	50.0	44.7		ug/Kg		89	75 - 124
1,3,5-Trimethylbenzene	50.0	45.8		ug/Kg		92	74 - 120
1,3-Dichlorobenzene	50.0	44.8		ug/Kg		90	74 - 120
1,4-Dichlorobenzene	50.0	44.7		ug/Kg		89	73 - 120
2-Butanone (MEK)	250	228		ug/Kg		91	70 - 134
2-Hexanone	250	221		ug/Kg		88	59 - 130
4-Isopropyltoluene	50.0	46.8		ug/Kg		94	74 - 120
4-Methyl-2-pentanone (MIBK)	250	228		ug/Kg		91	65 - 133
Acetone	250	214		ug/Kg		86	61 - 137
Benzene	50.0	46.4		ug/Kg		93	79 - 127
Bromodichloromethane	50.0	44.7		ug/Kg		89	80 - 122
Bromoform	50.0	38.3		ug/Kg		77	68 - 126
Bromomethane	50.0	48.5		ug/Kg		97	37 - 149
Carbon disulfide	50.0	48.2		ug/Kg		96	64 - 131

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

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

Lab Sample ID: LCS 480-398269/1-A

Matrix: Solid

Analysis Batch: 398242

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 398269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	50.0	42.0		ug/Kg		84	75 - 135
Chlorobenzene	50.0	45.2		ug/Kg		90	76 - 124
Chloroethane	50.0	48.6		ug/Kg		97	69 - 135
Chloroform	50.0	47.1		ug/Kg		94	80 - 120
Chloromethane	50.0	48.8		ug/Kg		98	63 - 127
cis-1,2-Dichloroethene	50.0	46.1		ug/Kg		92	81 - 120
cis-1,3-Dichloropropene	50.0	43.1		ug/Kg		86	80 - 120
Cyclohexane	50.0	47.1		ug/Kg		94	65 - 120
Dibromochloromethane	50.0	42.7		ug/Kg		85	76 - 125
Dichlorodifluoromethane	50.0	55.8		ug/Kg		112	57 - 142
Ethylbenzene	50.0	45.0		ug/Kg		90	80 - 120
Isopropylbenzene	50.0	46.0		ug/Kg		92	72 - 120
m,p-Xylene	50.0	44.9		ug/Kg		90	70 - 130
Methyl acetate	100	87.2		ug/Kg		87	55 - 136
Methyl tert-butyl ether	50.0	43.4		ug/Kg		87	63 - 125
Methylcyclohexane	50.0	47.0		ug/Kg		94	60 - 140
Methylene Chloride	50.0	44.1		ug/Kg		88	61 - 127
n-Butylbenzene	50.0	45.9		ug/Kg		92	70 - 120
N-Propylbenzene	50.0	46.0		ug/Kg		92	70 - 130
o-Xylene	50.0	44.9		ug/Kg		90	70 - 130
sec-Butylbenzene	50.0	46.9		ug/Kg		94	74 - 120
Styrene	50.0	43.7		ug/Kg		87	80 - 120
tert-Butylbenzene	50.0	47.0		ug/Kg		94	73 - 120
Tetrachloroethene	50.0	46.9		ug/Kg		94	74 - 122
Toluene	50.0	44.6		ug/Kg		89	74 - 128
trans-1,2-Dichloroethene	50.0	47.9		ug/Kg		96	78 - 126
trans-1,3-Dichloropropene	50.0	41.6		ug/Kg		83	73 - 123
Trichloroethene	50.0	47.5		ug/Kg		95	77 - 129
Trichlorofluoromethane	50.0	54.3		ug/Kg		109	65 - 146
Vinyl chloride	50.0	48.0		ug/Kg		96	61 - 133

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	105		64 - 126
4-Bromofluorobenzene (Surr)	97		72 - 126
Dibromofluoromethane (Surr)	105		60 - 140
Toluene-d8 (Surr)	99		71 - 125

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

Lab Sample ID: MB 480-397787/1-A

Matrix: Solid

Analysis Batch: 397943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 397787

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Acenaphthene	ND		170	24	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Acenaphthylene	ND		170	21	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Anthracene	ND		170	41	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Benzo[a]anthracene	ND		170	17	ug/Kg		01/29/18 14:08	01/30/18 16:49	1

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

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

Lab Sample ID: MB 480-397787/1-A

Matrix: Solid

Analysis Batch: 397943

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 397787

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[a]pyrene	ND		170	24	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Chrysene	ND		170	37	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Fluoranthene	ND		170	18	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Fluorene	ND		170	20	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Naphthalene	ND		170	21	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Pyrene	ND		170	20	ug/Kg		01/29/18 14:08	01/30/18 16:49	1
Phenanthrene	ND		170	24	ug/Kg		01/29/18 14:08	01/30/18 16:49	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2,4,6-Tribromophenol (Surr)	75		54 - 120	01/29/18 14:08	01/30/18 16:49	1
2-Fluorobiphenyl	81		60 - 120	01/29/18 14:08	01/30/18 16:49	1
2-Fluorophenol (Surr)	75		52 - 120	01/29/18 14:08	01/30/18 16:49	1
Phenol-d5 (Surr)	80		54 - 120	01/29/18 14:08	01/30/18 16:49	1
p-Terphenyl-d14 (Surr)	96		65 - 121	01/29/18 14:08	01/30/18 16:49	1
Nitrobenzene-d5 (Surr)	79		53 - 120	01/29/18 14:08	01/30/18 16:49	1

Lab Sample ID: LCS 480-397787/2-A

Matrix: Solid

Analysis Batch: 397943

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 397787

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1640	1390		ug/Kg		85	62 - 120
Acenaphthylene	1640	1400		ug/Kg		85	58 - 121
Anthracene	1640	1550		ug/Kg		94	62 - 120
Benzo[a]anthracene	1640	1540		ug/Kg		94	65 - 120
Benzo[a]pyrene	1640	1520		ug/Kg		93	64 - 120
Benzo[b]fluoranthene	1640	1460		ug/Kg		89	64 - 120
Benzo[g,h,i]perylene	1640	1460		ug/Kg		89	45 - 145
Benzo[k]fluoranthene	1640	1680		ug/Kg		102	65 - 120
Chrysene	1640	1500		ug/Kg		92	64 - 120
Dibenz(a,h)anthracene	1640	1540		ug/Kg		94	54 - 132
Fluoranthene	1640	1520		ug/Kg		93	62 - 120
Fluorene	1640	1450		ug/Kg		89	63 - 120
Indeno[1,2,3-cd]pyrene	1640	1480		ug/Kg		90	56 - 134
Naphthalene	1640	1290		ug/Kg		78	55 - 120
Pyrene	1640	1590		ug/Kg		97	61 - 133
Phenanthrene	1640	1470		ug/Kg		89	60 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2,4,6-Tribromophenol (Surr)	92		54 - 120
2-Fluorobiphenyl	83		60 - 120
2-Fluorophenol (Surr)	68		52 - 120

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

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

Lab Sample ID: LCS 480-397787/2-A
Matrix: Solid
Analysis Batch: 397943

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397787

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Phenol-d5 (Surr)	77		54 - 120
p-Terphenyl-d14 (Surr)	96		65 - 121
Nitrobenzene-d5 (Surr)	77		53 - 120

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography

Lab Sample ID: MB 480-397683/1-A
Matrix: Solid
Analysis Batch: 397728

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397683

Analyte	MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
PCB-1016	ND		0.20	0.039	mg/Kg		01/29/18 08:26	01/29/18 16:50	1
PCB-1221	ND		0.20	0.039	mg/Kg		01/29/18 08:26	01/29/18 16:50	1
PCB-1232	ND		0.20	0.039	mg/Kg		01/29/18 08:26	01/29/18 16:50	1
PCB-1242	ND		0.20	0.039	mg/Kg		01/29/18 08:26	01/29/18 16:50	1
PCB-1248	ND		0.20	0.039	mg/Kg		01/29/18 08:26	01/29/18 16:50	1
PCB-1254	ND		0.20	0.094	mg/Kg		01/29/18 08:26	01/29/18 16:50	1
PCB-1260	ND		0.20	0.094	mg/Kg		01/29/18 08:26	01/29/18 16:50	1

Surrogate	MB		Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
Tetrachloro-m-xylene	88		60 - 154	01/29/18 08:26	01/29/18 16:50	1
DCB Decachlorobiphenyl	83		65 - 174	01/29/18 08:26	01/29/18 16:50	1

Lab Sample ID: LCS 480-397683/2-A
Matrix: Solid
Analysis Batch: 397728

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397683

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec. Limits
		Result	Qualifier				
PCB-1016	1.74	2.24		mg/Kg		128	51 - 185
PCB-1260	1.74	1.78		mg/Kg		102	61 - 184

Surrogate	LCS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	134		60 - 154
DCB Decachlorobiphenyl	90		65 - 174

Lab Sample ID: 480-130646-3 MS
Matrix: Solid
Analysis Batch: 397728

Client Sample ID: SB-4 (3"-1')
Prep Type: Total/NA
Prep Batch: 397683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec. Limits
				Result	Qualifier				
PCB-1016	ND		2.12	2.31		mg/Kg	☼	109	50 - 177
PCB-1260	ND	F2	2.12	1.43		mg/Kg	☼	67	33 - 200

Surrogate	MS		Limits
	%Recovery	Qualifier	
Tetrachloro-m-xylene	110		60 - 154
DCB Decachlorobiphenyl	76		65 - 174

TestAmerica Buffalo

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Method: 8082A - Polychlorinated Biphenyls (PCBs) by Gas Chromatography (Continued)

Lab Sample ID: 480-130646-3 MSD

Matrix: Solid

Analysis Batch: 397728

Client Sample ID: SB-4 (3"-1')

Prep Type: Total/NA

Prep Batch: 397683

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
PCB-1016	ND		2.56	3.44		mg/Kg	☼	134	50 - 177	40	50
PCB-1260	ND	F2	2.56	2.43	F4	mg/Kg	☼	95	33 - 200	52	50
Surrogate	%Recovery	MSD Qualifier	Limits								
Tetrachloro-m-xylene	123		60 - 154								
DCB Decachlorobiphenyl	87		65 - 174								

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-397745/1-A

Matrix: Solid

Analysis Batch: 398110

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 397745

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Arsenic	ND		1.9		mg/Kg		01/29/18 13:30	01/30/18 17:38	1
Barium	ND		0.48		mg/Kg		01/29/18 13:30	01/30/18 17:38	1
Cadmium	ND		0.19		mg/Kg		01/29/18 13:30	01/30/18 17:38	1
Chromium	ND		0.48		mg/Kg		01/29/18 13:30	01/30/18 17:38	1
Lead	ND		0.96		mg/Kg		01/29/18 13:30	01/30/18 17:38	1
Selenium	ND		3.8		mg/Kg		01/29/18 13:30	01/30/18 17:38	1
Silver	ND		0.58		mg/Kg		01/29/18 13:30	01/30/18 17:38	1

Lab Sample ID: LCSSRM 480-397745/2-A

Matrix: Solid

Analysis Batch: 398110

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 397745

Analyte	Spike Added	LCSSRM	LCSSRM	Unit	D	%Rec	%Rec.	Limits
		Result	Qualifier					
Arsenic	149	125.6		mg/Kg		84.5	69.9 - 132.9	
Barium	104	94.15		mg/Kg		90.7	71.5 - 136.3	
Cadmium	64.3	58.73		mg/Kg		91.3	73.3 - 141.5	
Chromium	90.9	86.81		mg/Kg		95.5	69.1 - 143.3	
Lead	100	99.44		mg/Kg		99.2	70.8 - 137.1	
Selenium	138	122.9		mg/Kg		88.8	67.1 - 136.8	
Silver	49.8	43.39		mg/Kg		87.2	66.5 - 139.5	

QC Sample Results

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-398119/1-A

Matrix: Solid

Analysis Batch: 398339

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 398119

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		02/01/18 11:55	02/01/18 14:45	1

Lab Sample ID: LCSSRM 480-398119/2-A ^10

Matrix: Solid

Analysis Batch: 398339

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 398119

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.6	11.55		mg/Kg		91.7	44.4 - 128.6

Lab Sample ID: 480-130646-3 MS

Matrix: Solid

Analysis Batch: 398339

Client Sample ID: SB-4 (3"-1')

Prep Type: Total/NA

Prep Batch: 398119

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.044	F1	0.362	0.914	E F1	mg/Kg	✱	240	80 - 120

Lab Sample ID: 480-130646-3 MSD

Matrix: Solid

Analysis Batch: 398339

Client Sample ID: SB-4 (3"-1')

Prep Type: Total/NA

Prep Batch: 398119

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.044	F1	0.379	0.915	F1	mg/Kg	✱	230	80 - 120	0	20

QC Association Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

GC/MS VOA

Analysis Batch: 398242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	8260C	398269
480-130646-2	SB-2 (10-12')	Total/NA	Solid	8260C	398269
480-130646-8	SB-9 (8-10')	Total/NA	Solid	8260C	398269
MB 480-398269/2-A	Method Blank	Total/NA	Solid	8260C	398269
LCS 480-398269/1-A	Lab Control Sample	Total/NA	Solid	8260C	398269

Prep Batch: 398269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	5035A_L	
480-130646-2	SB-2 (10-12')	Total/NA	Solid	5035A_L	
480-130646-8	SB-9 (8-10')	Total/NA	Solid	5035A_L	
MB 480-398269/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-398269/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

GC/MS Semi VOA

Prep Batch: 397787

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	3550C	
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	3550C	
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	3550C	
480-130646-5	SB-6 (9"-2')	Total/NA	Solid	3550C	
480-130646-6	SB-7 (3"-9")	Total/NA	Solid	3550C	
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	3550C	
MB 480-397787/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-397787/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 397943

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-6	SB-7 (3"-9")	Total/NA	Solid	8270D	397787
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	8270D	397787
MB 480-397787/1-A	Method Blank	Total/NA	Solid	8270D	397787
LCS 480-397787/2-A	Lab Control Sample	Total/NA	Solid	8270D	397787

Analysis Batch: 398135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	8270D	397787
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	8270D	397787
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	8270D	397787
480-130646-5	SB-6 (9"-2')	Total/NA	Solid	8270D	397787

GC Semi VOA

Prep Batch: 397683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	3550C	
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	3550C	
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	3550C	
MB 480-397683/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-397683/2-A	Lab Control Sample	Total/NA	Solid	3550C	

TestAmerica Buffalo

QC Association Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

GC Semi VOA (Continued)

Prep Batch: 397683 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-3 MS	SB-4 (3"-1')	Total/NA	Solid	3550C	
480-130646-3 MSD	SB-4 (3"-1')	Total/NA	Solid	3550C	

Analysis Batch: 397728

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	8082A	397683
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	8082A	397683
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	8082A	397683
MB 480-397683/1-A	Method Blank	Total/NA	Solid	8082A	397683
LCS 480-397683/2-A	Lab Control Sample	Total/NA	Solid	8082A	397683
480-130646-3 MS	SB-4 (3"-1')	Total/NA	Solid	8082A	397683
480-130646-3 MSD	SB-4 (3"-1')	Total/NA	Solid	8082A	397683

Metals

Prep Batch: 397745

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	3050B	
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	3050B	
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	3050B	
480-130646-5	SB-6 (9"-2')	Total/NA	Solid	3050B	
480-130646-6	SB-7 (3"-9")	Total/NA	Solid	3050B	
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	3050B	
MB 480-397745/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-397745/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Analysis Batch: 398110

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	6010C	397745
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	6010C	397745
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	6010C	397745
480-130646-5	SB-6 (9"-2')	Total/NA	Solid	6010C	397745
480-130646-6	SB-7 (3"-9")	Total/NA	Solid	6010C	397745
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	6010C	397745
MB 480-397745/1-A	Method Blank	Total/NA	Solid	6010C	397745
LCSSRM 480-397745/2-A	Lab Control Sample	Total/NA	Solid	6010C	397745

Prep Batch: 398119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	7471B	
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	7471B	
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	7471B	
480-130646-5	SB-6 (9"-2')	Total/NA	Solid	7471B	
480-130646-6	SB-7 (3"-9")	Total/NA	Solid	7471B	
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	7471B	
MB 480-398119/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-398119/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-130646-3 MS	SB-4 (3"-1')	Total/NA	Solid	7471B	
480-130646-3 MSD	SB-4 (3"-1')	Total/NA	Solid	7471B	

TestAmerica Buffalo

QC Association Summary

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Metals (Continued)

Analysis Batch: 398339

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	7471B	398119
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	7471B	398119
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	7471B	398119
480-130646-5	SB-6 (9"-2')	Total/NA	Solid	7471B	398119
480-130646-6	SB-7 (3"-9")	Total/NA	Solid	7471B	398119
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	7471B	398119
MB 480-398119/1-A	Method Blank	Total/NA	Solid	7471B	398119
LCSSRM 480-398119/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	398119
480-130646-3 MS	SB-4 (3"-1')	Total/NA	Solid	7471B	398119
480-130646-3 MSD	SB-4 (3"-1')	Total/NA	Solid	7471B	398119

General Chemistry

Analysis Batch: 397775

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-1	SB-1 (36"-1')	Total/NA	Solid	Moisture	
480-130646-3	SB-4 (3"-1')	Total/NA	Solid	Moisture	
480-130646-4	SB-5 (3"-1')	Total/NA	Solid	Moisture	
480-130646-5	SB-6 (9"-2')	Total/NA	Solid	Moisture	
480-130646-6	SB-7 (3"-9")	Total/NA	Solid	Moisture	
480-130646-7	SB-8 (3"-1')	Total/NA	Solid	Moisture	

Analysis Batch: 398342

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130646-2	SB-2 (10-12')	Total/NA	Solid	Moisture	
480-130646-8	SB-9 (8-10')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-1 (36"-1')

Lab Sample ID: 480-130646-1

Date Collected: 01/25/18 08:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	397775	01/29/18 13:02	MJH	TAL BUF

Client Sample ID: SB-1 (36"-1')

Lab Sample ID: 480-130646-1

Date Collected: 01/25/18 08:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 89.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			398269	02/01/18 09:58	AEM	TAL BUF
Total/NA	Analysis	8260C		1	398242	02/01/18 13:47	CDC	TAL BUF
Total/NA	Prep	3550C			397787	01/29/18 14:08	BEK	TAL BUF
Total/NA	Analysis	8270D		20	398135	01/31/18 15:46	DMR	TAL BUF
Total/NA	Prep	3050B			397745	01/29/18 13:30	SMF	TAL BUF
Total/NA	Analysis	6010C		1	398110	01/30/18 18:15	AMH	TAL BUF
Total/NA	Prep	7471B			398119	02/01/18 11:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	398339	02/01/18 14:52	BMB	TAL BUF

Client Sample ID: SB-2 (10-12')

Lab Sample ID: 480-130646-2

Date Collected: 01/25/18 09:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	398342	02/01/18 16:02	CDC	TAL BUF

Client Sample ID: SB-2 (10-12')

Lab Sample ID: 480-130646-2

Date Collected: 01/25/18 09:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 95.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			398269	02/01/18 09:58	AEM	TAL BUF
Total/NA	Analysis	8260C		1	398242	02/01/18 14:13	CDC	TAL BUF

Client Sample ID: SB-4 (3"-1')

Lab Sample ID: 480-130646-3

Date Collected: 01/25/18 10:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	397775	01/29/18 13:02	MJH	TAL BUF

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-4 (3"-1')

Lab Sample ID: 480-130646-3

Date Collected: 01/25/18 10:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 87.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			397787	01/29/18 14:08	BEK	TAL BUF
Total/NA	Analysis	8270D		20	398135	01/31/18 16:13	DMR	TAL BUF
Total/NA	Prep	3550C			397683	01/29/18 08:26	NMC	TAL BUF
Total/NA	Analysis	8082A		1	397728	01/29/18 17:54	JMO	TAL BUF
Total/NA	Prep	3050B			397745	01/29/18 13:30	SMF	TAL BUF
Total/NA	Analysis	6010C		1	398110	01/30/18 18:18	AMH	TAL BUF
Total/NA	Prep	7471B			398119	02/01/18 11:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	398339	02/01/18 14:53	BMB	TAL BUF

Client Sample ID: SB-5 (3"-1')

Lab Sample ID: 480-130646-4

Date Collected: 01/25/18 11:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	397775	01/29/18 13:02	MJH	TAL BUF

Client Sample ID: SB-5 (3"-1')

Lab Sample ID: 480-130646-4

Date Collected: 01/25/18 11:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 83.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			397787	01/29/18 14:08	BEK	TAL BUF
Total/NA	Analysis	8270D		10	398135	01/31/18 16:39	DMR	TAL BUF
Total/NA	Prep	3550C			397683	01/29/18 08:26	NMC	TAL BUF
Total/NA	Analysis	8082A		1	397728	01/29/18 18:10	JMO	TAL BUF
Total/NA	Prep	3050B			397745	01/29/18 13:30	SMF	TAL BUF
Total/NA	Analysis	6010C		1	398110	01/30/18 18:22	AMH	TAL BUF
Total/NA	Prep	7471B			398119	02/01/18 11:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	398339	02/01/18 15:02	BMB	TAL BUF

Client Sample ID: SB-6 (9"-2')

Lab Sample ID: 480-130646-5

Date Collected: 01/25/18 12:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	397775	01/29/18 13:02	MJH	TAL BUF

Client Sample ID: SB-6 (9"-2')

Lab Sample ID: 480-130646-5

Date Collected: 01/25/18 12:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			397787	01/29/18 14:08	BEK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Client Sample ID: SB-6 (9"-2')

Lab Sample ID: 480-130646-5

Date Collected: 01/25/18 12:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 78.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		20	398135	01/31/18 17:05	DMR	TAL BUF
Total/NA	Prep	3050B			397745	01/29/18 13:30	SMF	TAL BUF
Total/NA	Analysis	6010C		1	398110	01/30/18 18:26	AMH	TAL BUF
Total/NA	Prep	7471B			398119	02/01/18 11:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	398339	02/01/18 15:04	BMB	TAL BUF

Client Sample ID: SB-7 (3"-9")

Lab Sample ID: 480-130646-6

Date Collected: 01/25/18 13:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	397775	01/29/18 13:02	MJH	TAL BUF

Client Sample ID: SB-7 (3"-9")

Lab Sample ID: 480-130646-6

Date Collected: 01/25/18 13:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			397787	01/29/18 14:08	BEK	TAL BUF
Total/NA	Analysis	8270D		20	397943	01/30/18 21:19	DMR	TAL BUF
Total/NA	Prep	3050B			397745	01/29/18 13:30	SMF	TAL BUF
Total/NA	Analysis	6010C		1	398110	01/30/18 18:30	AMH	TAL BUF
Total/NA	Prep	7471B			398119	02/01/18 11:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	398339	02/01/18 15:05	BMB	TAL BUF

Client Sample ID: SB-8 (3"-1')

Lab Sample ID: 480-130646-7

Date Collected: 01/25/18 14:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	397775	01/29/18 13:02	MJH	TAL BUF

Client Sample ID: SB-8 (3"-1')

Lab Sample ID: 480-130646-7

Date Collected: 01/25/18 14:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 87.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			397787	01/29/18 14:08	BEK	TAL BUF
Total/NA	Analysis	8270D		5	397943	01/30/18 21:45	DMR	TAL BUF
Total/NA	Prep	3550C			397683	01/29/18 08:26	NMC	TAL BUF
Total/NA	Analysis	8082A		1	397728	01/29/18 18:26	JMO	TAL BUF
Total/NA	Prep	3050B			397745	01/29/18 13:30	SMF	TAL BUF
Total/NA	Analysis	6010C		1	398110	01/30/18 18:34	AMH	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
 Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7471B			398119	02/01/18 11:55	BMB	TAL BUF
Total/NA	Analysis	7471B		1	398339	02/01/18 15:06	BMB	TAL BUF

Client Sample ID: SB-9 (8-10')

Lab Sample ID: 480-130646-8

Date Collected: 01/25/18 15:00

Matrix: Solid

Date Received: 01/26/18 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	398342	02/01/18 16:02	CDC	TAL BUF

Client Sample ID: SB-9 (8-10')

Lab Sample ID: 480-130646-8

Date Collected: 01/25/18 15:00

Matrix: Solid

Date Received: 01/26/18 15:15

Percent Solids: 95.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			398269	02/01/18 09:58	AEM	TAL BUF
Total/NA	Analysis	8260C		1	398242	02/01/18 14:38	CDC	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

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: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Fine Moisture	EPA	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: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 188 West Utica

TestAmerica Job ID: 480-130646-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-130646-1	SB-1 (36"-1')	Solid	01/25/18 08:00	01/26/18 15:15
480-130646-2	SB-2 (10-12')	Solid	01/25/18 09:00	01/26/18 15:15
480-130646-3	SB-4 (3"-1')	Solid	01/25/18 10:00	01/26/18 15:15
480-130646-4	SB-5 (3"-1')	Solid	01/25/18 11:00	01/26/18 15:15
480-130646-5	SB-6 (9"-2')	Solid	01/25/18 12:00	01/26/18 15:15
480-130646-6	SB-7 (3"-9")	Solid	01/25/18 13:00	01/26/18 15:15
480-130646-7	SB-8 (3"-1')	Solid	01/25/18 14:00	01/26/18 15:15
480-130646-8	SB-9 (8-10')	Solid	01/25/18 15:00	01/26/18 15:15



Temperature on Receipt _____
 Drinking Water? Yes No

TAL-4124 (1007)

Chain of Custody Record

Client: Twinkey EAU Restoration Date: 1/25/18 Chain of Custody Number: 274024

Address: 2558 Herby Trk, Suite 300 Lab Number: _____

City: Buffalo State: NY Zip Code: 14218 Project Name and Location (State): 188 West Elm

Contract/Purchase Order/Quote No.: BO136-018-002 Lab Contact: Nick Surad Carrier/Waybill Number: _____

Project Manager: Mike Munnery / Brian Fisher Lab Contact: Brian Fisher

Telephone Number (Area Code)/Fax Number: 716-713-3937

Page 1 of 1

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix			Containers & Preservatives					Analysis (Attach list if more space is needed)	Special Instructions/ Conditions of Receipt		
			Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl			NaOH	ZnAc/NaOH
SB-1 (3"-1')	1/25/18	8:00		X	X	X	X	X	X	X	X	X	Tilt & Cr-stress	
SB-2 (10"-12')		9:00		X	X	X	X	X	X	X	X	X	CR-515 voc's	
SB-4 (3"-1')		10:00		X	X	X	X	X	X	X	X	X	PCB's	
SB-5 (3"-1.25')		11:00		X	X	X	X	X	X	X	X	X	RCRA Metals	
SB-6 (4"-2')		12:00		X	X	X	X	X	X	X	X	X		
SB-7 (3"-9")		13:00		X	X	X	X	X	X	X	X	X		
SB-8 (3"-1')		14:00		X	X	X	X	X	X	X	X	X		
SB-9 (8-16')		15:00		X	X	X	X	X	X	X	X	X		

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Disposal By Lab Archive For _____ Months

Sample Disposal
 Return To Client Disposal By Lab Archive For _____ Months

Turn Around Time Required
 24 Hours 48 Hours 7 Days 14 Days 21 Days Other _____

QC Requirements (Specify)

1. Relinquished By: Juan Kow Date: 1/26/18 Time: 14:10
 2. Relinquished By: Juan Kow Date: 1/26/18 Time: 15:15
 3. Relinquished By: _____ Date: _____ Time: _____

1. Received By: Juan Kow Date: 1/26/18 Time: 14:10
 2. Received By: Juan Kow Date: 1/26/18 Time: 15:15
 3. Received By: _____ Date: _____ Time: _____

Comments: 7.5 #1

Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-130646-1

Login Number: 130646

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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	
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.	N/A	
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	