SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT

1653-1661 MAIN STREET AND 17-21 EAST BALCOM STREET SITE
BUFFALO, NEW YORK

January 2016 0239-014-001

Prepared for:

Sinatra & Company Real Estate, LLC

Prepared By:

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

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1.0 INTRODUCTION

1.1 Background and Site Description

TurnKey Environmental Restoration, LLC (TurnKey) performed a Supplemental Phase II Environmental Investigation on behalf of Sinatra & Company Real Estate, LLC (Sinatra) at the 1653-1661 Main Street and 17-21 East Balcom Street Site, located in the City of Buffalo, Erie County, New York (see Figure 1). The Site is located in a highly developed residential and commercial area of the City Buffalo. The Site includes six (6) parcels, including:

- 1653 Main Street
- 1655 Main Street
- 1661 Main Street
- 17 East Balcom Street
- 19 East Balcom Street
- 21 East Balcom Street

The Supplemental Investigation was completed to further assess potential environmental concerns identified during previous investigation activities as part of Sinatra's due diligence for the Site.

1.2 Previous Studies

1.2.1 January 2015 – Phase I Environmental Site Assessment

TurnKey completed a Phase I Environmental Site Assessment (ESA) for the 1661 Main Street and E. Balcom Street parcels, dated January 2015. TurnKey's review of historical sources revealed that the Site had a history of residential and commercial uses/development.

The following RECs and other concerns were identified:

- A 1,000-gallon fuel oil aboveground storage tank (AST) is located in the basement boiler room of the existing building. Petroleum odors and staining was noted on the exterior of the tank as well as beneath it (petro stained wood chips present surrounding the tank). Filling and vent lines are present in the basement.

- Three (3) vent and filling pipes are located next to man-door along E. Balcom Street. It should be noted that only two (2) lines were identified in the basement related to boiler AST, likely indicating additional tank(s) present on-Site.
- City of Buffalo Building Department and Fire Prevention office records indicate the presence of at least one (1) and potentially up to three (3) underground storage tanks (USTs), and at least one (1) fuel dispenser on-Site (1661 Main Street).
- Gasoline station and automotive repair operations were identified in connection with adjacent properties (including 1653 and 1655 Main Street parcels).
- Hazardous/regulated materials are stored and utilized on-site.
- Black staining was observed to the concrete ground surface within the interior loading/unloading area, wood surfaces proximate to the northernmost elevator pulley system/motor, and on an inactive motor room noted on the seventh floor.
- 1665 (aka 1661) Main Street (American Household Storage Company) was identified as a RCRA generator of hazardous waste.
- Multiple NYSDEC Spill files are associated with the Site, including:
    - Spill No. 9702110, involving a diesel fuel release, is classified as "closed" by the NYSDEC.
    - Spill No. 9975698, involving a battery acid release, is classified as "closed" by the NYSDEC.
- Numerous closed/inactive spills were identified in connection with adjacent/nearby properties in the regulatory database.

1.2.1 April 2015 - Limited Phase II Environmental Investigation Report

TurnKey completed a Limited Phase II Environmental Investigation on the 1661 Main Street (American Storage) Site. Findings of the Limited Phase II investigation are detailed below:

- A total of seven (7) soil borings were completed across the Site, including two (2), identified as SB-1 and SB-2, completed in the basement boiler room, and five (5), identified as SB-2 through SB-7 in the exterior parking lot along E. Balcom.

- Multiple SBs, designated collectively as SB-8, were advanced along the southeast portion of the E. Balcom parking lot, adjacent to the vent/fill lines. Boring refusal was encountered at approximately 2-3 fbgs at each location, likely indicating the presence of an additional UST. Investigation activities were limited to the west by the presence of a utility (natural gas) and north, south and west by the building and property boundaries.
- Field observations of apparent petroleum contamination, including elevated PID readings (390 ppm) and petroleum odors were noted in the basement SBs.
- Petroleum-related compound, naphthalene, was detected exceeding its NYSDEC CP-51 Soil Cleanup Level (SCL).
- Based on the presence of the fuel oil tank in the basement, including staining and odors associated with the tank, and the presence of petroleum impacts beneath the basement slab, accordingly the NYSDEC Spill hotline was notified and Spill No. 1500185 was issued for the Site. The spill is active.

2.0 SUPPLEMENTAL INVESTIGATION

Based on the previous investigation findings, as described above, a supplemental investigation was completed to further assess previously identified environmental contamination on-Site. Photolog of the Supplemental Investigation is provided in Appendix A.

2.1 Interior Investigation

2.1.1 Basement Hand Core

One (1) additional subslab soil sample was collected from outside of the basement tank enclosure. Attempts to collect a sample from within the tank enclosure were unsuccessful due to space limitations.

A core drill was used to drill through the concrete basement floor and a hand auger was used to collect soil sample, identified as HC-1 (see Figure 3). Petroleum odors and elevated PID readings were noted during sample collection. The core soil sample was collected and submitted to the laboratory for analysis of volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and metals.

Analytical results indicate multiple petroleum VOCs were detected, with 1,2,4-trimethylbenzene, ethylbenzene, and xylenes exceeding CP-51 SCLs (see Table 1). Laboratory analytical data packages are provided electronically in Appendix B.

2.1.2 Floor Trench

Accumulated solids in the interior loading dock area were collected and analyzed for VOCs, SVOCs, and metals. No elevated VOCs or SVOCs were detected. Elevated metals, including arsenic, cadmium, chromium, lead and mercury, exceeding Part 375 Unrestricted Use, Residential Use, and Commercial Use soil cleanup objectives (SCOs) were detected (see Table 1).

2.2 Exterior Investigation

2.2.1 Suspect UST Exploratory Test Pit (TP-1)

During the previous investigation, an area located adjacent to the vent/fill lines on the 1661 Main Street parcel, along E. Balcom Street, experienced multiple boring refusal, indicating a potential additional UST located on-Site.

On December 10th, 2015, TurnKey mobilized a excavator to assess the subsurface obstruction with a test pit designated as TP-1. An approximate 4,500-gallon UST was uncovered. Tank includes approximately six-inches of product and water. Elevated PID and odors were noted with the tank. The NYSDEC was notified of the additional UST discovery, in association with the open Spill No. 1500185.

It should be noted that additional investigation around the tank was limited due to the presence of the building and property line along E. Balcom, and the presence of underground utilities (natural gas and communications) on both sides of the tank (see Figure 3). TurnKey was unable to advance planned test pit(s) in the vicinity of the former fuel dispenser due to access restrictions (vehicle present). Additional investigation of the tank and potential former fuel pump is recommended.

2.2.2 Test Pits (TP-2 through TP-10)

On December 10, 2015, nine (9) test pits (TPs), identified as TP-2 through TP-10 were excavated across the Site. Location are shown on Figures 2 and 3. Test pits were excavated to 10-12 fbgs, and soil descriptions were completed in the field via visual characterization of excavated soils and test pit excavation faces using the Unified Soil Classification System (USCS), and scanned for total VOCs with a hand held photoionization detector (PID). Soil samples were collected selectively from the TPs to further assess the Site.

2.3 Laboratory Analysis

Soil samples were placed in pre-cleaned, laboratory provided sample bottles using dedicated stainless steel sampling tools, and cooled to 4° C in the field. The samples were transported under chain-of-custody command to TestAmerica Buffalo, located in Amherst, NY for analysis. Samples were analyzed for Commissioner Policy-51 (CP-51) VOCs, CP-51

SVOCs, and Resource Conservation and Recovery Act (RCRA) metals, respectively. Laboratory analytical data packages are included electronically in Appendix B. Results are discussed below.

3.0 INVESTIGATION FINDINGS

Ten test pits (TP-1 through TP-10), and two interior investigation locations (HC-1 and Floor Trench) were completed to supplemental previous investigations. Table 1 summarizes the laboratory analytical results, and Figure 3 identifies the investigation locations. A photolog is provided in Appendix A and laboratory analytical data packages are provided electronically in Appendix B.

3.1 Qualitative Soil/Fill Screening/Geology

Soil samples were screened via headspace for VOCs using a hand held PID, with measurements ranging from 0.0 ppm (background) to 190 ppm. Petroleum odors were noted in the field at several locations, including HC-1, TP-1, and TP-10.

In general, the upper 12-inches of surface cover is described as a mixture of asphalt/concrete with associated subbase, and/or soil/fill, including concrete, brick and gravel. Subsurface soil/fill can be generally described as fill ranging from 0-6 fbgs consisting of silty clay and sand, with gravel, brick, block, concrete, glass, wood and cinders, underlain by a reworked clay-sand, with some fill to approximately 10-12 fbgs. Sandy clay was encountered ranging from 8-12 fbgs.

Subgrade soil-fill underlying the 17, 19, and 21 E. Balcom Street parcels is similarly described as grey-black soil-fill, including building debris (brick, block, glass) and cinders ranging in depth from 4-6 fbgs, overlying a reddish-brown clay. Samples were collected from the soil-fill interval from select TPs to characterize the underlying fill material. Analytical results are described below.

3.2 Soil Analytical Results

Nine (9) soil samples were collected and submitted to the laboratory for analysis. Table 1 presents a summary of the analytical results with comparison to 6NYCRR Part 375 Soil Cleanup Objectives (SCOs) and NYSDEC CP-51 SCLs. As indicated on Table 1, analytical results indicate exceedance of the Unrestricted Use (USCOs), Residential Use (RSCOs) and/or Commercial Use (CSCOs) con, and CP-51 SCLs, including:

- Elevated metals, including arsenic, cadmium, chromium, lead and mercury above USCOs, RSCOs, and/or CSOCs;

- Elevated polycyclic aromatic hydrocarbons (PAHs) exceeding the RSCOs and CSCOs; and,
- Elevated petroleum VOCs exceeding CP-51 SCLs, and the presence of elevated PID and petroleum odors.

4.0 CONCLUSIONS AND RECOMMENDATIONS

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

- An additional approximate 4,500 gallon UST was discovered in the 1661 Main Street parcel, E. Balcom parking lot. Additional assessment of the tank was limited by the presence of subgrade utilities along the sides of the tank, the building, and the property boundary. Investigation of the former fuel pump was limited due to vehicle restricting access.
- Since the Site is intended for future residential use, completion of a Soil Vapor Intrusion (SVI) investigation should be considered.
- Field observations of apparent petroleum contamination, including elevated PID readings and petroleum odors were noted on the 1655 and 1661 Main Street parcels TP locations.
- Elevated metals, including arsenic, cadmium, chromium, lead and mercury, some exceeding CSCOs, were detected across the Site. Elevated metals are likely associated with fill that was identified Site-wide from surface to 10 fbgs.
- Based on the findings of the completed investigations, Site remediation appears warranted. The two (2) known tanks, one (1) AST in the basement and one (1) UST in the 1661 Main Street parking lot, and appurtenant piping, should be removed in accordance with NYSDEC protocols and impacted soil encountered in the area of these structures should be properly handled.
- Based on the elevated concentration of metals and PAHs in the upper 8-10 ft. across the Site, any soil-fill excavated during redevelopment for utilities or building foundations will need to be handle as a solid waste, and disposed off-site, in accordance with NYSDEC and City of Buffalo guidelines. Any excavated material needs to be handled in accordance with all local, state and federal regulations.
- Additional investigation and/or remediation will be required to address NYSDEC Spill No. 1500185.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of Sinatra & Company Real Estate, 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 Sinatra & Company Real Estate, LLC. Use of or reliance on this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

TABLE

TABLE 1

SUMMARY OF SOIL/FILL SAMPLE ANALYTICAL RESULTS
SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT

1653-1661 Main Street & 17-21 East Balcom Street Site
Buffalo, New York

PARAMETER[1]	Unrestricted Use SCOs [2]	Residential Use SCOs [2]	Commercial Use SCOs [2]	Sample Location (depth)								
				FLOOR TRENCH	HC-1	TP-1 (1-4')	TP-2 (1-3')	TP-3 (1-6')	TP-4 (1-4')	TP-8 (1-3')	TP-9 (3-6')	TP-10 (10-11')
				5/27/2015		12/10/2015						
Volatile Organic Compounds (VOCs) - mg/Kg [3]												
1,2,4-Trimethylbenzene	**3.6**	**47**	**190**	ND	**13**	ND	--	--	--	--	--	ND
1,3,5-Trimethylbenzene	**8.4**	**47**	**190**	ND	3.6	ND	--	--	--	--	--	ND
4-Isopropyltoluene	**--**	**--**	**--**	ND	1.3	ND	--	--	--	--	--	ND
Acetone	**0.05**	**100**	**500**	0.0056 J	ND	ND	--	--	--	--	--	**0.057 B**
Benzene	**0.06**	**2.9**	**44**	ND	ND	ND	--	--	--	--	--	ND
Chloroform	**0.37**	**10**	**350**	ND	ND	0.00034 J	--	--	--	--	--	ND
Ethylbenzene	**1**	**30**	**390**	ND	**1.3**	ND	--	--	--	--	--	ND
Isopropylbenzene (Cumene)	**--**	**--**	**--**	ND	0.66	ND	--	--	--	--	--	ND
Methylene chloride	**0.05**	**51**	**500**	0.0057 B	ND	ND	--	--	--	--	--	ND
n-Butylbenzene	**12**	**100**	**500**	ND	3.6	ND	--	--	--	--	--	ND
n-Propylbenzene	**3.9**	**100**	**500**	ND	1.6	ND	--	--	--	--	--	ND
p-Cymene (p-isopropyltoluene)	**--**	**--**	**--**	ND	ND	ND	--	--	--	--	--	ND
sec-Butylbenzene	**11**	**100**	**500**	ND	1.2	ND	--	--	--	--	--	ND
Toluene	**0.7**	**100**	**500**	ND	ND	ND	--	--	--	--	--	ND
Total Xylenes	**0.26**	**100**	**500**	ND	**2.6**	ND	--	--	--	--	--	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]												
Acenaphthene	**20**	**100**	**500**	ND	ND	ND	ND	ND	ND	0.18 J	0.16 J	1.1
Acenaphthylene	**100**	**100**	**500**	ND	ND	ND	ND	ND	ND	0.12 J	ND	ND
Anthracene	**100**	**100**	**500**	ND	ND	ND	ND	ND	ND	0.83 J	0.67 J	2.7
Benzo(a)anthracene	**1**	**1**	**5.6**	ND	ND	ND	ND	ND	**4.3 J**	**2.6**	**3.1**	**6.3**
Benzo(a)pyrene	**1**	**1**	**1**	ND	ND	ND	ND	ND	**4.6 J**	**2.1**	**2**	**5.1**
Benzo(b)fluoranthene	**1**	**1**	**5.6**	ND	ND	ND	ND	ND	**8.2 J**	**2.7**	**2.6 K**	**8.5**
Benzo(ghi)perylene	**100**	**100**	**500**	ND	ND	ND	ND	ND	3.8 J	1.5	1.5	4.2
Benzo(k)fluoranthene	**0.8**	**1**	**56**	ND	ND	ND	ND	ND	ND	**1.1**	**1.7**	ND
Bis(2-ethylhexyl) phthalate	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	ND	0.5 J	ND
Carbazole	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	0.38 J	0.27 J	1.3
Chrysene	**1**	**1**	**56**	ND	ND	ND	ND	ND	**4.8 J**	**2.4**	**3**	**5.7**
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dibenzofuran	**--**	**--**	**--**	ND	ND	ND	ND	ND	ND	0.21 J	ND	0.82
Fluoranthene	**100**	**100**	**500**	10 J	ND	ND	ND	1.7 J	12	4.8	6.1	15
Fluorene	**30**	**100**	**500**	ND	0.23 J	ND	ND	ND	ND	0.24 J	ND	1.4 J
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	ND	ND	ND	ND	ND	**3.3 J**	**1.3**	**1.2**	**3.7**
Naphthalene	**12**	**100**	**500**	ND	0.31 J	ND	ND	ND	ND	ND	ND	ND
Phenanthrene	**100**	**100**	**500**	ND	0.46 J	ND	ND	ND	7.5 J	3.7	2.6	10
Pyrene	**100**	**100**	**500**	8.8 J	ND	ND	ND	ND	9.9	4	5.3	13
Metals - mg/Kg												
Arsenic	**13**	**16**	**16**	**19.1**	ND	5.1	2.3	**15.1**	3.3	8.1	**17**	7
Barium	**350**	**350**	**400**	144	39.1	24.3	109	**2460**	204	83.4	77.1	103
Cadmium	**2.5**	**2.5**	**9.3**	**3.2**	0.22	0.36	ND	2.1	0.38	0.37	0.73	0.75
Chromium	**30**	**36**	**1500**	**94.1**	7	8.4	9	**35.2**	9.8	10.2	**65**	18.4
Lead	**63**	**400**	**1000**	**434**	9.7	31.6	9.4	**2820**	107	174	190	72
Mercury	**0.18**	**0.81**	**2.8**	**0.75 F1**	ND	ND	ND	**0.27**	0.11	**0.37**	**0.21**	**0.24**

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

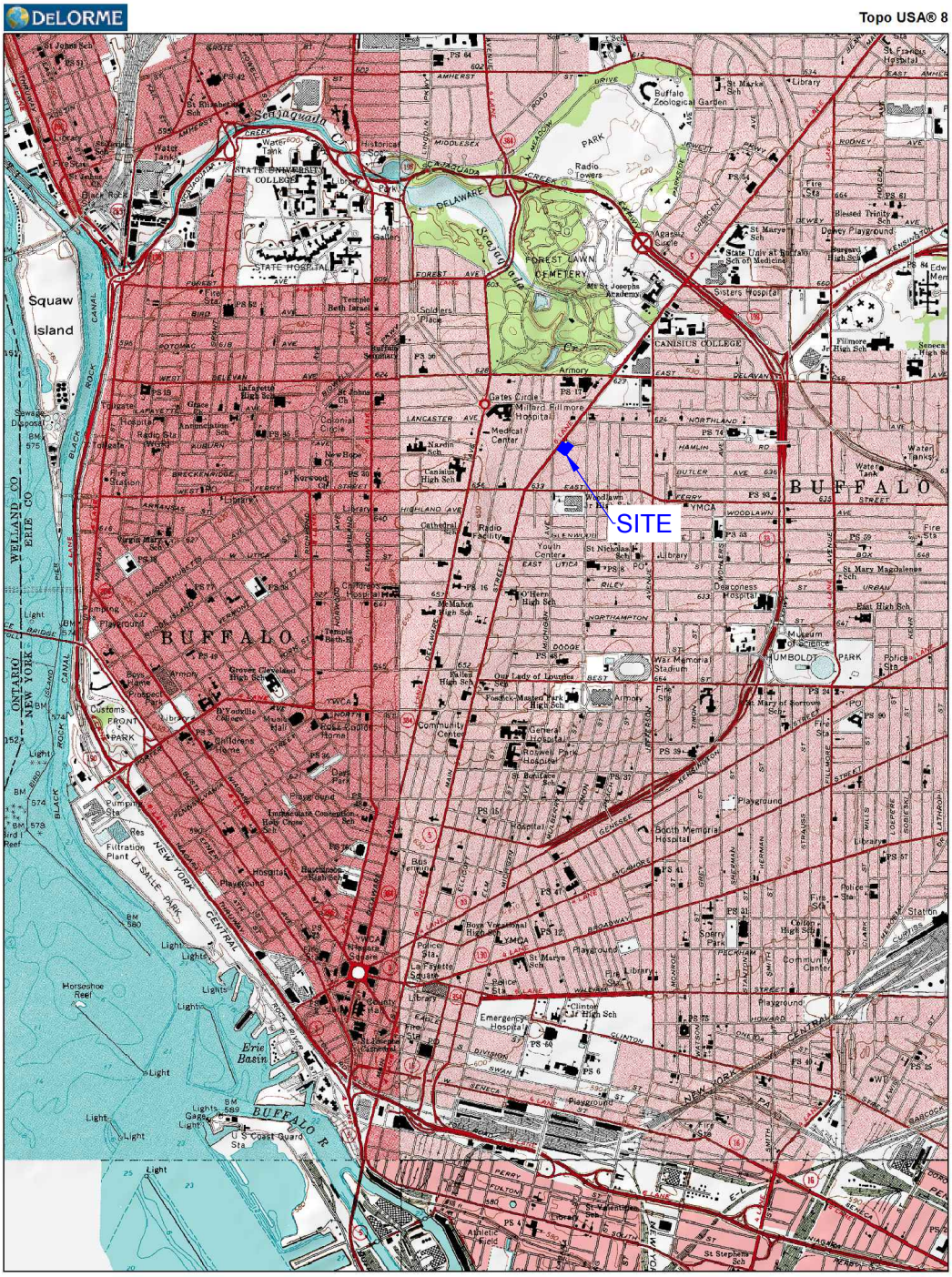
Definitions:
ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter; Parameter not analyzed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
D = Indicates laboratory dilution.
K = Benzo(b&k)fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene
F1 = MS and/or MSD Recovery is outside acceptance limits

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

FIGURES

F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\Supplemental Phase II Investigation Report\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



TurnKey Environmental Restoration, LLC

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BUFFALO, NY 14218
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PROJECT NO.: 0239-014-001

DATE: JANUARY 2016

DRAFTED BY: BLR/CCB

SITE LOCATION AND VICINITY MAP

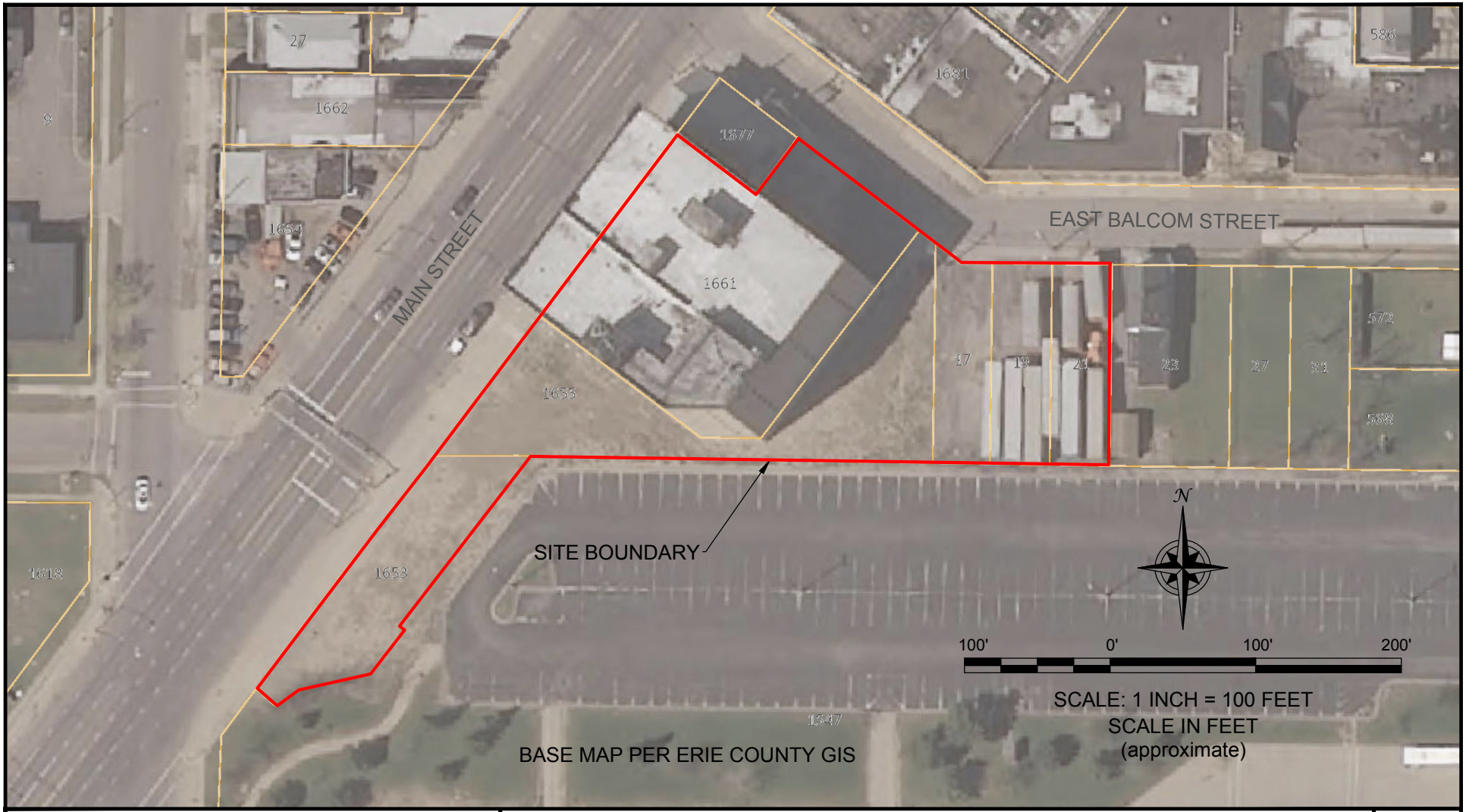
SUPPLEMENTAL PHASE II ENV. INVESTIGATION REPORT

1653-1661 MAIN STREET & 17-21 E. BALCOM STREET
BUFFALO, NEW YORK

PREPARED FOR

SINATRA & COMPANY REAL ESTATE, LLC

F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\Supplemental Phase II Investigation Report\Figure 2; Site Plan (Aerial).dwg



TURNKEY ENVIRONMENTAL RESTORATION, LLC

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SITE PLAN (AERIAL)

SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT

1653-1661 MAIN ST. & 17-19 E. BALCOM STREET

BUFFALO, NEW YORK

PREPARED FOR

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FIGURE 2

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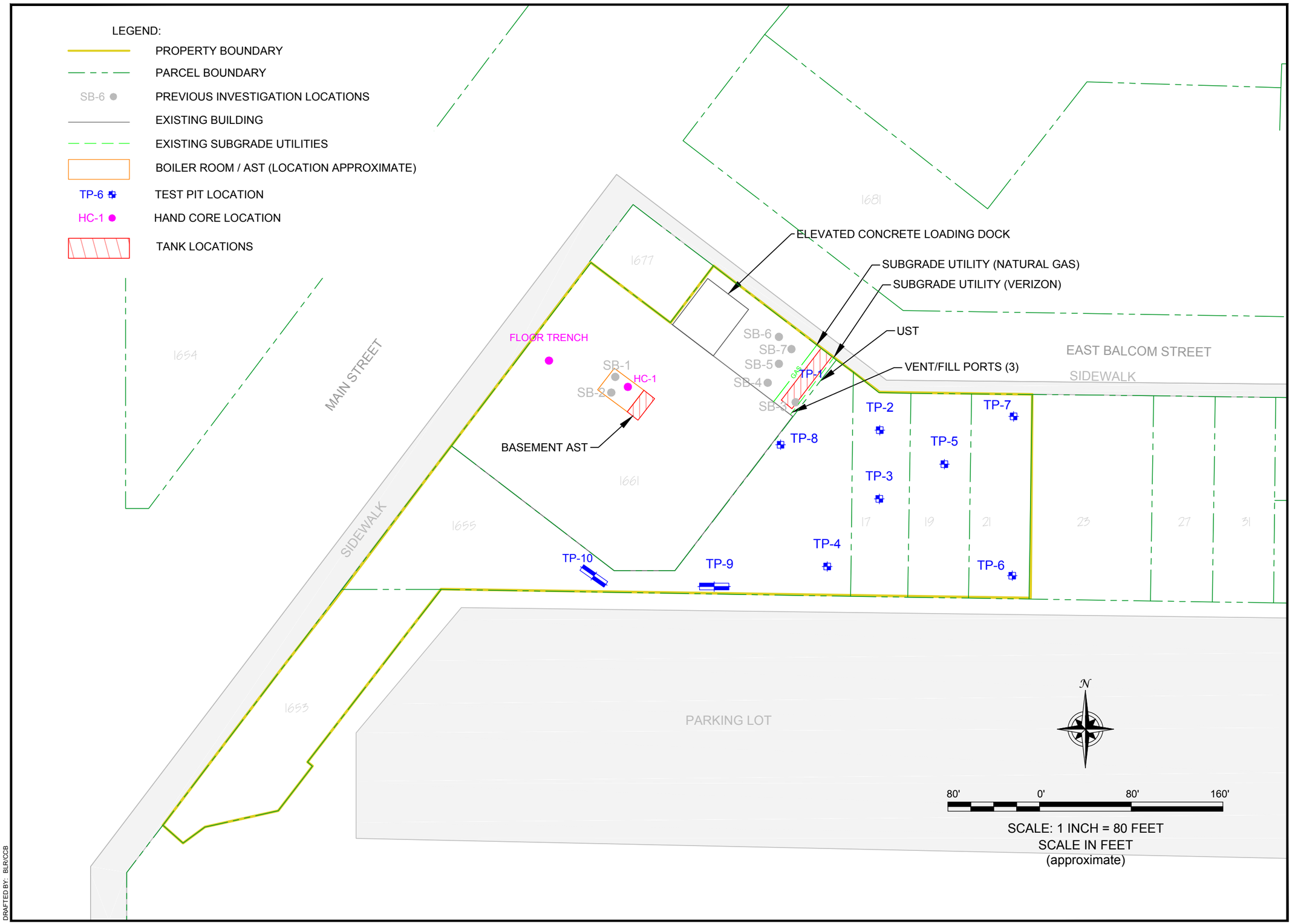
F:\CAD\TurnKey\Sinatra\1653-1661 Main Street Site\Supplemental Phase II Investigation Report\Figure 3; Sample Location Map.dwg

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- SB-6 ● PREVIOUS INVESTIGATION LOCATIONS
- EXISTING BUILDING
- EXISTING SUBGRADE UTILITIES
- BOILER ROOM / AST (LOCATION APPROXIMATE)
- TP-6 ✜ TEST PIT LOCATION
- HC-1 ● HAND CORE LOCATION
- TANK LOCATIONS



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TURNKEY ENVIRONMENTAL RESTORATION, LLC

JOB NO.: 0239-014-001

SUPPLEMENTAL INVESTIGATION SAMPLE LOCATIONS

SUPPLEMENTAL PHASE II ENVIRONMENTAL INVESTIGATION REPORT
1653-1661 MAIN STREET & 17-21 E. BALCOM STREET
BUFFALO, NEW YORK
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FIGURE 3

APPENDIX A

PHOTOLOG

SITE PHOTOGRAPHS

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: Three (3) vent and filling pipes (looking southwest).

Photo 2: Approximate 1,000 gallon fuel oil AST located in the basement (note spill/staining).

Photo 3: Approximate 4,500 gallon UST (TP-1) (top of tank).

Photo 4: 1661 Main Street Parcel – Area of 4,500 gallon UST and TP-1 (looking south).

SITE PHOTOGRAPHS

Photo 5:

Photo 6:

Photo 5: Example of Test Pit (TP-4) with fill material (looking south).

Photo 6: Example of Test Pit.

APPENDIX B

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: 480-81136-1
Client Project/Site: Benchmark - 1661 Main St.site

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

Attn: Mr. Michael Lesakowski

Joseph V. Giacomazza

Authorized for release by:
6/8/2015 12:30:51 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

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	ISTD response or retention time outside acceptable limits
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.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
*	LCS or LCSD is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC/MS 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.

Metals

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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)

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Job ID: 480-81136-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-81136-1

Receipt
The samples were received on 5/28/2015 11:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-245120 recovered above the upper control limit for 2-Hexanone. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following sample is impacted: FLOOR TRENCH (480-81136-1).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-245120 recovered outside acceptance criteria, low biased, for Benzene. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated sample was not detected above the reporting limit for this analyte, the data have been reported for the following samples: FLOOR TRENCH (480-81136-1) .

Method(s) 8260C: The method blank for 480-245182 contained Methylene Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of the following sample was not performed: FLOOR TRENCH (480-81136-1) .

Method(s) 8260C: Reported analyte concentrations in the following samples are below 200 ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: FLOOR TRENCH (480-81136-1), (480-81136-B-1-C MS) and (480-81136-B-1-D MSD).

Method(s) 8260C: Internal standard (ISTD) response for the following samples were outside control limits: FLOOR TRENCH (480-81136-1), (480-81136-B-1-C MS) and (480-81136-B-1-D MSD). The samples were re-analyzed with concurring results, and the second set of data has been reported.

Method(s) 8260C: Surrogate recovery for the following samples was outside control limits: FLOOR TRENCH (480-81136-1), (480-81136-B-1-C MS) and (480-81136-B-1-D MSD). Re-analysis was performed with concurring results. The second analysis has been reported.

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for 480-245182 were outside control limits. Sample non-homogeneity is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. (480-81136-B-1-C MS) and (480-81136-B-1-D MSD)

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-245629 recovered above the upper control limit for sec-Butylbenzene. The sample associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported. The following sample was impacted: HC-1 (480-81136-2).

Method(s) 8260C: The laboratory control sample (LCS) for batch 480-245684 recovered outside control limits for the following analytes: 4-Isopropyltoluene, tert-Butylbenzene, sec-Butylbenzene, n-Butylbenzene and 1,3,5-Trimethylbenzene. These were not requested spike compounds; therefore, the data have been qualified and reported. The following sample was impacted HC-1 (480-81136-2)

Method(s) 8260C: The following sample was analyzed using medium level soil analysis to bring the concentration of target analytes within the calibration range: HC-1 (480-81136-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The continuing calibration verification (CCV) analyzed in batch 480-245629 was outside the method criteria for the following analytes: 4-Isopropyltoluene; 1,3,5-Trimethylbenzene, n-Butylbenzene. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analytes is considered estimated.HC-1 (480-81136-2)

Method(s) 8260C: The following samples were analyzed using medium level soil analysis due to the nature of the sample's matrix: (480-81136-B-2-C MS) and (480-81136-B-2-D MSD). Elevated reporting limits (RLs) are provided.

Job ID: 480-81136-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

GC/MS Semi VOA
Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: FLOOR TRENCH (480-81136-1). As such, surrogate recoveries are below the calibration range or are not reported, and elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: HC-1 (480-81136-2). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The following sample was diluted due to viscosity: FLOOR TRENCH (480-81136-1). Elevated reporting limits (RL) are provided.

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
Method(s) 3550C: Due to the matrix, the following sample could not be concentrated to the final method required volume: FLOOR TRENCH (480-81136-1). The reporting limits (RLs) are elevated proportionately.

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Client Sample ID: FLOOR TRENCH — Lab Sample ID: 480-81136-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.6	J	28	4.6	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	5.7	B	5.5	2.5	ug/Kg	1	☼	8260C	Total/NA
Fluoranthene	10000	J	59000	6300	ug/Kg	20	☼	8270D	Total/NA
Pyrene	8800	J	59000	7000	ug/Kg	20	☼	8270D	Total/NA
Arsenic	19.1		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	144		0.55		mg/Kg	1	☼	6010C	Total/NA
Cadmium	3.2		0.22		mg/Kg	1	☼	6010C	Total/NA
Chromium	94.1		0.55		mg/Kg	1	☼	6010C	Total/NA
Lead	434		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.75	F1	0.020		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HC-1 — Lab Sample ID: 480-81136-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	13000		490	140	ug/Kg	4	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	3600	*	490	150	ug/Kg	4	☼	8260C	Total/NA
4-Isopropyltoluene	1300	*	490	170	ug/Kg	4	☼	8260C	Total/NA
Ethylbenzene	1300		490	140	ug/Kg	4	☼	8260C	Total/NA
Isopropylbenzene	660		490	74	ug/Kg	4	☼	8260C	Total/NA
m-Xylene & p-Xylene	2600		990	270	ug/Kg	4	☼	8260C	Total/NA
n-Butylbenzene	3600	*	490	140	ug/Kg	4	☼	8260C	Total/NA
N-Propylbenzene	1600		490	130	ug/Kg	4	☼	8260C	Total/NA
sec-Butylbenzene	1200	*	490	180	ug/Kg	4	☼	8260C	Total/NA
Xylenes, Total	2600		990	270	ug/Kg	4	☼	8260C	Total/NA
Fluorene	230	J	990	120	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	310	J	990	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	460	J	990	150	ug/Kg	5	☼	8270D	Total/NA
Barium	39.1		0.56		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.22		0.22		mg/Kg	1	☼	6010C	Total/NA
Chromium	7.0		0.56		mg/Kg	1	☼	6010C	Total/NA
Lead	9.7		1.1		mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: FLOOR TRENCH

Date Collected: 05/27/15 11:05
Date Received: 05/28/15 11:30

Lab Sample ID: 480-81136-1
Matrix: Solid
Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.5	0.40	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,1,2,2-Tetrachloroethane	ND	*	5.5	0.89	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.5	1.3	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,1,2-Trichloroethane	ND		5.5	0.72	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,1-Dichloroethane	ND		5.5	0.67	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,1-Dichloroethene	ND		5.5	0.67	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,2,4-Trichlorobenzene	ND	*	5.5	0.33	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,2,4-Trimethylbenzene	ND	*	5.5	1.1	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,2-Dibromo-3-Chloropropane	ND	*	5.5	2.8	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,2-Dichlorobenzene	ND	*	5.5	0.43	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,2-Dichloroethane	ND		5.5	0.28	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,2-Dichloropropane	ND		5.5	2.8	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,3,5-Trimethylbenzene	ND	*	5.5	0.35	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,3-Dichlorobenzene	ND	*	5.5	0.28	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,4-Dichlorobenzene	ND	*	5.5	0.77	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
2-Hexanone	ND		28	2.8	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
4-Isopropyltoluene	ND	*	5.5	0.44	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Acetone	**5.6**	**J**	28	4.6	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Benzene	ND		5.5	0.27	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Bromoform	ND		5.5	2.8	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Bromomethane	ND		5.5	0.50	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Carbon disulfide	ND		5.5	2.8	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Carbon tetrachloride	ND		5.5	0.53	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Chlorobenzene	ND		5.5	0.73	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Dibromochloromethane	ND		5.5	0.70	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Chloroethane	ND		5.5	1.2	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Chloroform	ND		5.5	0.34	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Chloromethane	ND		5.5	0.33	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
cis-1,2-Dichloroethene	ND		5.5	0.70	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
cis-1,3-Dichloropropene	ND		5.5	0.79	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Cyclohexane	ND		5.5	0.77	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Bromodichloromethane	ND		5.5	0.74	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Dichlorodifluoromethane	ND		5.5	0.45	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Ethylbenzene	ND		5.5	0.38	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
1,2-Dibromoethane	ND		5.5	0.71	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Isopropylbenzene	ND	*	5.5	0.83	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Methyl acetate	ND		5.5	3.3	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
2-Butanone (MEK)	ND		28	2.0	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
4-Methyl-2-pentanone (MIBK)	ND		28	1.8	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Methyl tert-butyl ether	ND		5.5	0.54	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Methylcyclohexane	ND		5.5	0.84	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Methylene Chloride	**5.7**	**B**	5.5	2.5	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
m,p-Xylene	ND		11	0.92	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
n-Butylbenzene	ND	*	5.5	0.48	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
N-Propylbenzene	ND	*	5.5	0.44	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
o-Xylene	ND		5.5	0.72	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
sec-Butylbenzene	ND	*	5.5	0.48	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Styrene	ND		5.5	0.28	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
tert-Butylbenzene	ND	*	5.5	0.57	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1

Client Sample ID: FLOOR TRENCH
Date Collected: 05/27/15 11:05
Date Received: 05/28/15 11:30

Lab Sample ID: 480-81136-1
Matrix: Solid
Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.5	0.74	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Toluene	ND		5.5	0.42	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
trans-1,2-Dichloroethene	ND		5.5	0.57	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
trans-1,3-Dichloropropene	ND		5.5	2.4	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Trichloroethene	ND		5.5	1.2	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Trichlorofluoromethane	ND		5.5	0.52	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Vinyl chloride	ND		5.5	0.67	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1
Xylenes, Total	ND		11	0.92	ug/Kg	☼	05/29/15 12:21	05/29/15 20:05	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*	*05/29/15 12:21*	*05/29/15 20:05*	*1*
Toluene-d8 (Surr)	*108*		*71 - 125*	*05/29/15 12:21*	*05/29/15 20:05*	*1*
4-Bromofluorobenzene (Surr)	*64*	*X*	*72 - 126*	*05/29/15 12:21*	*05/29/15 20:05*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*05/29/15 12:21*	*05/29/15 20:05*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		59000	8700	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Acenaphthylene	ND		59000	7700	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Anthracene	ND		59000	15000	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Benzo[a]anthracene	ND		59000	5900	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Benzo[a]pyrene	ND		59000	8700	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Benzo[b]fluoranthene	ND		59000	9400	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Benzo[g,h,i]perylene	ND		59000	6300	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Benzo[k]fluoranthene	ND		59000	7700	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Chrysene	ND		59000	13000	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Dibenz(a,h)anthracene	ND		59000	10000	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Fluoranthene	**10000**	**J**	59000	6300	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Fluorene	ND		59000	7000	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Indeno[1,2,3-cd]pyrene	ND		59000	7300	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Naphthalene	ND		59000	7700	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Phenanthrene	ND		59000	8700	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20
Pyrene	**8800**	**J**	59000	7000	ug/Kg	☼	05/29/15 14:28	06/06/15 15:28	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*39 - 146*	*05/29/15 14:28*	*06/06/15 15:28*	*20*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*05/29/15 14:28*	*06/06/15 15:28*	*20*
2-Fluorophenol (Surr)	*0*	*X*	*18 - 120*	*05/29/15 14:28*	*06/06/15 15:28*	*20*
Nitrobenzene-d5 (Surr)	*0*	*X*	*34 - 132*	*05/29/15 14:28*	*06/06/15 15:28*	*20*
Phenol-d5 (Surr)	*0*	*X*	*11 - 120*	*05/29/15 14:28*	*06/06/15 15:28*	*20*
p-Terphenyl-d14 (Surr)	*0*	*X*	*65 - 153*	*05/29/15 14:28*	*06/06/15 15:28*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**19.1**		2.2		mg/Kg	☼	05/29/15 14:53	06/02/15 01:49	1
Barium	**144**		0.55		mg/Kg	☼	05/29/15 14:53	06/02/15 01:49	1
Cadmium	**3.2**		0.22		mg/Kg	☼	05/29/15 14:53	06/02/15 01:49	1
Chromium	**94.1**		0.55		mg/Kg	☼	05/29/15 14:53	06/02/15 01:49	1
Lead	**434**		1.1		mg/Kg	☼	05/29/15 14:53	06/02/15 01:49	1
Selenium	ND		4.4		mg/Kg	☼	05/29/15 14:53	06/02/15 01:49	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Client Sample ID: FLOOR TRENCH
Date Collected: 05/27/15 11:05
Date Received: 05/28/15 11:30

Lab Sample ID: 480-81136-1
Matrix: Solid
Percent Solids: 90.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Silver	ND		0.67		mg/Kg	☼	05/29/15 14:53	06/02/15 01:49	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.75**	**F1**	0.020		mg/Kg	☼	06/02/15 14:00	06/02/15 16:07	1

Client Sample ID: HC-1

Date Collected: 05/27/15 09:47
Date Received: 05/28/15 11:30

Lab Sample ID: 480-81136-2

Matrix: Solid
Percent Solids: 85.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	13000		490	140	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
1,3,5-Trimethylbenzene	3600	*	490	150	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
4-Isopropyltoluene	1300	*	490	170	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
Benzene	ND		490	94	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
Dibromomethane	ND		490	160	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
Ethylbenzene	1300		490	140	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
Isopropylbenzene	660		490	74	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
Methyl tert-butyl ether	ND		490	190	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
m-Xylene & p-Xylene	2600		990	270	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
n-Butylbenzene	3600	*	490	140	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
N-Propylbenzene	1600		490	130	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
o-Xylene	ND		490	64	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
sec-Butylbenzene	1200	*	490	180	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
tert-Butylbenzene	ND	*	490	140	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
Toluene	ND		490	130	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4
Xylenes, Total	2600		990	270	ug/Kg	☼	06/02/15 10:16	06/02/15 20:51	4

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*	*06/02/15 10:16*	*06/02/15 20:51*	*4*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*	*06/02/15 10:16*	*06/02/15 20:51*	*4*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*06/02/15 10:16*	*06/02/15 20:51*	*4*
Toluene-d8 (Surr)	*108*		*50 - 149*	*06/02/15 10:16*	*06/02/15 20:51*	*4*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		990	150	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Acenaphthylene	ND		990	130	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Anthracene	ND		990	240	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Benzo[a]anthracene	ND		990	99	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Benzo[a]pyrene	ND		990	150	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Benzo[b]fluoranthene	ND		990	160	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Benzo[g,h,i]perylene	ND		990	100	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Benzo[k]fluoranthene	ND		990	130	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Chrysene	ND		990	220	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Dibenz(a,h)anthracene	ND		990	170	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Fluoranthene	ND		990	100	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Fluorene	230	J	990	120	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Indeno[1,2,3-cd]pyrene	ND		990	120	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Naphthalene	310	J	990	130	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Phenanthrene	460	J	990	150	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5
Pyrene	ND		990	120	ug/Kg	☼	05/29/15 14:28	06/06/15 15:54	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*39 - 146*	*05/29/15 14:28*	*06/06/15 15:54*	*5*
2-Fluorobiphenyl	*88*		*37 - 120*	*05/29/15 14:28*	*06/06/15 15:54*	*5*
2-Fluorophenol (Surr)	*71*		*18 - 120*	*05/29/15 14:28*	*06/06/15 15:54*	*5*
Nitrobenzene-d5 (Surr)	*69*		*34 - 132*	*05/29/15 14:28*	*06/06/15 15:54*	*5*
Phenol-d5 (Surr)	*78*		*11 - 120*	*05/29/15 14:28*	*06/06/15 15:54*	*5*
p-Terphenyl-d14 (Surr)	*103*		*65 - 153*	*05/29/15 14:28*	*06/06/15 15:54*	*5*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Client Sample ID: HC-1
Date Collected: 05/27/15 09:47
Date Received: 05/28/15 11:30

Lab Sample ID: 480-81136-2
Matrix: Solid
Percent Solids: 85.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.2		mg/Kg	☼	05/29/15 14:53	06/02/15 01:52	1
Barium	**39.1**		0.56		mg/Kg	☼	05/29/15 14:53	06/02/15 01:52	1
Cadmium	**0.22**		0.22		mg/Kg	☼	05/29/15 14:53	06/02/15 01:52	1
Chromium	**7.0**		0.56		mg/Kg	☼	05/29/15 14:53	06/02/15 01:52	1
Lead	**9.7**		1.1		mg/Kg	☼	05/29/15 14:53	06/02/15 01:52	1
Selenium	ND		4.4		mg/Kg	☼	05/29/15 14:53	06/02/15 01:52	1
Silver	ND		0.67		mg/Kg	☼	05/29/15 14:53	06/02/15 01:52	1

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.024		mg/Kg	☼	06/02/15 14:00	06/02/15 16:18	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(64-126)	(71-125)	(72-126)	(60-140)
480-81136-1	FLOOR TRENCH	107	108	64 X	97
480-81136-1 MS	FLOOR TRENCH	93	117	75	95
480-81136-1 MSD	FLOOR TRENCH	99	127 X	93	105
LCS 480-245182/1-A	Lab Control Sample	97	102	106	97
MB 480-245182/2-A	Method Blank	96	101	99	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	TOL	DBFM
Lab Sample ID	Client Sample ID	(53-146)	(49-148)	(50-149)	(60-140)
480-81136-2	HC-1	103	106	108	98
480-81136-2 MS	HC-1	102	106	105	102
480-81136-2 MSD	HC-1	103	107	105	105
LCS 480-245684/1-A	Lab Control Sample	104	106	106	103
MB 480-245684/2-A	Method Blank	103	102	107	95

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
TOL = Toluene-d8 (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)
480-81136-1	FLOOR TRENCH	0 X	0 X	0 X	0 X	0 X	0 X
480-81136-2	HC-1	69	88	71	69	78	103
LCS 480-245213/2-A	Lab Control Sample	87	80	69	72	74	88
MB 480-245213/1-A	Method Blank	70	79	68	66	72	90

Surrogate Legend

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

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

Lab Sample ID: MB 480-245182/2-A
Matrix: Solid
Analysis Batch: 245120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,2,4-Trimethylbenzene	ND		5.0	0.95	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
2-Hexanone	ND		25	2.5	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Acetone	ND		25	4.2	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Benzene	ND		5.0	0.24	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Bromoform	ND		5.0	2.5	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Bromomethane	ND		5.0	0.45	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Chloroethane	ND		5.0	1.1	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Chloroform	ND		5.0	0.31	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Chloromethane	ND		5.0	0.30	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Cyclohexane	ND		5.0	0.70	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Ethylbenzene	ND		5.0	0.34	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Methyl acetate	ND		5.0	3.0	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Methylene Chloride	3.23	J	5.0	2.3	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
m,p-Xylene	ND		9.9	0.83	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
n-Butylbenzene	ND		5.0	0.43	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
o-Xylene	ND		5.0	0.65	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
sec-Butylbenzene	ND		5.0	0.43	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Styrene	ND		5.0	0.25	ug/Kg		05/29/15 12:21	05/29/15 15:19	1

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

Lab Sample ID: MB 480-245182/2-A
Matrix: Solid
Analysis Batch: 245120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245182

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Toluene	ND		5.0	0.38	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
trans-1,2-Dichloroethene	ND		5.0	0.51	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Trichloroethene	ND		5.0	1.1	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		05/29/15 12:21	05/29/15 15:19	1
Xylenes, Total	ND		9.9	0.83	ug/Kg		05/29/15 12:21	05/29/15 15:19	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 126*	*05/29/15 12:21*	*05/29/15 15:19*	*1*
Toluene-d8 (Surr)	*101*		*71 - 125*	*05/29/15 12:21*	*05/29/15 15:19*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*	*05/29/15 12:21*	*05/29/15 15:19*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*	*05/29/15 12:21*	*05/29/15 15:19*	*1*

Lab Sample ID: LCS 480-245182/1-A
Matrix: Solid
Analysis Batch: 245120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245182

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	49.8	46.6		ug/Kg		93	73 - 126
1,1-Dichloroethene	49.8	46.6		ug/Kg		94	59 - 125
1,2,4-Trimethylbenzene	49.8	50.9		ug/Kg		102	74 - 120
1,2-Dichlorobenzene	49.8	51.3		ug/Kg		103	75 - 120
1,2-Dichloroethane	49.8	48.0		ug/Kg		96	77 - 122
Benzene	49.8	40.0		ug/Kg		80	79 - 127
Chlorobenzene	49.8	50.3		ug/Kg		101	76 - 124
cis-1,2-Dichloroethene	49.8	47.5		ug/Kg		95	81 - 117
Ethylbenzene	49.8	49.8		ug/Kg		100	80 - 120
Methyl tert-butyl ether	49.8	47.0		ug/Kg		94	63 - 125
m,p-Xylene	49.8	48.7		ug/Kg		98	70 - 130
o-Xylene	49.8	50.3		ug/Kg		101	70 - 130
Tetrachloroethene	49.8	50.7		ug/Kg		102	74 - 122
Toluene	49.8	46.6		ug/Kg		94	74 - 128
trans-1,2-Dichloroethene	49.8	46.4		ug/Kg		93	78 - 126
Trichloroethene	49.8	46.5		ug/Kg		93	77 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*
Toluene-d8 (Surr)	*102*		*71 - 125*
4-Bromofluorobenzene (Surr)	*106*		*72 - 126*
Dibromofluoromethane (Surr)	*97*		*60 - 140*

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

Lab Sample ID: 480-81136-1 MS
Matrix: Solid
Analysis Batch: 245120

Client Sample ID: FLOOR TRENCH
Prep Type: Total/NA
Prep Batch: 245182

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	ND		54.2	41.6		ug/Kg	☼	77	73 - 126
1,1-Dichloroethene	ND		54.2	38.0		ug/Kg	☼	70	59 - 125
1,2,4-Trimethylbenzene	ND	*	54.2	16.4	F1 *	ug/Kg	☼	30	74 - 120
1,2-Dichlorobenzene	ND	*	54.2	15.2	F1 *	ug/Kg	☼	28	75 - 120
1,2-Dichloroethane	ND		54.2	39.1	F1	ug/Kg	☼	72	77 - 122
Benzene	ND		54.2	30.0	F1	ug/Kg	☼	55	79 - 127
Chlorobenzene	ND		54.2	26.9	F1	ug/Kg	☼	50	76 - 124
cis-1,2-Dichloroethene	ND		54.2	38.6	F1	ug/Kg	☼	71	81 - 117
Ethylbenzene	ND		54.2	22.6	F1	ug/Kg	☼	42	80 - 120
Methyl tert-butyl ether	ND		54.2	45.6		ug/Kg	☼	84	63 - 125
m,p-Xylene	ND		54.2	20.2	F1	ug/Kg	☼	37	70 - 130
o-Xylene	ND		54.2	20.5	F1	ug/Kg	☼	38	70 - 130
Tetrachloroethene	ND		54.2	22.3	F1	ug/Kg	☼	41	74 - 122
Toluene	ND		54.2	33.2	F1	ug/Kg	☼	61	74 - 128
trans-1,2-Dichloroethene	ND		54.2	38.4	F1	ug/Kg	☼	71	78 - 126
Trichloroethene	ND		54.2	27.0	F1	ug/Kg	☼	50	77 - 129

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*64 - 126*
Toluene-d8 (Surr)	*117*		*71 - 125*
4-Bromofluorobenzene (Surr)	*75*		*72 - 126*
Dibromofluoromethane (Surr)	*95*		*60 - 140*

Lab Sample ID: 480-81136-1 MSD
Matrix: Solid
Analysis Batch: 245120

Client Sample ID: FLOOR TRENCH
Prep Type: Total/NA
Prep Batch: 245182

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1-Dichloroethane	ND		53.4	40.1		ug/Kg	☼	75	73 - 126	4	30
1,1-Dichloroethene	ND		53.4	35.7		ug/Kg	☼	67	59 - 125	6	30
1,2,4-Trimethylbenzene	ND	*	53.4	13.1	F1 *	ug/Kg	☼	24	74 - 120	23	30
1,2-Dichlorobenzene	ND	*	53.4	11.7	F1 *	ug/Kg	☼	22	75 - 120	26	30
1,2-Dichloroethane	ND		53.4	36.9	F1	ug/Kg	☼	69	77 - 122	6	30
Benzene	ND		53.4	28.4	F1	ug/Kg	☼	53	79 - 127	6	30
Chlorobenzene	ND		53.4	23.0	F1	ug/Kg	☼	43	76 - 124	15	30
cis-1,2-Dichloroethene	ND		53.4	37.1	F1	ug/Kg	☼	69	81 - 117	4	30
Ethylbenzene	ND		53.4	19.6	F1	ug/Kg	☼	37	80 - 120	14	30
Methyl tert-butyl ether	ND		53.4	42.7		ug/Kg	☼	80	63 - 125	7	30
m,p-Xylene	ND		53.4	17.7	F1	ug/Kg	☼	33	70 - 130	13	30
o-Xylene	ND		53.4	17.9	F1	ug/Kg	☼	34	70 - 130	14	30
Tetrachloroethene	ND		53.4	19.0	F1	ug/Kg	☼	36	74 - 122	16	30
Toluene	ND		53.4	28.7	F1	ug/Kg	☼	54	74 - 128	15	30
trans-1,2-Dichloroethene	ND		53.4	36.6	F1	ug/Kg	☼	69	78 - 126	5	30
Trichloroethene	ND		53.4	25.1	F1	ug/Kg	☼	47	77 - 129	7	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*64 - 126*

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

Lab Sample ID: 480-81136-1 MSD
Matrix: Solid
Analysis Batch: 245120

Client Sample ID: FLOOR TRENCH
Prep Type: Total/NA
Prep Batch: 245182

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*127*	*X*	*71 - 125*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*
Dibromofluoromethane (Surr)	*105*		*60 - 140*

Lab Sample ID: MB 480-245684/2-A
Matrix: Solid
Analysis Batch: 245629

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245684

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		99	28	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
Dibromomethane	ND		99	32	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
1,3,5-Trimethylbenzene	ND		99	30	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
4-Isopropyltoluene	ND		99	33	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
Benzene	ND		99	19	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
Ethylbenzene	ND		99	29	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
Isopropylbenzene	ND		99	15	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
Methyl tert-butyl ether	ND		99	38	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
m-Xylene & p-Xylene	ND		200	55	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
n-Butylbenzene	ND		99	29	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
N-Propylbenzene	ND		99	26	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
o-Xylene	ND		99	13	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
sec-Butylbenzene	ND		99	37	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
tert-Butylbenzene	ND		99	28	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
Toluene	ND		99	27	ug/Kg		06/02/15 10:16	06/02/15 15:05	1
Xylenes, Total	ND		200	55	ug/Kg		06/02/15 10:16	06/02/15 15:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*	*06/02/15 10:16*	*06/02/15 15:05*	*1*
Toluene-d8 (Surr)	*107*		*50 - 149*	*06/02/15 10:16*	*06/02/15 15:05*	*1*
4-Bromofluorobenzene (Surr)	*102*		*49 - 148*	*06/02/15 10:16*	*06/02/15 15:05*	*1*
Dibromofluoromethane (Surr)	*95*		*60 - 140*	*06/02/15 10:16*	*06/02/15 15:05*	*1*

Lab Sample ID: LCS 480-245684/1-A
Matrix: Solid
Analysis Batch: 245629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245684

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	2430	2930		ug/Kg		121	77 - 127
Benzene	2430	2620		ug/Kg		108	77 - 125
Ethylbenzene	2430	2740		ug/Kg		113	78 - 124
Methyl tert-butyl ether	2430	2750		ug/Kg		113	67 - 137
m-Xylene & p-Xylene	2430	2770		ug/Kg		114	77 - 125
o-Xylene	2430	2820		ug/Kg		116	80 - 124
Toluene	2430	2670		ug/Kg		110	75 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*104*		*53 - 146*

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

Lab Sample ID: LCS 480-245684/1-A
Matrix: Solid
Analysis Batch: 245629

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245684

Surrogate	LCS %Recovery	LCS Qualifier	Limits
Toluene-d8 (Surr)	*106*		*50 - 149*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*
Dibromofluoromethane (Surr)	*103*		*60 - 140*

Lab Sample ID: 480-81136-2 MS
Matrix: Solid
Analysis Batch: 245881

Client Sample ID: HC-1
Prep Type: Total/NA
Prep Batch: 245684

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	13000		2850	14200	4	ug/Kg	☼	32	78 - 134
Benzene	ND		2850	3370		ug/Kg	☼	118	77 - 125
Ethylbenzene	1300		2850	4510		ug/Kg	☼	113	78 - 124
Methyl tert-butyl ether	ND		2850	3450		ug/Kg	☼	121	67 - 137
m-Xylene & p-Xylene	2600		2850	5560		ug/Kg	☼	105	77 - 125
o-Xylene	ND		2850	3540		ug/Kg	☼	124	80 - 124
Toluene	ND		2850	3320		ug/Kg	☼	116	75 - 124

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*102*		*53 - 146*
Toluene-d8 (Surr)	*105*		*50 - 149*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*
Dibromofluoromethane (Surr)	*102*		*60 - 140*

Lab Sample ID: 480-81136-2 MSD
Matrix: Solid
Analysis Batch: 245881

Client Sample ID: HC-1
Prep Type: Total/NA
Prep Batch: 245684

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,2,4-Trimethylbenzene	13000		2830	16100	4	ug/Kg	☼	97	78 - 134	12	20
Benzene	ND		2830	3410		ug/Kg	☼	121	77 - 125	1	20
Ethylbenzene	1300		2830	4770		ug/Kg	☼	123	78 - 124	6	20
Methyl tert-butyl ether	ND		2830	3320		ug/Kg	☼	117	67 - 137	4	20
m-Xylene & p-Xylene	2600		2830	5840		ug/Kg	☼	116	77 - 125	5	20
o-Xylene	ND		2830	3620	F1	ug/Kg	☼	128	80 - 124	2	20
Toluene	ND		2830	3310		ug/Kg	☼	117	75 - 124	0	20

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*103*		*53 - 146*
Toluene-d8 (Surr)	*105*		*50 - 149*
4-Bromofluorobenzene (Surr)	*107*		*49 - 148*
Dibromofluoromethane (Surr)	*105*		*60 - 140*

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

Lab Sample ID: MB 480-245213/1-A
Matrix: Solid
Analysis Batch: 246614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245213

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Acenaphthylene	ND		170	22	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Anthracene	ND		170	41	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Benzo[a]anthracene	ND		170	17	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Benzo[a]pyrene	ND		170	25	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Chrysene	ND		170	37	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Fluoranthene	ND		170	18	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Fluorene	ND		170	20	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Naphthalene	ND		170	22	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Phenanthrene	ND		170	25	ug/Kg		05/29/15 14:28	06/06/15 11:59	1
Pyrene	ND		170	20	ug/Kg		05/29/15 14:28	06/06/15 11:59	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*39 - 146*	*05/29/15 14:28*	*06/06/15 11:59*	*1*
2-Fluorobiphenyl	*79*		*37 - 120*	*05/29/15 14:28*	*06/06/15 11:59*	*1*
2-Fluorophenol (Surr)	*68*		*18 - 120*	*05/29/15 14:28*	*06/06/15 11:59*	*1*
Nitrobenzene-d5 (Surr)	*66*		*34 - 132*	*05/29/15 14:28*	*06/06/15 11:59*	*1*
Phenol-d5 (Surr)	*72*		*11 - 120*	*05/29/15 14:28*	*06/06/15 11:59*	*1*
p-Terphenyl-d14 (Surr)	*90*		*65 - 153*	*05/29/15 14:28*	*06/06/15 11:59*	*1*

Lab Sample ID: LCS 480-245213/2-A
Matrix: Solid
Analysis Batch: 246614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245213

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1660	1360		ug/Kg		82	53 - 120
Acenaphthylene	1660	1390		ug/Kg		84	58 - 121
Anthracene	1660	1460		ug/Kg		88	62 - 129
Benzo[a]anthracene	1660	1500		ug/Kg		90	65 - 133
Benzo[a]pyrene	1660	1430		ug/Kg		86	64 - 127
Benzo[b]fluoranthene	1660	1460		ug/Kg		88	64 - 135
Benzo[g,h,i]perylene	1660	1340		ug/Kg		81	50 - 152
Benzo[k]fluoranthene	1660	1590		ug/Kg		96	58 - 138
Chrysene	1660	1440		ug/Kg		87	64 - 131
Dibenz(a,h)anthracene	1660	1300		ug/Kg		79	54 - 148
Fluoranthene	1660	1440		ug/Kg		87	62 - 131
Fluorene	1660	1390		ug/Kg		84	63 - 126
Indeno[1,2,3-cd]pyrene	1660	1380		ug/Kg		83	56 - 149
Naphthalene	1660	1280		ug/Kg		77	46 - 120
Phenanthrene	1660	1460		ug/Kg		88	60 - 130
Pyrene	1660	1520		ug/Kg		92	51 - 133

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

Lab Sample ID: LCS 480-245213/2-A
Matrix: Solid
Analysis Batch: 246614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245213

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*87*		*39 - 146*
2-Fluorobiphenyl	*80*		*37 - 120*
2-Fluorophenol (Surr)	*69*		*18 - 120*
Nitrobenzene-d5 (Surr)	*72*		*34 - 132*
Phenol-d5 (Surr)	*74*		*11 - 120*
p-Terphenyl-d14 (Surr)	*88*		*65 - 153*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-245161/1-A
Matrix: Solid
Analysis Batch: 245599

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245161

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0		mg/Kg		05/29/15 14:53	06/02/15 00:52	1
Barium	ND		0.51		mg/Kg		05/29/15 14:53	06/02/15 00:52	1
Cadmium	ND		0.20		mg/Kg		05/29/15 14:53	06/02/15 00:52	1
Chromium	ND		0.51		mg/Kg		05/29/15 14:53	06/02/15 00:52	1
Lead	ND		1.0		mg/Kg		05/29/15 14:53	06/02/15 00:52	1
Selenium	ND		4.0		mg/Kg		05/29/15 14:53	06/02/15 00:52	1
Silver	ND		0.61		mg/Kg		05/29/15 14:53	06/02/15 00:52	1

Lab Sample ID: LCDSRM 480-245161/3-A
Matrix: Solid
Analysis Batch: 245599

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 245161

Analyte			Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic			122	103.4		mg/Kg		84.8	70.0 - 145.1	7	20
Barium			167	145.2		mg/Kg		86.9	73.1 - 126.9	7	20
Cadmium			88.0	75.15		mg/Kg		85.4	73.3 - 127.3	7	20
Chromium			102	88.57		mg/Kg		86.8	69.4 - 130.4	6	20
Lead			94.5	90.97		mg/Kg		96.3	70.5 - 129.1	10	20
Selenium			157	133.0		mg/Kg		84.7	67.5 - 131.8	8	20
Silver			34.2	28.96		mg/Kg		84.7	65.5 - 134.2	5	20

Lab Sample ID: LCSSRM 480-245161/2-A
Matrix: Solid
Analysis Batch: 245599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245161

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic			122	96.55		mg/Kg		79.1	70.0 - 145.1

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

Lab Sample ID: LCSSRM 480-245161/2-A
Matrix: Solid
Analysis Batch: 245599

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245161

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Barium	167	135.8		mg/Kg		81.3	73.1 - 126.9
Cadmium	88.0	70.38		mg/Kg		80.0	73.3 - 127.3
Chromium	102	83.56		mg/Kg		81.9	69.4 - 130.4
Lead	94.5	82.50		mg/Kg		87.3	70.5 - 129.1
Selenium	157	122.4		mg/Kg		78.0	67.5 - 131.8
Silver	34.2	27.66		mg/Kg		80.9	65.5 - 134.2

Method: 7471B - Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)

Lab Sample ID: MB 480-245689/1-A
Matrix: Solid
Analysis Batch: 245852

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 245689

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		06/02/15 14:00	06/02/15 16:04	1

Lab Sample ID: LCSSRM 480-245689/2-A
Matrix: Solid
Analysis Batch: 245852

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 245689

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	3.98	3.47		mg/Kg		87.2	51.0 - 149.0

Lab Sample ID: 480-81136-1 MS
Matrix: Solid
Analysis Batch: 245852

Client Sample ID: FLOOR TRENCH
Prep Type: Total/NA
Prep Batch: 245689

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.75	F1	0.355	0.823	F1	mg/Kg	☼	20	80 - 120

Lab Sample ID: 480-81136-1 MSD
Matrix: Solid
Analysis Batch: 245852

Client Sample ID: FLOOR TRENCH
Prep Type: Total/NA
Prep Batch: 245689

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.75	F1	0.339	0.899	F1	mg/Kg	☼	44	80 - 120	9	20

GC/MS VOA

Analysis Batch: 245120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	8260C	245182
480-81136-1 MS	FLOOR TRENCH	Total/NA	Solid	8260C	245182
480-81136-1 MSD	FLOOR TRENCH	Total/NA	Solid	8260C	245182
LCS 480-245182/1-A	Lab Control Sample	Total/NA	Solid	8260C	245182
MB 480-245182/2-A	Method Blank	Total/NA	Solid	8260C	245182

Prep Batch: 245182

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	5035A	
480-81136-1 MS	FLOOR TRENCH	Total/NA	Solid	5035A	
480-81136-1 MSD	FLOOR TRENCH	Total/NA	Solid	5035A	
LCS 480-245182/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-245182/2-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 245629

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-2	HC-1	Total/NA	Solid	8260C	245684
LCS 480-245684/1-A	Lab Control Sample	Total/NA	Solid	8260C	245684
MB 480-245684/2-A	Method Blank	Total/NA	Solid	8260C	245684

Prep Batch: 245684

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-2	HC-1	Total/NA	Solid	5035A	
480-81136-2 MS	HC-1	Total/NA	Solid	5035A	
480-81136-2 MSD	HC-1	Total/NA	Solid	5035A	
LCS 480-245684/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-245684/2-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 245881

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-2 MS	HC-1	Total/NA	Solid	8260C	245684
480-81136-2 MSD	HC-1	Total/NA	Solid	8260C	245684

GC/MS Semi VOA

Prep Batch: 245213

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	3550C	
480-81136-2	HC-1	Total/NA	Solid	3550C	
LCS 480-245213/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-245213/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 246614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	8270D	245213
480-81136-2	HC-1	Total/NA	Solid	8270D	245213
LCS 480-245213/2-A	Lab Control Sample	Total/NA	Solid	8270D	245213
MB 480-245213/1-A	Method Blank	Total/NA	Solid	8270D	245213

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Metals

Prep Batch: 245161

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	3050B	
480-81136-2	HC-1	Total/NA	Solid	3050B	
LCDSRM 480-245161/3-A	Lab Control Sample Dup	Total/NA	Solid	3050B	
LCSSRM 480-245161/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-245161/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 245599

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	6010C	245161
480-81136-2	HC-1	Total/NA	Solid	6010C	245161
LCDSRM 480-245161/3-A	Lab Control Sample Dup	Total/NA	Solid	6010C	245161
LCSSRM 480-245161/2-A	Lab Control Sample	Total/NA	Solid	6010C	245161
MB 480-245161/1-A	Method Blank	Total/NA	Solid	6010C	245161

Prep Batch: 245689

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	7471B	
480-81136-1 MS	FLOOR TRENCH	Total/NA	Solid	7471B	
480-81136-1 MSD	FLOOR TRENCH	Total/NA	Solid	7471B	
480-81136-2	HC-1	Total/NA	Solid	7471B	
LCSSRM 480-245689/2-A	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-245689/1-A	Method Blank	Total/NA	Solid	7471B	

Analysis Batch: 245852

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	7471B	245689
480-81136-1 MS	FLOOR TRENCH	Total/NA	Solid	7471B	245689
480-81136-1 MSD	FLOOR TRENCH	Total/NA	Solid	7471B	245689
480-81136-2	HC-1	Total/NA	Solid	7471B	245689
LCSSRM 480-245689/2-A	Lab Control Sample	Total/NA	Solid	7471B	245689
MB 480-245689/1-A	Method Blank	Total/NA	Solid	7471B	245689

General Chemistry

Analysis Batch: 245032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-81136-1	FLOOR TRENCH	Total/NA	Solid	Moisture	
480-81136-2	HC-1	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Client Sample ID: FLOOR TRENCH

Lab Sample ID: 480-81136-1
Date Collected: 05/27/15 11:05
Matrix: Solid
Date Received: 05/28/15 11:30
Percent Solids: 90.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			245182	05/29/15 12:21	RAS	TAL BUF
Total/NA	Analysis	8260C		1	245120	05/29/15 20:05	RAS	TAL BUF
Total/NA	Prep	3550C			245213	05/29/15 14:28	CPH	TAL BUF
Total/NA	Analysis	8270D		20	246614	06/06/15 15:28	DMR	TAL BUF
Total/NA	Prep	3050B			245161	05/29/15 14:53	TAS	TAL BUF
Total/NA	Analysis	6010C		1	245599	06/02/15 01:49	AMH	TAL BUF
Total/NA	Prep	7471B			245689	06/02/15 14:00	LRK	TAL BUF
Total/NA	Analysis	7471B		1	245852	06/02/15 16:07	LRK	TAL BUF
Total/NA	Analysis	Moisture		1	245032	05/28/15 21:29	CMK	TAL BUF

Client Sample ID: HC-1

Lab Sample ID: 480-81136-2
Date Collected: 05/27/15 09:47
Matrix: Solid
Date Received: 05/28/15 11:30
Percent Solids: 85.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			245684	06/02/15 10:16	RAS	TAL BUF
Total/NA	Analysis	8260C		4	245629	06/02/15 20:51	SWO	TAL BUF
Total/NA	Prep	3550C			245213	05/29/15 14:28	CPH	TAL BUF
Total/NA	Analysis	8270D		5	246614	06/06/15 15:54	DMR	TAL BUF
Total/NA	Prep	3050B			245161	05/29/15 14:53	TAS	TAL BUF
Total/NA	Analysis	6010C		1	245599	06/02/15 01:52	AMH	TAL BUF
Total/NA	Prep	7471B			245689	06/02/15 14:00	LRK	TAL BUF
Total/NA	Analysis	7471B		1	245852	06/02/15 16:18	LRK	TAL BUF
Total/NA	Analysis	Moisture		1	245032	05/28/15 21:29	CMK	TAL BUF

Laboratory References:

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

Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury in Solid or Semisolid Waste (Manual Cold Vapor Technique)	SW846	TAL BUF
Moisture	Percent 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: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-81136-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-81136-1	FLOOR TRENCH	Solid	05/27/15 11:05	05/28/15 11:30
480-81136-2	HC-1	Solid	05/27/15 09:47	05/28/15 11:30

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Tunkey Environmental Restoration, LLC	Nathan Munley	5/27/15	284932
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** _____ **of** _____
2558 Hamburg Turnpike	716-856-0635 nmunley@tunkeyllc.com		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Lackawanna / NY / 14218			
Project Name and Location (State)	**Carrier/Waybill Number**		
1661 Main Street Site Buffalo, NY			
Contract/Purchase Order/Quote No.			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: TCL+CP-SI VOCs	TCL+CP-SI SVOCs	RCRA metals
Floor Trench	5/27/15	1105				X	X						X	X	X
HC-1	5/27/15	0947				X	X						X	X	X

Special Instructions/ Conditions of Receipt

480-81136 Chain of Custody

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

Sample Disposal
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Standard 5 day

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	5/27/15	1646	1. Received By	5/28/15	10:25
2. Relinquished By	5/28/15	11:30	2. Received By TA	05/28/15	1130
3. Relinquished By			3. Received By		

Comments

Temp 4.4 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

6/8/2015

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-81136-1

Login Number: 81136
List Number: 1
Creator: Kolb, Chris M

List Source: TestAmerica Buffalo

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.	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.	True	
Chlorine Residual checked.	N/A	

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: 480-77270-1
Client Project/Site: Benchmark - 1661 Main St.site
Revision: 1

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

Attn: Mr. Nate Munley

Authorized for release by:
5/21/2015 4:05:01 PM

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

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Qualifiers

GC/MS VOA

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

GC/MS Semi VOA

Qualifier	Qualifier Description
E	Result exceeded calibration range.
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Job ID: 480-77270-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-77270-1

Comments
No additional comments.

Receipt
The samples were received on 3/26/2015 12:40 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.9º C.

GC/MS VOA
Method(s) 8260C: Reported analyte concentrations in the following samples are below 200ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: SB-02 (0-2) (480-77270-2).

Method(s) 8260C: The following sample was weighed at a reduced weight to bring the concentration of target analytes within the calibration range: SB-02 (0-2) (480-77270-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Reported analyte concentrations in the following samples are below 200ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: SB-02 (0-2) (480-77270-2).

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

GC/MS Semi VOA
Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: SB-01 (2-4) (480-77270-1), SB-02 (0-2) (480-77270-2) and SB-03 (0-2) (480-77270-3). Elevated reporting limits (RLs) are provided.

Method(s) 8270D: The method blank for batch 232623 contained Bis(2-ethyl hexyl)phthalate below the method reporting limit (RL).

Method(s) 8270D: The continuing calibration verification (CCV) analyzed in batch 480-232980 was outside the method criteria for the following analyte: N-Nitrosodiphenylamine. Any detection for the affected analyte is considered estimated.

Method(s) 8270D: The following sample, SB-01 (2-4) (480-77270-1), contained 2-Methylnaphthalene above the range of the calibration, therefore the results for this analyte should be considered an estimate. The results for this analyte were requested after the completion of the analysis and beyond the analytical and extraction hold time.

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

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Client Sample ID: SB-01 (2-4) — Lab Sample ID: 480-77270-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	3000		950	140	ug/Kg	5	☼	8270D	Total/NA
Anthracene	1400		950	240	ug/Kg	5	☼	8270D	Total/NA
Fluorene	8500		950	110	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	22000		950	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	15000		950	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	610	J	950	110	ug/Kg	5	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	600	J B	950	320	ug/Kg	5	☼	8270D	Total/NA
4-Chlorophenyl phenyl ether	1100		950	120	ug/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	82000	E	950	190	ug/Kg	5	☼	8270D	Total/NA
N-Nitrosodiphenylamine	4700		950	770	ug/Kg	5	☼	8270D	Total/NA
Acetophenone	8100		950	130	ug/Kg	5	☼	8270D	Total/NA
Biphenyl	5600		950	140	ug/Kg	5	☼	8270D	Total/NA

Client Sample ID: SB-02 (0-2) — Lab Sample ID: 480-77270-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
4-Isopropyltoluene	120		5.9	0.47	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.58	J	5.9	0.29	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	93		5.9	0.41	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	66		5.9	0.89	ug/Kg	1	☼	8260C	Total/NA
n-Butylbenzene	140		5.9	0.51	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	150		5.9	0.47	ug/Kg	1	☼	8260C	Total/NA
o-Xylene	91		5.9	0.77	ug/Kg	1	☼	8260C	Total/NA
sec-Butylbenzene	78		5.9	0.51	ug/Kg	1	☼	8260C	Total/NA
Toluene	2.3	J	5.9	0.44	ug/Kg	1	☼	8260C	Total/NA
1,2,4-Trimethylbenzene - DL	400		59	11	ug/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene - DL	96		59	3.8	ug/Kg	1	☼	8260C	Total/NA
m-Xylene & p-Xylene - DL	59	J	120	9.9	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total - DL	79	J	120	9.9	ug/Kg	1	☼	8260C	Total/NA
Fluorene	790	J	980	120	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	1000		980	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1600		980	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	120	J	980	120	ug/Kg	5	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	390	J B	980	330	ug/Kg	5	☼	8270D	Total/NA
2-Methylnaphthalene	6500		980	200	ug/Kg	5	☼	8270D	Total/NA
Acetophenone	310	J	980	130	ug/Kg	5	☼	8270D	Total/NA
Biphenyl	520	J	980	140	ug/Kg	5	☼	8270D	Total/NA

Client Sample ID: SB-03 (0-2) — Lab Sample ID: 480-77270-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Bis(2-ethylhexyl) phthalate	430	J B	1100	370	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-01 (2-4)
Date Collected: 03/23/15 10:00
Date Received: 03/26/15 12:40

Lab Sample ID: 480-77270-1
Matrix: Solid
Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**3000**		950	140	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Acenaphthylene	ND		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Anthracene	**1400**		950	240	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Benzo[a]anthracene	ND		950	95	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Benzo[a]pyrene	ND		950	140	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Benzo[b]fluoranthene	ND		950	150	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Benzo[g,h,i]perylene	ND		950	100	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Benzo[k]fluoranthene	ND		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Chrysene	ND		950	210	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Dibenz(a,h)anthracene	ND		950	170	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Fluoranthene	ND		950	100	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Fluorene	**8500**		950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Indeno[1,2,3-cd]pyrene	ND		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Naphthalene	**22000**		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Phenanthrene	**15000**		950	140	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Pyrene	**610**	**J**	950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Hexachloroethane	ND		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Dimethyl phthalate	ND		950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Isophorone	ND		950	200	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Dibenzofuran	ND		950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Bis(2-ethylhexyl) phthalate	**600**	**J B**	950	320	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
N-Nitrosodi-n-propylamine	ND		950	160	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
4-Chlorophenyl phenyl ether	**1100**		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Hexachlorobenzene	ND		950	130	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Di-n-octyl phthalate	ND		950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Hexachlorobutadiene	ND		950	140	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
2-Methylnaphthalene	**82000**	**E**	950	190	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Di-n-butyl phthalate	ND		950	160	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
2,4-Dinitrotoluene	ND		950	200	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
4-Nitroaniline	ND		1800	500	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Nitrobenzene	ND		950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
2-Nitroaniline	ND		1800	140	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
4-Bromophenyl phenyl ether	ND		950	130	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Caprolactam	ND		950	290	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Diethyl phthalate	ND		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Carbazole	ND		950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
bis (2-chloroisopropyl) ether	ND		950	190	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
N-Nitrosodiphenylamine	**4700**		950	770	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Acetophenone	**8100**		950	130	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Bis(2-chloroethyl)ether	ND		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Atrazine	ND		950	330	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Benzaldehyde	ND		950	760	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Butyl benzyl phthalate	ND		950	160	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Hexachlorocyclopentadiene	ND		950	130	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
4-Chloroaniline	ND		950	240	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
3-Nitroaniline	ND		1800	260	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
2,6-Dinitrotoluene	ND		950	110	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Bis(2-chloroethoxy)methane	ND		950	200	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Client Sample ID: SB-01 (2-4)
Date Collected: 03/23/15 10:00
Date Received: 03/26/15 12:40

Lab Sample ID: 480-77270-1
Matrix: Solid
Percent Solids: 87.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		950	160	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
Biphenyl	**5600**		950	140	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*64*		*39 - 146*	*03/27/15 09:16*	*03/30/15 11:37*	*5*
2-Fluorobiphenyl	*83*		*37 - 120*	*03/27/15 09:16*	*03/30/15 11:37*	*5*
2-Fluorophenol (Surr)	*52*		*18 - 120*	*03/27/15 09:16*	*03/30/15 11:37*	*5*
Nitrobenzene-d5 (Surr)	*72*		*34 - 132*	*03/27/15 09:16*	*03/30/15 11:37*	*5*
Phenol-d5 (Surr)	*57*		*11 - 120*	*03/27/15 09:16*	*03/30/15 11:37*	*5*
p-Terphenyl-d14 (Surr)	*92*		*65 - 153*	*03/27/15 09:16*	*03/30/15 11:37*	*5*

Client Sample ID: SB-02 (0-2)

Date Collected: 03/23/15 10:30
Date Received: 03/26/15 12:40

Lab Sample ID: 480-77270-2

Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Isopropyltoluene	**120**		5.9	0.47	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
Benzene	**0.58**	**J**	5.9	0.29	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
Dibromomethane	ND		5.9	0.60	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
Ethylbenzene	**93**		5.9	0.41	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
Isopropylbenzene	**66**		5.9	0.89	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
Methyl tert-butyl ether	ND		5.9	0.58	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
n-Butylbenzene	**140**		5.9	0.51	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
N-Propylbenzene	**150**		5.9	0.47	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
o-Xylene	**91**		5.9	0.77	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
sec-Butylbenzene	**78**		5.9	0.51	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
tert-Butylbenzene	ND		5.9	0.61	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1
Toluene	**2.3**	**J**	5.9	0.44	ug/Kg	☼	03/27/15 00:43	03/27/15 02:14	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*89*		*64 - 126*	*03/27/15 00:43*	*03/27/15 02:14*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 126*	*03/27/15 00:43*	*03/27/15 02:14*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*	*03/27/15 00:43*	*03/27/15 02:14*	*1*
Toluene-d8 (Surr)	*113*		*71 - 125*	*03/27/15 00:43*	*03/27/15 02:14*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**400**		59	11	ug/Kg	☼	03/27/15 08:30	03/27/15 12:13	1
1,3,5-Trimethylbenzene	**96**		59	3.8	ug/Kg	☼	03/27/15 08:30	03/27/15 12:13	1
m-Xylene & p-Xylene	**59**	**J**	120	9.9	ug/Kg	☼	03/27/15 08:30	03/27/15 12:13	1
Xylenes, Total	**79**	**J**	120	9.9	ug/Kg	☼	03/27/15 08:30	03/27/15 12:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*85*		*64 - 126*	*03/27/15 08:30*	*03/27/15 12:13*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*	*03/27/15 08:30*	*03/27/15 12:13*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*03/27/15 08:30*	*03/27/15 12:13*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*03/27/15 08:30*	*03/27/15 12:13*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		980	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Acenaphthylene	ND		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Anthracene	ND		980	240	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Benzo[a]anthracene	ND		980	98	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Benzo[a]pyrene	ND		980	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Benzo[b]fluoranthene	ND		980	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Benzo[g,h,i]perylene	ND		980	100	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Benzo[k]fluoranthene	ND		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Chrysene	ND		980	220	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Dibenz(a,h)anthracene	ND		980	170	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Fluoranthene	ND		980	100	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Fluorene	**790**	**J**	980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Indeno[1,2,3-cd]pyrene	ND		980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Naphthalene	**1000**		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Phenanthrene	**1600**		980	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Pyrene	**120**	**J**	980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5

Client Sample ID: SB-02 (0-2)
Date Collected: 03/23/15 10:30
Date Received: 03/26/15 12:40

Lab Sample ID: 480-77270-2
Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloroethane	ND		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Dimethyl phthalate	ND		980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Isophorone	ND		980	210	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Dibenzofuran	ND		980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Bis(2-ethylhexyl) phthalate	**390**	**J B**	980	330	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
N-Nitrosodi-n-propylamine	ND		980	170	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
4-Chlorophenyl phenyl ether	ND		980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Hexachlorobenzene	ND		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Di-n-octyl phthalate	ND		980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Hexachlorobutadiene	ND		980	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
2-Methylnaphthalene	**6500**		980	200	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Di-n-butyl phthalate	ND		980	170	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
2,4-Dinitrotoluene	ND		980	200	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
4-Nitroaniline	ND		1900	510	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Nitrobenzene	ND		980	110	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
3,3'-Dichlorobenzidine	ND		1900	1200	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
2-Nitroaniline	ND		1900	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
4-Bromophenyl phenyl ether	ND		980	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Caprolactam	ND		980	290	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Diethyl phthalate	ND		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Carbazole	ND		980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
bis (2-chloroisopropyl) ether	ND		980	200	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
N-Nitrosodiphenylamine	ND		980	790	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Acetophenone	**310**	**J**	980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Bis(2-chloroethyl)ether	ND		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Atrazine	ND		980	340	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Benzaldehyde	ND		980	780	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Butyl benzyl phthalate	ND		980	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Hexachlorocyclopentadiene	ND		980	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
4-Chloroaniline	ND		980	240	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
3-Nitroaniline	ND		1900	270	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
2,6-Dinitrotoluene	ND		980	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Biphenyl	**520**	**J**	980	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
Bis(2-chloroethoxy)methane	ND		980	210	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5
2-Chloronaphthalene	ND		980	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:01	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*77*		*39 - 146*	*03/27/15 09:16*	*03/30/15 12:01*	*5*
2-Fluorobiphenyl	*88*		*37 - 120*	*03/27/15 09:16*	*03/30/15 12:01*	*5*
2-Fluorophenol (Surr)	*80*		*18 - 120*	*03/27/15 09:16*	*03/30/15 12:01*	*5*
Nitrobenzene-d5 (Surr)	*84*		*34 - 132*	*03/27/15 09:16*	*03/30/15 12:01*	*5*
Phenol-d5 (Surr)	*79*		*11 - 120*	*03/27/15 09:16*	*03/30/15 12:01*	*5*
p-Terphenyl-d14 (Surr)	*96*		*65 - 153*	*03/27/15 09:16*	*03/30/15 12:01*	*5*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Client Sample ID: SB-03 (0-2)
Date Collected: 03/23/15 11:30
Date Received: 03/26/15 12:40

Lab Sample ID: 480-77270-3
Matrix: Solid
Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1100	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Anthracene	ND		1100	270	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Benzo[a]anthracene	ND		1100	110	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Benzo[a]pyrene	ND		1100	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Benzo[b]fluoranthene	ND		1100	170	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Benzo[g,h,i]perylene	ND		1100	110	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Benzo[k]fluoranthene	ND		1100	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Chrysene	ND		1100	240	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Fluoranthene	ND		1100	110	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Fluorene	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Indeno[1,2,3-cd]pyrene	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Naphthalene	ND		1100	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Phenanthrene	ND		1100	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Pyrene	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Hexachloroethane	ND		1100	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Dimethyl phthalate	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Isophorone	ND		1100	230	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Dibenzofuran	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Bis(2-ethylhexyl) phthalate	**430**	**J B**	1100	370	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
N-Nitrosodi-n-propylamine	ND		1100	190	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
4-Chlorophenyl phenyl ether	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Hexachlorobenzene	ND		1100	150	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Di-n-octyl phthalate	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Hexachlorobutadiene	ND		1100	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
2-Methylnaphthalene	ND		1100	220	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Di-n-butyl phthalate	ND		1100	190	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
2,4-Dinitrotoluene	ND		1100	220	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
4-Nitroaniline	ND		2100	570	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Nitrobenzene	ND		1100	120	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
3,3'-Dichlorobenzidine	ND		2100	1300	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
2-Nitroaniline	ND		2100	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
4-Bromophenyl phenyl ether	ND		1100	150	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Caprolactam	ND		1100	330	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Diethyl phthalate	ND		1100	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Carbazole	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
bis (2-chloroisopropyl) ether	ND		1100	220	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
N-Nitrosodiphenylamine	ND		1100	880	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Acetophenone	ND		1100	150	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Bis(2-chloroethyl)ether	ND		1100	140	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Atrazine	ND		1100	380	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Benzaldehyde	ND		1100	860	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Butyl benzyl phthalate	ND		1100	180	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Hexachlorocyclopentadiene	ND		1100	150	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
4-Chloroaniline	ND		1100	270	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
3-Nitroaniline	ND		2100	300	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
2,6-Dinitrotoluene	ND		1100	130	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Bis(2-chloroethoxy)methane	ND		1100	230	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Client Sample ID: SB-03 (0-2)
Date Collected: 03/23/15 11:30
Date Received: 03/26/15 12:40

Lab Sample ID: 480-77270-3
Matrix: Solid
Percent Solids: 77.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Chloronaphthalene	ND		1100	180	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5
Biphenyl	ND		1100	160	ug/Kg	☼	03/27/15 09:16	03/30/15 12:25	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*70*		*39 - 146*	*03/27/15 09:16*	*03/30/15 12:25*	*5*
2-Fluorobiphenyl	*72*		*37 - 120*	*03/27/15 09:16*	*03/30/15 12:25*	*5*
2-Fluorophenol (Surr)	*68*		*18 - 120*	*03/27/15 09:16*	*03/30/15 12:25*	*5*
Nitrobenzene-d5 (Surr)	*70*		*34 - 132*	*03/27/15 09:16*	*03/30/15 12:25*	*5*
Phenol-d5 (Surr)	*72*		*11 - 120*	*03/27/15 09:16*	*03/30/15 12:25*	*5*
p-Terphenyl-d14 (Surr)	*87*		*65 - 153*	*03/27/15 09:16*	*03/30/15 12:25*	*5*

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-77270-2	SB-02 (0-2)	89	96	93	113
480-77270-2 - DL	SB-02 (0-2)	85	94	94	96
LCS 480-232561/1-A	Lab Control Sample	85	98	94	99
LCS 480-232615/1-A	Lab Control Sample	88	100	96	101
MB 480-232561/2-A	Method Blank	87	95	94	99
MB 480-232615/2-A	Method Blank	84	95	93	98

Surrogate Legend

12DCE = 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**

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	NBZ	PHL	TPH
Lab Sample ID	Client Sample ID	(39-146)	(37-120)	(18-120)	(34-132)	(11-120)	(65-153)
480-77270-1	SB-01 (2-4)	64	83	52	72	57	92
480-77270-2	SB-02 (0-2)	77	88	80	84	79	96
480-77270-3	SB-03 (0-2)	70	72	68	70	72	87
LCS 480-232623/2-A	Lab Control Sample	89	82	79	83	81	91
MB 480-232623/1-A	Method Blank	81	83	80	82	81	93

Surrogate Legend

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

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

Lab Sample ID: MB 480-232561/2-A
Matrix: Solid
Analysis Batch: 232540

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 232561

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		5.0	0.95	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
Benzene	ND		5.0	0.24	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
Dibromomethane	ND		5.0	0.51	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
Ethylbenzene	ND		5.0	0.34	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
m-Xylene & p-Xylene	ND		9.9	0.83	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
n-Butylbenzene	ND		5.0	0.43	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
o-Xylene	ND		5.0	0.65	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
sec-Butylbenzene	ND		5.0	0.43	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
Toluene	ND		5.0	0.38	ug/Kg		03/26/15 23:31	03/27/15 01:11	1
Xylenes, Total	ND		9.9	0.83	ug/Kg		03/26/15 23:31	03/27/15 01:11	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*87*		*64 - 126*	*03/26/15 23:31*	*03/27/15 01:11*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*03/26/15 23:31*	*03/27/15 01:11*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*03/26/15 23:31*	*03/27/15 01:11*	*1*
Toluene-d8 (Surr)	*99*		*71 - 125*	*03/26/15 23:31*	*03/27/15 01:11*	*1*

Lab Sample ID: LCS 480-232561/1-A
Matrix: Solid
Analysis Batch: 232540

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 232561

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	49.6	52.7		ug/Kg		106	74 - 120
Benzene	49.6	52.1		ug/Kg		105	79 - 127
Ethylbenzene	49.6	52.9		ug/Kg		107	80 - 120
Methyl tert-butyl ether	49.6	48.6		ug/Kg		98	63 - 125
m-Xylene & p-Xylene	49.6	52.4		ug/Kg		106	70 - 130
o-Xylene	49.6	51.7		ug/Kg		104	70 - 130
Toluene	49.6	52.2		ug/Kg		105	74 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*85*		*64 - 126*
4-Bromofluorobenzene (Surr)	*98*		*72 - 126*
Dibromofluoromethane (Surr)	*94*		*60 - 140*
Toluene-d8 (Surr)	*99*		*71 - 125*

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

Lab Sample ID: MB 480-232615/2-A
Matrix: Solid
Analysis Batch: 232596

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 232615

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	ND		4.9	0.94	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
1,3,5-Trimethylbenzene	ND		4.9	0.32	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
4-Isopropyltoluene	ND		4.9	0.39	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
Benzene	ND		4.9	0.24	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
Dibromomethane	ND		4.9	0.51	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
Ethylbenzene	ND		4.9	0.34	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
Isopropylbenzene	ND		4.9	0.74	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
m-Xylene & p-Xylene	ND		9.8	0.83	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
n-Butylbenzene	ND		4.9	0.43	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
N-Propylbenzene	ND		4.9	0.39	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
o-Xylene	ND		4.9	0.64	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
sec-Butylbenzene	ND		4.9	0.43	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
tert-Butylbenzene	ND		4.9	0.51	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
Toluene	ND		4.9	0.37	ug/Kg		03/27/15 08:30	03/27/15 11:35	1
Xylenes, Total	ND		9.8	0.83	ug/Kg		03/27/15 08:30	03/27/15 11:35	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*84*		*64 - 126*	*03/27/15 08:30*	*03/27/15 11:35*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*03/27/15 08:30*	*03/27/15 11:35*	*1*
Dibromofluoromethane (Surr)	*93*		*60 - 140*	*03/27/15 08:30*	*03/27/15 11:35*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*03/27/15 08:30*	*03/27/15 11:35*	*1*

Lab Sample ID: LCS 480-232615/1-A
Matrix: Solid
Analysis Batch: 232596

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 232615

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	48.9	47.5		ug/Kg		97	74 - 120
Benzene	48.9	47.4		ug/Kg		97	79 - 127
Ethylbenzene	48.9	47.3		ug/Kg		97	80 - 120
Methyl tert-butyl ether	48.9	47.0		ug/Kg		96	63 - 125
m-Xylene & p-Xylene	48.9	47.4		ug/Kg		97	70 - 130
o-Xylene	48.9	47.3		ug/Kg		97	70 - 130
Toluene	48.9	47.6		ug/Kg		97	74 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*88*		*64 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*
Dibromofluoromethane (Surr)	*96*		*60 - 140*
Toluene-d8 (Surr)	*101*		*71 - 125*

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

Lab Sample ID: MB 480-232623/1-A
Matrix: Solid
Analysis Batch: 232980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 232623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Acenaphthylene	ND		170	22	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Anthracene	ND		170	42	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Benzo[a]anthracene	ND		170	17	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Benzo[a]pyrene	ND		170	25	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Chrysene	ND		170	38	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Fluoranthene	ND		170	18	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Fluorene	ND		170	20	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Naphthalene	ND		170	22	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Phenanthrene	ND		170	25	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Pyrene	ND		170	20	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Hexachloroethane	ND		170	22	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Dimethyl phthalate	ND		170	20	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Isophorone	ND		170	36	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Dibenzofuran	ND		170	20	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Bis(2-ethylhexyl) phthalate	164	J	170	58	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Hexachlorobenzene	ND		170	23	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Hexachlorobutadiene	ND		170	25	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
2-Methylnaphthalene	ND		170	34	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
4-Nitroaniline	ND		330	88	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Nitrobenzene	ND		170	19	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
2-Nitroaniline	ND		330	25	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Caprolactam	ND		170	51	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Diethyl phthalate	ND		170	22	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Carbazole	ND		170	20	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Acetophenone	ND		170	23	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Atrazine	ND		170	59	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Benzaldehyde	ND		170	130	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
4-Chloroaniline	ND		170	42	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
3-Nitroaniline	ND		330	47	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		03/27/15 09:16	03/30/15 09:13	1

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

Lab Sample ID: MB 480-232623/1-A
Matrix: Solid
Analysis Batch: 232980

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 232623

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
2-Chloronaphthalene	ND		170	28	ug/Kg		03/27/15 09:16	03/30/15 09:13	1
Biphenyl	ND		170	25	ug/Kg		03/27/15 09:16	03/30/15 09:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*81*		*39 - 146*	*03/27/15 09:16*	*03/30/15 09:13*	*1*
2-Fluorobiphenyl	*83*		*37 - 120*	*03/27/15 09:16*	*03/30/15 09:13*	*1*
2-Fluorophenol (Surr)	*80*		*18 - 120*	*03/27/15 09:16*	*03/30/15 09:13*	*1*
Nitrobenzene-d5 (Surr)	*82*		*34 - 132*	*03/27/15 09:16*	*03/30/15 09:13*	*1*
Phenol-d5 (Surr)	*81*		*11 - 120*	*03/27/15 09:16*	*03/30/15 09:13*	*1*
p-Terphenyl-d14 (Surr)	*93*		*65 - 153*	*03/27/15 09:16*	*03/30/15 09:13*	*1*

Lab Sample ID: LCS 480-232623/2-A
Matrix: Solid
Analysis Batch: 232980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 232623

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1630	1380		ug/Kg		85	53 - 120
Acenaphthylene	1630	1430		ug/Kg		88	58 - 121
Anthracene	1630	1450		ug/Kg		89	62 - 129
Benzo[a]anthracene	1630	1470		ug/Kg		90	65 - 133
Benzo[a]pyrene	1630	1490		ug/Kg		91	64 - 127
Benzo[b]fluoranthene	1630	1530		ug/Kg		94	64 - 135
Benzo[g,h,i]perylene	1630	1570		ug/Kg		97	50 - 152
Benzo[k]fluoranthene	1630	1480		ug/Kg		91	58 - 138
Chrysene	1630	1450		ug/Kg		89	64 - 131
Dibenz(a,h)anthracene	1630	1480		ug/Kg		91	54 - 148
Fluoranthene	1630	1550		ug/Kg		95	62 - 131
Fluorene	1630	1400		ug/Kg		86	63 - 126
Indeno[1,2,3-cd]pyrene	1630	1540		ug/Kg		95	56 - 149
Naphthalene	1630	1290		ug/Kg		79	46 - 120
Phenanthrene	1630	1500		ug/Kg		92	60 - 130
Pyrene	1630	1520		ug/Kg		94	51 - 133
Hexachloroethane	1630	1270		ug/Kg		78	41 - 120
Bis(2-ethylhexyl) phthalate	1630	1820		ug/Kg		112	61 - 133
N-Nitrosodi-n-propylamine	1630	1340		ug/Kg		82	46 - 120
2,4-Dinitrotoluene	1630	1460		ug/Kg		90	55 - 125
Caprolactam	3250	2810		ug/Kg		86	54 - 133
Atrazine	3250	2860		ug/Kg		88	60 - 164
Biphenyl	1630	1370		ug/Kg		84	71 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*89*		*39 - 146*
2-Fluorobiphenyl	*82*		*37 - 120*
2-Fluorophenol (Surr)	*79*		*18 - 120*
Nitrobenzene-d5 (Surr)	*83*		*34 - 132*
Phenol-d5 (Surr)	*81*		*11 - 120*

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

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

Lab Sample ID: LCS 480-232623/2-A
Matrix: Solid
Analysis Batch: 232980

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 232623

Surrogate	LCS %Recovery	LCS Qualifier	Limits
p-Terphenyl-d14 (Surr)	91		65 - 153

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

GC/MS VOA

Analysis Batch: 232540

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-77270-2	SB-02 (0-2)	Total/NA	Solid	8260C	232561
LCS 480-232561/1-A	Lab Control Sample	Total/NA	Solid	8260C	232561
MB 480-232561/2-A	Method Blank	Total/NA	Solid	8260C	232561

Prep Batch: 232561

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-77270-2	SB-02 (0-2)	Total/NA	Solid	5035A	
LCS 480-232561/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-232561/2-A	Method Blank	Total/NA	Solid	5035A	

Analysis Batch: 232596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-77270-2 - DL	SB-02 (0-2)	Total/NA	Solid	8260C	232615
LCS 480-232615/1-A	Lab Control Sample	Total/NA	Solid	8260C	232615
MB 480-232615/2-A	Method Blank	Total/NA	Solid	8260C	232615

Prep Batch: 232615

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-77270-2 - DL	SB-02 (0-2)	Total/NA	Solid	5035A	
LCS 480-232615/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-232615/2-A	Method Blank	Total/NA	Solid	5035A	

GC/MS Semi VOA

Prep Batch: 232623

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-77270-1	SB-01 (2-4)	Total/NA	Solid	3550C	
480-77270-2	SB-02 (0-2)	Total/NA	Solid	3550C	
480-77270-3	SB-03 (0-2)	Total/NA	Solid	3550C	
LCS 480-232623/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-232623/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 232980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-77270-1	SB-01 (2-4)	Total/NA	Solid	8270D	232623
480-77270-2	SB-02 (0-2)	Total/NA	Solid	8270D	232623
480-77270-3	SB-03 (0-2)	Total/NA	Solid	8270D	232623
LCS 480-232623/2-A	Lab Control Sample	Total/NA	Solid	8270D	232623
MB 480-232623/1-A	Method Blank	Total/NA	Solid	8270D	232623

General Chemistry

Analysis Batch: 232551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-77270-1	SB-01 (2-4)	Total/NA	Solid	Moisture	
480-77270-2	SB-02 (0-2)	Total/NA	Solid	Moisture	
480-77270-3	SB-03 (0-2)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Client Sample ID: SB-01 (2-4)

Lab Sample ID: 480-77270-1
Date Collected: 03/23/15 10:00
Matrix: Solid
Date Received: 03/26/15 12:40
Percent Solids: 87.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			232623	03/27/15 09:16	CAM	TAL BUF
Total/NA	Analysis	8270D		5	232980	03/30/15 11:37	LMW	TAL BUF
Total/NA	Analysis	Moisture		1	232551	03/26/15 22:43	CMK	TAL BUF

Client Sample ID: SB-02 (0-2)

Lab Sample ID: 480-77270-2
Date Collected: 03/23/15 10:30
Matrix: Solid
Date Received: 03/26/15 12:40
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			232561	03/27/15 00:43	NMD1	TAL BUF
Total/NA	Analysis	8260C		1	232540	03/27/15 02:14	RAS	TAL BUF
Total/NA	Prep	5035A	DL		232615	03/27/15 08:30	RAS	TAL BUF
Total/NA	Analysis	8260C	DL	1	232596	03/27/15 12:13	NMD1	TAL BUF
Total/NA	Prep	3550C			232623	03/27/15 09:16	CAM	TAL BUF
Total/NA	Analysis	8270D		5	232980	03/30/15 12:01	LMW	TAL BUF
Total/NA	Analysis	Moisture		1	232551	03/26/15 22:43	CMK	TAL BUF

Client Sample ID: SB-03 (0-2)

Lab Sample ID: 480-77270-3
Date Collected: 03/23/15 11:30
Matrix: Solid
Date Received: 03/26/15 12:40
Percent Solids: 77.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			232623	03/27/15 09:16	CAM	TAL BUF
Total/NA	Analysis	8270D		5	232980	03/30/15 12:25	LMW	TAL BUF
Total/NA	Analysis	Moisture		1	232551	03/26/15 22:43	CMK	TAL BUF

Laboratory References:

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

Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
Moisture	Percent 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: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-77270-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-77270-1	SB-01 (2-4)	Solid	03/23/15 10:00	03/26/15 12:40
480-77270-2	SB-02 (0-2)	Solid	03/23/15 10:30	03/26/15 12:40
480-77270-3	SB-03 (0-2)	Solid	03/23/15 11:30	03/26/15 12:40

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Turnkey	Nate Munley	3-23-15	190634
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2558 Hamburg Turnpike	(716) 856-0599 / (716) 856-0583		
City Buffalo	**State** NY	**Zip Code** 14218	
Site Contact Ted W Wetherman	**Lab Contact** B Fischer		
Project Name and Location (State) 1661 Main St	**Carrier/Waybill Number**		
Contract/Purchase Order/Quote No. 0239-015-002			

480-77270 Chain of Custody

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis: CP-51 VOCs	CP-51 SVOCs
SB-01 (2-4)	3-23-15	1000				X	2							X
SB-02 (0-2)		1030				X	2						X	X
SB-03 (0-2)	↓	1130				X	2							X

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

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months
(A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Standard

QC Requirements (Specify)

	Date	Time
1. Relinquished By: Ted W Wetherman	3/23/15	1630
2. Relinquished By: Jay Zaglin	3/26/15	12:40
3. Relinquished By		
1. Received By: Jay Zaglin	3/26/15	09:35
2. Received By	3/26/15	1240
3. Received By		

Comments

3.9 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

5/21/2015

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-77270-1

Login Number: 77270
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

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.	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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	bmtk
Samples received within 48 hours of sampling.	False	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-92593-1
Client Project/Site: Benchmark - 1661 Main St.site

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

Attn: Mr. Michael Lesakowski

Joseph V. Giacomazza

Authorized for release by:
12/17/2015 3:53:24 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

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-92593-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-92593-1

Receipt
The samples were received on 12/11/2015 12:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-279734 recovered above the upper control limit for 4-Nitrophenol, Atrazine, Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, Diethyl phthalate, Di-n-butyl phthalate and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: TP-2 (1-3') (480-92593-1), TP-3 (1-6') (480-92593-2) and TP-4 (1-4') (480-92593-3).

Method(s) 8270D: The laboratory control sample (LCS) for batch preparation batch 480-279536 and analytical batch 480-279734 recovered outside control limits for the following analytes: 4-Nitrophenol and Benzaldehyde. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The minimum response factor (RF) criteria for the initial calibration (ICAL) analyzed in analytical batch 274321 was outside criteria for the following analyte: Pentachlorophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte is considered estimated.

Method(s) 8270D: The following samples were diluted due to color, appearance and viscosity: TP-2 (1-3') (480-92593-1), TP-3 (1-6') (480-92593-2) and TP-4 (1-4') (480-92593-3). As such, surrogate recoveries are below the calibration range and may not be reported. Elevated reporting limits (RLs) are provided.

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

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

Organic Prep
Method(s) 3550C: Due to the matrix, the following sample could not be concentrated to the final method required volume: TP-2 (1-3') (480-92593-1). The reporting limits (RLs) are elevated proportionately.

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

Client Sample ID: TP-2 (1-3') — Lab Sample ID: 480-92593-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	2.3		2.0		mg/Kg	1	☼	6010C	Total/NA
Barium	109		0.49		mg/Kg	1	☼	6010C	Total/NA
Chromium	9.0		0.49		mg/Kg	1	☼	6010C	Total/NA
Lead	9.4		0.98		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: TP-3 (1-6') — Lab Sample ID: 480-92593-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	1700	J	12000	1300	ug/Kg	50	☼	8270D	Total/NA
Arsenic	15.1		3.0		mg/Kg	1	☼	6010C	Total/NA
Barium	2460		3.7		mg/Kg	5	☼	6010C	Total/NA
Cadmium	2.1		0.30		mg/Kg	1	☼	6010C	Total/NA
Chromium	35.2		0.74		mg/Kg	1	☼	6010C	Total/NA
Lead	2820		1.5		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.27		0.028		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-4 (1-4') — Lab Sample ID: 480-92593-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	4300	J	9000	900	ug/Kg	50	☼	8270D	Total/NA
Benzo[a]pyrene	4600	J	9000	1300	ug/Kg	50	☼	8270D	Total/NA
Benzo[b]fluoranthene	8200	J	9000	1400	ug/Kg	50	☼	8270D	Total/NA
Benzo[g,h,i]perylene	3800	J	9000	950	ug/Kg	50	☼	8270D	Total/NA
Chrysene	4800	J	9000	2000	ug/Kg	50	☼	8270D	Total/NA
Fluoranthene	12000		9000	950	ug/Kg	50	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3300	J	9000	1100	ug/Kg	50	☼	8270D	Total/NA
Phenanthrene	7500	J	9000	1300	ug/Kg	50	☼	8270D	Total/NA
Pyrene	9900		9000	1100	ug/Kg	50	☼	8270D	Total/NA
Arsenic	3.3		2.1		mg/Kg	1	☼	6010C	Total/NA
Barium	204		0.52		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.38		0.21		mg/Kg	1	☼	6010C	Total/NA
Chromium	9.8		0.52		mg/Kg	1	☼	6010C	Total/NA
Lead	107		1.0		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.11		0.021		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-2 (1-3')
Date Collected: 12/10/15 14:15
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-1
Matrix: Solid
Percent Solids: 97.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		59000	8700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
bis (2-chloroisopropyl) ether	ND		59000	12000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2,4,5-Trichlorophenol	ND		59000	16000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2,4,6-Trichlorophenol	ND		59000	12000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2,4-Dichlorophenol	ND		59000	6300	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2,4-Dimethylphenol	ND		59000	14000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2,4-Dinitrophenol	ND		580000	270000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2,4-Dinitrotoluene	ND		59000	12000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2,6-Dinitrotoluene	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2-Chloronaphthalene	ND		59000	9800	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2-Chlorophenol	ND		59000	11000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2-Methylphenol	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2-Methylnaphthalene	ND		59000	12000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2-Nitroaniline	ND		120000	8700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
2-Nitrophenol	ND		59000	17000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
3,3'-Dichlorobenzidine	ND		120000	70000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
3-Nitroaniline	ND		120000	16000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4,6-Dinitro-2-methylphenol	ND		120000	59000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4-Bromophenyl phenyl ether	ND		59000	8400	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4-Chloro-3-methylphenol	ND		59000	15000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4-Chloroaniline	ND		59000	15000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4-Chlorophenyl phenyl ether	ND		59000	7300	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4-Methylphenol	ND		120000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4-Nitroaniline	ND		120000	31000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
4-Nitrophenol	ND	*	120000	42000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Acenaphthene	ND		59000	8700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Acenaphthylene	ND		59000	7700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Acetophenone	ND		59000	8000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Anthracene	ND		59000	15000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Atrazine	ND		59000	21000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Benzaldehyde	ND	*	59000	47000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Benzo[a]anthracene	ND		59000	5900	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Benzo[a]pyrene	ND		59000	8700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Benzo[b]fluoranthene	ND		59000	9400	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Benzo[g,h,i]perylene	ND		59000	6300	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Benzo[k]fluoranthene	ND		59000	7700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Bis(2-chloroethoxy)methane	ND		59000	13000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Bis(2-chloroethyl)ether	ND		59000	7700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Bis(2-ethylhexyl) phthalate	ND		59000	20000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Butyl benzyl phthalate	ND		59000	9800	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Caprolactam	ND		59000	18000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Carbazole	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Chrysene	ND		59000	13000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Dibenz(a,h)anthracene	ND		59000	10000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Di-n-butyl phthalate	ND		59000	10000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Di-n-octyl phthalate	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Dibenzofuran	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Diethyl phthalate	ND		59000	7700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Dimethyl phthalate	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50

Client Sample ID: TP-2 (1-3')
Date Collected: 12/10/15 14:15
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-1
Matrix: Solid
Percent Solids: 97.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	ND		59000	6300	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Fluorene	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Hexachlorobenzene	ND		59000	8000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Hexachlorobutadiene	ND		59000	8700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Hexachlorocyclopentadiene	ND		59000	8000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Hexachloroethane	ND		59000	7700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Indeno[1,2,3-cd]pyrene	ND		59000	7300	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Isophorone	ND		59000	13000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
N-Nitrosodi-n-propylamine	ND		59000	10000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
N-Nitrosodiphenylamine	ND		59000	48000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Naphthalene	ND		59000	7700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Nitrobenzene	ND		59000	6600	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Pentachlorophenol	ND		120000	59000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Phenanthrene	ND		59000	8700	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Phenol	ND		59000	9100	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50
Pyrene	ND		59000	7000	ug/Kg	☼	12/14/15 08:13	12/15/15 15:57	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*0*	*X*	*34 - 132*	*12/14/15 08:13*	*12/15/15 15:57*	*50*
Phenol-d5 (Surr)	*0*	*X*	*11 - 120*	*12/14/15 08:13*	*12/15/15 15:57*	*50*
p-Terphenyl-d14 (Surr)	*0*	*X*	*65 - 153*	*12/14/15 08:13*	*12/15/15 15:57*	*50*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*39 - 146*	*12/14/15 08:13*	*12/15/15 15:57*	*50*
2-Fluorobiphenyl	*0*	*X*	*37 - 120*	*12/14/15 08:13*	*12/15/15 15:57*	*50*
2-Fluorophenol (Surr)	*0*	*X*	*18 - 120*	*12/14/15 08:13*	*12/15/15 15:57*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**2.3**		2.0		mg/Kg	☼	12/14/15 11:42	12/15/15 13:30	1
Barium	**109**		0.49		mg/Kg	☼	12/14/15 11:42	12/15/15 13:30	1
Cadmium	ND		0.20		mg/Kg	☼	12/14/15 11:42	12/15/15 13:30	1
Chromium	**9.0**		0.49		mg/Kg	☼	12/14/15 11:42	12/15/15 13:30	1
Lead	**9.4**		0.98		mg/Kg	☼	12/14/15 11:42	12/15/15 13:30	1
Selenium	ND		3.9		mg/Kg	☼	12/14/15 11:42	12/15/15 13:30	1
Silver	ND		0.59		mg/Kg	☼	12/14/15 11:42	12/15/15 13:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg	☼	12/14/15 10:20	12/14/15 13:55	1

Client Sample ID: TP-3 (1-6')
Date Collected: 12/10/15 14:20
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-2
Matrix: Solid
Percent Solids: 70.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		12000	1700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
bis (2-chloroisopropyl) ether	ND		12000	2400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2,4,5-Trichlorophenol	ND		12000	3200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2,4,6-Trichlorophenol	ND		12000	2400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2,4-Dichlorophenol	ND		12000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2,4-Dimethylphenol	ND		12000	2900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2,4-Dinitrophenol	ND		120000	55000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2,4-Dinitrotoluene	ND		12000	2400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2,6-Dinitrotoluene	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2-Chloronaphthalene	ND		12000	2000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2-Chlorophenol	ND		12000	2200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2-Methylphenol	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2-Methylnaphthalene	ND		12000	2400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2-Nitroaniline	ND		23000	1700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
2-Nitrophenol	ND		12000	3300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
3,3'-Dichlorobenzidine	ND		23000	14000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
3-Nitroaniline	ND		23000	3300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4,6-Dinitro-2-methylphenol	ND		23000	12000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4-Bromophenyl phenyl ether	ND		12000	1700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4-Chloro-3-methylphenol	ND		12000	2900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4-Chloroaniline	ND		12000	2900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4-Chlorophenyl phenyl ether	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4-Methylphenol	ND		23000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4-Nitroaniline	ND		23000	6200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
4-Nitrophenol	ND	*	23000	8300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Acenaphthene	ND		12000	1700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Acenaphthylene	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Acetophenone	ND		12000	1600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Anthracene	ND		12000	2900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Atrazine	ND		12000	4100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Benzaldehyde	ND	*	12000	9400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Benzo[a]anthracene	ND		12000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Benzo[a]pyrene	ND		12000	1700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Benzo[b]fluoranthene	ND		12000	1900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Benzo[g,h,i]perylene	ND		12000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Benzo[k]fluoranthene	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Bis(2-chloroethoxy)methane	ND		12000	2500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Bis(2-chloroethyl)ether	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Bis(2-ethylhexyl) phthalate	ND		12000	4000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Butyl benzyl phthalate	ND		12000	2000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Caprolactam	ND		12000	3600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Carbazole	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Chrysene	ND		12000	2600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Dibenz(a,h)anthracene	ND		12000	2100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Di-n-butyl phthalate	ND		12000	2000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Di-n-octyl phthalate	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Dibenzofuran	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Diethyl phthalate	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Dimethyl phthalate	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50

Client Sample ID: TP-3 (1-6')

Date Collected: 12/10/15 14:20
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-2

Matrix: Solid
Percent Solids: 70.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**1700**	**J**	12000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Fluorene	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Hexachlorobenzene	ND		12000	1600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Hexachlorobutadiene	ND		12000	1700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Hexachlorocyclopentadiene	ND		12000	1600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Hexachloroethane	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Indeno[1,2,3-cd]pyrene	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Isophorone	ND		12000	2500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
N-Nitrosodi-n-propylamine	ND		12000	2000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
N-Nitrosodiphenylamine	ND		12000	9600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Naphthalene	ND		12000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Nitrobenzene	ND		12000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Pentachlorophenol	ND		23000	12000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Phenanthrene	ND		12000	1700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Phenol	ND		12000	1800	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50
Pyrene	ND		12000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:24	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*73*		*34 - 132*	*12/14/15 08:13*	*12/15/15 16:24*	*50*
Phenol-d5 (Surr)	*71*		*11 - 120*	*12/14/15 08:13*	*12/15/15 16:24*	*50*
p-Terphenyl-d14 (Surr)	*94*		*65 - 153*	*12/14/15 08:13*	*12/15/15 16:24*	*50*
2,4,6-Tribromophenol (Surr)	*191*	*X*	*39 - 146*	*12/14/15 08:13*	*12/15/15 16:24*	*50*
2-Fluorobiphenyl	*94*		*37 - 120*	*12/14/15 08:13*	*12/15/15 16:24*	*50*
2-Fluorophenol (Surr)	*57*		*18 - 120*	*12/14/15 08:13*	*12/15/15 16:24*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15.1**		3.0		mg/Kg	☼	12/14/15 11:42	12/15/15 13:33	1
Barium	**2460**		3.7		mg/Kg	☼	12/14/15 11:42	12/16/15 11:11	5
Cadmium	**2.1**		0.30		mg/Kg	☼	12/14/15 11:42	12/15/15 13:33	1
Chromium	**35.2**		0.74		mg/Kg	☼	12/14/15 11:42	12/15/15 13:33	1
Lead	**2820**		1.5		mg/Kg	☼	12/14/15 11:42	12/15/15 13:33	1
Selenium	ND		5.9		mg/Kg	☼	12/14/15 11:42	12/15/15 13:33	1
Silver	ND		0.89		mg/Kg	☼	12/14/15 11:42	12/15/15 13:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.27**		0.028		mg/Kg	☼	12/14/15 10:20	12/14/15 13:56	1

Client Sample ID: TP-4 (1-4')
Date Collected: 12/10/15 14:25
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-3
Matrix: Solid
Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		9000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
bis (2-chloroisopropyl) ether	ND		9000	1800	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2,4,5-Trichlorophenol	ND		9000	2400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2,4,6-Trichlorophenol	ND		9000	1800	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2,4-Dichlorophenol	ND		9000	950	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2,4-Dimethylphenol	ND		9000	2200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2,4-Dinitrophenol	ND		88000	42000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2,4-Dinitrotoluene	ND		9000	1900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2,6-Dinitrotoluene	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2-Chloronaphthalene	ND		9000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2-Chlorophenol	ND		9000	1600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2-Methylphenol	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2-Methylnaphthalene	ND		9000	1800	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2-Nitroaniline	ND		17000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
2-Nitrophenol	ND		9000	2500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
3,3'-Dichlorobenzidine	ND		17000	11000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
3-Nitroaniline	ND		17000	2500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4,6-Dinitro-2-methylphenol	ND		17000	9000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4-Bromophenyl phenyl ether	ND		9000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4-Chloro-3-methylphenol	ND		9000	2200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4-Chloroaniline	ND		9000	2200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4-Chlorophenyl phenyl ether	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4-Methylphenol	ND		17000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4-Nitroaniline	ND		17000	4700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
4-Nitrophenol	ND	*	17000	6300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Acenaphthene	ND		9000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Acenaphthylene	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Acetophenone	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Anthracene	ND		9000	2200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Atrazine	ND		9000	3100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Benzaldehyde	ND	*	9000	7200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Benzo[a]anthracene	**4300**	**J**	9000	900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Benzo[a]pyrene	**4600**	**J**	9000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Benzo[b]fluoranthene	**8200**	**J**	9000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Benzo[g,h,i]perylene	**3800**	**J**	9000	950	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Benzo[k]fluoranthene	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Bis(2-chloroethoxy)methane	ND		9000	1900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Bis(2-chloroethyl)ether	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Bis(2-ethylhexyl) phthalate	ND		9000	3100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Butyl benzyl phthalate	ND		9000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Caprolactam	ND		9000	2700	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Carbazole	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Chrysene	**4800**	**J**	9000	2000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Dibenz(a,h)anthracene	ND		9000	1600	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Di-n-butyl phthalate	ND		9000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Di-n-octyl phthalate	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Dibenzofuran	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Diethyl phthalate	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Dimethyl phthalate	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50

Client Sample ID: TP-4 (1-4')

Date Collected: 12/10/15 14:25
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-3

Matrix: Solid
Percent Solids: 91.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**12000**		9000	950	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Fluorene	ND		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Hexachlorobenzene	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Hexachlorobutadiene	ND		9000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Hexachlorocyclopentadiene	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Hexachloroethane	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Indeno[1,2,3-cd]pyrene	**3300**	**J**	9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Isophorone	ND		9000	1900	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
N-Nitrosodi-n-propylamine	ND		9000	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
N-Nitrosodiphenylamine	ND		9000	7300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Naphthalene	ND		9000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Nitrobenzene	ND		9000	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Pentachlorophenol	ND		17000	9000	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Phenanthrene	**7500**	**J**	9000	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Phenol	ND		9000	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50
Pyrene	**9900**		9000	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 16:51	50

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*57*		*34 - 132*	*12/14/15 08:13*	*12/15/15 16:51*	*50*
Phenol-d5 (Surr)	*47*		*11 - 120*	*12/14/15 08:13*	*12/15/15 16:51*	*50*
p-Terphenyl-d14 (Surr)	*68*		*65 - 153*	*12/14/15 08:13*	*12/15/15 16:51*	*50*
2,4,6-Tribromophenol (Surr)	*203*	*X*	*39 - 146*	*12/14/15 08:13*	*12/15/15 16:51*	*50*
2-Fluorobiphenyl	*73*		*37 - 120*	*12/14/15 08:13*	*12/15/15 16:51*	*50*
2-Fluorophenol (Surr)	*49*		*18 - 120*	*12/14/15 08:13*	*12/15/15 16:51*	*50*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.3**		2.1		mg/Kg	☼	12/14/15 11:42	12/15/15 13:37	1
Barium	**204**		0.52		mg/Kg	☼	12/14/15 11:42	12/15/15 13:37	1
Cadmium	**0.38**		0.21		mg/Kg	☼	12/14/15 11:42	12/15/15 13:37	1
Chromium	**9.8**		0.52		mg/Kg	☼	12/14/15 11:42	12/15/15 13:37	1
Lead	**107**		1.0		mg/Kg	☼	12/14/15 11:42	12/15/15 13:37	1
Selenium	ND		4.1		mg/Kg	☼	12/14/15 11:42	12/15/15 13:37	1
Silver	ND		0.62		mg/Kg	☼	12/14/15 11:42	12/15/15 13:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.11**		0.021		mg/Kg	☼	12/14/15 10:20	12/14/15 14:03	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

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

Matrix: Solid

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPH	TBP	FBP	2FP
Lab Sample ID	Client Sample ID	(34-132)	(11-120)	(65-153)	(39-146)	(37-120)	(18-120)
480-92593-1	TP-2 (1-3')	0 X	0 X	0 X	0 X	0 X	0 X
480-92593-2	TP-3 (1-6')	73	71	94	191 X	94	57
480-92593-3	TP-4 (1-4')	57	47	68	203 X	73	49
LCS 480-279536/2-A	Lab Control Sample	95	79	97	104	92	77
MB 480-279536/1-A	Method Blank	87	76	89	90	83	73

Surrogate Legend

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

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

Lab Sample ID: MB 480-279536/1-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Chloronaphthalene	ND		170	28	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Chlorophenol	ND		170	31	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Methylphenol	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Methylnaphthalene	ND		170	34	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Nitroaniline	ND		330	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Nitrophenol	ND		170	47	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
3-Nitroaniline	ND		330	46	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Chloroaniline	ND		170	41	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Methylphenol	ND		330	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Nitroaniline	ND		330	88	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Nitrophenol	ND		330	120	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Acenaphthene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Acenaphthylene	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Acetophenone	ND		170	23	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Anthracene	ND		170	41	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Atrazine	ND		170	58	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzaldehyde	ND		170	130	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[a]anthracene	ND		170	17	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[a]pyrene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Caprolactam	ND		170	50	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Carbazole	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Chrysene	ND		170	37	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Dibenzofuran	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Diethyl phthalate	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1

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

Lab Sample ID: MB 480-279536/1-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Fluoranthene	ND		170	18	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Fluorene	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachlorobenzene	ND		170	23	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachlorobutadiene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachloroethane	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Isophorone	ND		170	36	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Naphthalene	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Nitrobenzene	ND		170	19	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Pentachlorophenol	ND		330	170	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Phenanthrene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Phenol	ND		170	26	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Pyrene	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*87*		*34 - 132*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
Phenol-d5 (Surr)	*76*		*11 - 120*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
p-Terphenyl-d14 (Surr)	*89*		*65 - 153*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
2,4,6-Tribromophenol (Surr)	*90*		*39 - 146*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
2-Fluorobiphenyl	*83*		*37 - 120*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
2-Fluorophenol (Surr)	*73*		*18 - 120*	*12/14/15 08:13*	*12/15/15 09:20*	*1*

Lab Sample ID: LCS 480-279536/2-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279536

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1630	1520		ug/Kg		93	71 - 120
bis (2-chloroisopropyl) ether	1630	1270		ug/Kg		78	44 - 120
2,4,5-Trichlorophenol	1630	1580		ug/Kg		97	59 - 126
2,4,6-Trichlorophenol	1630	1530		ug/Kg		94	59 - 123
2,4-Dichlorophenol	1630	1440		ug/Kg		89	52 - 120
2,4-Dimethylphenol	1630	1640		ug/Kg		101	36 - 120
2,4-Dinitrophenol	3260	2950		ug/Kg		90	35 - 146
2,4-Dinitrotoluene	1630	1680		ug/Kg		103	55 - 125
2,6-Dinitrotoluene	1630	1630		ug/Kg		100	66 - 128
2-Chloronaphthalene	1630	1460		ug/Kg		90	57 - 120
2-Chlorophenol	1630	1330		ug/Kg		82	38 - 120
2-Methylphenol	1630	1340		ug/Kg		82	48 - 120
2-Methylnaphthalene	1630	1440		ug/Kg		88	47 - 120
2-Nitroaniline	1630	1830		ug/Kg		112	61 - 130
2-Nitrophenol	1630	1350		ug/Kg		83	50 - 120
3,3'-Dichlorobenzidine	3260	2940		ug/Kg		90	48 - 126
3-Nitroaniline	1630	1440		ug/Kg		89	61 - 127

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

Lab Sample ID: LCS 480-279536/2-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279536

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	3260	3230		ug/Kg		99	49 - 155
4-Bromophenyl phenyl ether	1630	1530		ug/Kg		94	58 - 131
4-Chloro-3-methylphenol	1630	1610		ug/Kg		99	49 - 125
4-Chloroaniline	1630	1280		ug/Kg		79	49 - 120
4-Chlorophenyl phenyl ether	1630	1500		ug/Kg		92	63 - 124
4-Methylphenol	1630	1340		ug/Kg		82	50 - 119
4-Nitroaniline	1630	1530		ug/Kg		94	63 - 128
4-Nitrophenol	3260	5350	*	ug/Kg		164	43 - 137
Acenaphthene	1630	1540		ug/Kg		95	53 - 120
Acenaphthylene	1630	1530		ug/Kg		94	58 - 121
Acetophenone	1630	1430		ug/Kg		88	66 - 120
Anthracene	1630	1690		ug/Kg		104	62 - 129
Atrazine	3260	3820		ug/Kg		117	60 - 164
Benzaldehyde	3260	4810	E *	ug/Kg		148	21 - 120
Benzo[a]anthracene	1630	1690		ug/Kg		104	65 - 133
Benzo[a]pyrene	1630	1600		ug/Kg		98	64 - 127
Benzo[b]fluoranthene	1630	1660		ug/Kg		102	64 - 135
Benzo[g,h,i]perylene	1630	1510		ug/Kg		93	50 - 152
Benzo[k]fluoranthene	1630	1570		ug/Kg		96	58 - 138
Bis(2-chloroethoxy)methane	1630	1320		ug/Kg		81	61 - 133
Bis(2-chloroethyl)ether	1630	1240		ug/Kg		76	45 - 120
Bis(2-ethylhexyl) phthalate	1630	2050		ug/Kg		126	61 - 133
Butyl benzyl phthalate	1630	1990		ug/Kg		122	61 - 129
Caprolactam	3260	2800		ug/Kg		86	54 - 133
Carbazole	1630	1640		ug/Kg		101	59 - 129
Chrysene	1630	1570		ug/Kg		96	64 - 131
Dibenz(a,h)anthracene	1630	1520		ug/Kg		93	54 - 148
Di-n-butyl phthalate	1630	2000		ug/Kg		123	58 - 130
Di-n-octyl phthalate	1630	2070		ug/Kg		127	62 - 133
Dibenzofuran	1630	1570		ug/Kg		96	56 - 120
Diethyl phthalate	1630	1910		ug/Kg		117	66 - 126
Dimethyl phthalate	1630	1730		ug/Kg		106	65 - 124
Fluoranthene	1630	1670		ug/Kg		103	62 - 131
Fluorene	1630	1570		ug/Kg		97	63 - 126
Hexachlorobenzene	1630	1620		ug/Kg		99	60 - 132
Hexachlorobutadiene	1630	1610		ug/Kg		99	45 - 120
Hexachlorocyclopentadiene	1630	1400		ug/Kg		86	31 - 120
Hexachloroethane	1630	1440		ug/Kg		88	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1570		ug/Kg		96	56 - 149
Isophorone	1630	1510		ug/Kg		93	56 - 120
N-Nitrosodi-n-propylamine	1630	1370		ug/Kg		84	46 - 120
Naphthalene	1630	1380		ug/Kg		85	46 - 120
Nitrobenzene	1630	1490		ug/Kg		91	49 - 120
Pentachlorophenol	3260	2820		ug/Kg		87	33 - 136
Phenanthrene	1630	1710		ug/Kg		105	60 - 130
Phenol	1630	1270		ug/Kg		78	36 - 120
Pyrene	1630	1660		ug/Kg		102	51 - 133

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

Lab Sample ID: LCS 480-279536/2-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279536

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*95*		*34 - 132*
Phenol-d5 (Surr)	*79*		*11 - 120*
p-Terphenyl-d14 (Surr)	*97*		*65 - 153*
2,4,6-Tribromophenol (Surr)	*104*		*39 - 146*
2-Fluorobiphenyl	*92*		*37 - 120*
2-Fluorophenol (Surr)	*77*		*18 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-279591/1-A
Matrix: Solid
Analysis Batch: 279950

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.1		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Barium	ND		0.53		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Cadmium	ND		0.21		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Chromium	ND		0.53		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Lead	ND		1.1		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Selenium	ND		4.2		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Silver	ND		0.63		mg/Kg		12/14/15 11:42	12/15/15 13:04	1

Lab Sample ID: LCSSRM 480-279591/2-A
Matrix: Solid
Analysis Batch: 279950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279591

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	98.5	86.58		mg/Kg		87.9	69.3 - 145.2
Barium	308	268.8		mg/Kg		87.3	74.0 - 126.0
Cadmium	146	130.5		mg/Kg		89.4	73.3 - 126.7
Chromium	182	155.0		mg/Kg		85.2	70.9 - 129.7
Lead	130	123.2		mg/Kg		94.8	72.5 - 126.9
Selenium	154	133.8		mg/Kg		86.9	67.5 - 132.5
Silver	40.9	33.61		mg/Kg		82.2	66.0 - 133.7

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-279559/1-A
Matrix: Solid
Analysis Batch: 279658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		12/14/15 10:20	12/14/15 13:44	1

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

Lab Sample ID: LCSSRM 480-279559/2-A ^5
Matrix: Solid
Analysis Batch: 279658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279559

Analyte			Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury			7.10	7.96		mg/Kg		112.1	51.3 - 149.3		

Lab Sample ID: 480-92593-3 MS
Matrix: Solid
Analysis Batch: 279658

Client Sample ID: TP-4 (1-4')
Prep Type: Total/NA
Prep Batch: 279559

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Mercury	0.11		0.366	0.460		mg/Kg	☼	96	80 - 120		

Lab Sample ID: 480-92593-3 MSD
Matrix: Solid
Analysis Batch: 279658

Client Sample ID: TP-4 (1-4')
Prep Type: Total/NA
Prep Batch: 279559

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.11		0.354	0.432		mg/Kg	☼	91	80 - 120	6	20

GC/MS Semi VOA

Prep Batch: 279536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-1	TP-2 (1-3')	Total/NA	Solid	3550C	
480-92593-2	TP-3 (1-6')	Total/NA	Solid	3550C	
480-92593-3	TP-4 (1-4')	Total/NA	Solid	3550C	
LCS 480-279536/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-279536/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 279734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-1	TP-2 (1-3')	Total/NA	Solid	8270D	279536
480-92593-2	TP-3 (1-6')	Total/NA	Solid	8270D	279536
480-92593-3	TP-4 (1-4')	Total/NA	Solid	8270D	279536
LCS 480-279536/2-A	Lab Control Sample	Total/NA	Solid	8270D	279536
MB 480-279536/1-A	Method Blank	Total/NA	Solid	8270D	279536

Metals

Prep Batch: 279559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-1	TP-2 (1-3')	Total/NA	Solid	7471B	
480-92593-2	TP-3 (1-6')	Total/NA	Solid	7471B	
480-92593-3	TP-4 (1-4')	Total/NA	Solid	7471B	
480-92593-3 MS	TP-4 (1-4')	Total/NA	Solid	7471B	
480-92593-3 MSD	TP-4 (1-4')	Total/NA	Solid	7471B	
LCSSRM 480-279559/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-279559/1-A	Method Blank	Total/NA	Solid	7471B	

Prep Batch: 279591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-1	TP-2 (1-3')	Total/NA	Solid	3050B	
480-92593-2	TP-3 (1-6')	Total/NA	Solid	3050B	
480-92593-3	TP-4 (1-4')	Total/NA	Solid	3050B	
LCSSRM 480-279591/2-A	Lab Control Sample	Total/NA	Solid	3050B	
MB 480-279591/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 279658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-1	TP-2 (1-3')	Total/NA	Solid	7471B	279559
480-92593-2	TP-3 (1-6')	Total/NA	Solid	7471B	279559
480-92593-3	TP-4 (1-4')	Total/NA	Solid	7471B	279559
480-92593-3 MS	TP-4 (1-4')	Total/NA	Solid	7471B	279559
480-92593-3 MSD	TP-4 (1-4')	Total/NA	Solid	7471B	279559
LCSSRM 480-279559/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	279559
MB 480-279559/1-A	Method Blank	Total/NA	Solid	7471B	279559

Analysis Batch: 279950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-1	TP-2 (1-3')	Total/NA	Solid	6010C	279591
480-92593-2	TP-3 (1-6')	Total/NA	Solid	6010C	279591
480-92593-3	TP-4 (1-4')	Total/NA	Solid	6010C	279591
LCSSRM 480-279591/2-A	Lab Control Sample	Total/NA	Solid	6010C	279591

Metals (Continued)

Analysis Batch: 279950 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-279591/1-A	Method Blank	Total/NA	Solid	6010C	279591

Analysis Batch: 280242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-2	TP-3 (1-6')	Total/NA	Solid	6010C	279591

General Chemistry

Analysis Batch: 279439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92593-1	TP-2 (1-3')	Total/NA	Solid	Moisture	
480-92593-2	TP-3 (1-6')	Total/NA	Solid	Moisture	
480-92593-3	TP-4 (1-4')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

Client Sample ID: TP-2 (1-3')
Date Collected: 12/10/15 14:15
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	279439	12/12/15 04:12	CSW	TAL BUF

Client Sample ID: TP-2 (1-3')
Date Collected: 12/10/15 14:15
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-1
Matrix: Solid
Percent Solids: 97.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			279536	12/14/15 08:13	TRG	TAL BUF
Total/NA	Analysis	8270D		50	279734	12/15/15 15:57	LMW	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		1	279950	12/15/15 13:30	AMH	TAL BUF
Total/NA	Prep	7471B			279559	12/14/15 10:20	TAS	TAL BUF
Total/NA	Analysis	7471B		1	279658	12/14/15 13:55	TAS	TAL BUF

Client Sample ID: TP-3 (1-6')
Date Collected: 12/10/15 14:20
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	279439	12/12/15 04:12	CSW	TAL BUF

Client Sample ID: TP-3 (1-6')
Date Collected: 12/10/15 14:20
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-2
Matrix: Solid
Percent Solids: 70.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			279536	12/14/15 08:13	TRG	TAL BUF
Total/NA	Analysis	8270D		50	279734	12/15/15 16:24	LMW	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		1	279950	12/15/15 13:33	AMH	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		5	280242	12/16/15 11:11	AMH	TAL BUF
Total/NA	Prep	7471B			279559	12/14/15 10:20	TAS	TAL BUF
Total/NA	Analysis	7471B		1	279658	12/14/15 13:56	TAS	TAL BUF

Client Sample ID: TP-4 (1-4')
Date Collected: 12/10/15 14:25
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	279439	12/12/15 04:12	CSW	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

Client Sample ID: TP-4 (1-4')

Date Collected: 12/10/15 14:25
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92593-3

Matrix: Solid
Percent Solids: 91.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			279536	12/14/15 08:13	TRG	TAL BUF
Total/NA	Analysis	8270D		50	279734	12/15/15 16:51	LMW	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		1	279950	12/15/15 13:37	AMH	TAL BUF
Total/NA	Prep	7471B			279559	12/14/15 10:20	TAS	TAL BUF
Total/NA	Analysis	7471B		1	279658	12/14/15 14:03	TAS	TAL BUF

Laboratory References:

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

Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

Method	Method Description	Protocol	Laboratory
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92593-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-92593-1	TP-2 (1-3')	Solid	12/10/15 14:15	12/11/15 12:05
480-92593-2	TP-3 (1-6')	Solid	12/10/15 14:20	12/11/15 12:05
480-92593-3	TP-4 (1-4')	Solid	12/10/15 14:25	12/11/15 12:05

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes ☐ No ☒

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

Client: Turnkey	Project Manager: Nate Munley	Date: 12-10-15	Chain of Custody Number: 296348
Address: 7558 Hamburg Turnpike	Telephone Number (Area Code)/Fax Number: (716) 856-0599 / (716) 856-0583	Lab Number:	Page 1 of 1
City: Buffalo / State: NY / Zip Code: 14218	Site Contact: Paul Wurthman	Lab Contact: B Fischer	
Project Name and Location (State): Main + Balcom	Carrier/Waybill Number:		
Contract/Purchase Order/Quote No.: 0239-014-001-003			

Analysis (Attach list if more space is needed): TCL SVOCs 8270; RCRA Metals

Special Instructions/ Conditions of Receipt

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	TCL SVOCs 8270	RCRA Metals
TP-2 (1-3')	12-10-15	1415				X	X						1	1
TP-3 (1-6')	↓	1420				X	X						1	1
TP-4 (1-4')	↓	1425				X	X						1	1

480-92593 Chain of Custody

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

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For _____ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Standard

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	12-10-15	17:00	1. Received By	12/11/15	10:35
2. Relinquished By	12/11/15	12:05	2. Received By	12/11/15	1205
3. Relinquished By			3. Received By		

Comments

3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-92593-1

Login Number: 92593
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

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.	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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	BMTK
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	

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: 480-92594-1
Client Project/Site: Benchmark - 1661 Main St.site

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

Attn: Mr. Nate Munley

Joseph V. Giacomazza

Authorized for release by:
12/17/2015 4:17:56 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

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
K	Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-92594-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-92594-1

Receipt
The samples were received on 12/11/2015 12:05 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

Receipt Exceptions
The following samples were not listed on the Chain-of-Custody (COC): TP-5 (1-2.5) (480-92594-5) and TP-6 (1-4) (480-92594-6) Samples have been logged in with no methods pending PM/client resolution.

GC/MS VOA
Method(s) 8260C: Reported analyte concentrations in the following samples are below 200 ug/kg and may be biased low due to the samples not being collected according to 5035-L/5035A-L low-level specifications: TP-1 (1-4) (480-92594-1) and TP-10 (10-12) (480-92594-4).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-279534 recovered above the upper control limit for Chloromethane, Trichlorofluoromethane and Vinyl chloride. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: TP-1 (1-4) (480-92594-1) and TP-10 (10-12) (480-92594-4).

Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-279590 and analytical batch 480-279534 recovered outside control limits for the following analyte: 2-Butanone. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. TP-1 (1-4) (480-92594-1) and TP-10 (10-12) (480-92594-4)

Method(s) 8260C: The method blank for preparation batch 480-279590 and analytical batch 480-279534 contained Acetone above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed. TP-1 (1-4) (480-92594-1) and TP-10 (10-12) (480-92594-4)

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

GC/MS Semi VOA
Method(s) 8270D: The continuing calibration verification (CCV) associated with batch 480-279734 recovered above the upper control limit for 4-Nitrophenol, Atrazine, Bis(2-ethylhexyl) phthalate, Butyl benzyl phthalate, Diethyl phthalate, Di-n-butyl phthalate and Di-n-octyl phthalate. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following samples are impacted: TP-1 (1-4) (480-92594-1), TP-8 (1-3) (480-92594-2), TP-9 (3-6) (480-92594-3) and TP-10 (10-12) (480-92594-4).

Method(s) 8270D: The laboratory control sample (LCS) for batch preparation batch 480-279536 and analytical batch 480-279734 recovered outside control limits for the following analytes: 4-Nitrophenol and Benzaldehyde. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8270D: The minimum response factor (RF) criteria for the initial calibration (ICAL) analyzed in analytical batch 274321 was outside criteria for the following analyte: Pentachlorophenol. As indicated in the reference method, sample analysis may proceed; however, any detection or non-detection for the affected analyte is considered estimated.

Method(s) 8270D: The following samples were diluted due to appearance and viscosity: TP-8 (1-3) (480-92594-2) and TP-9 (3-6) (480-92594-3). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples were diluted due to appearance and viscosity: TP-1 (1-4) (480-92594-1) and TP-10 (10-12) (480-92594-4). As such, surrogate recoveries are below the calibration range, and elevated reporting limits (RLs) are provided.

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

Metals

Job ID: 480-92594-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

Method(s) 6010C: The following samples was diluted due to the presence of Total Iron which interferes with Total Silver, Chromium, Lead, and Selenium: TP-9 (3-6) (480-92594-3). Elevated reporting limits (RLs) are provided.

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

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Client Sample ID: TP-1 (1-4) — Lab Sample ID: 480-92594-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloroform	0.34	J	5.2	0.32	ug/Kg	1	☼	8260C	Total/NA
Arsenic	5.1		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	24.3		0.54		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.36		0.22		mg/Kg	1	☼	6010C	Total/NA
Chromium	8.4		0.54		mg/Kg	1	☼	6010C	Total/NA
Lead	31.6		1.1		mg/Kg	1	☼	6010C	Total/NA

Client Sample ID: TP-8 (1-3) — Lab Sample ID: 480-92594-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	180	J	920	130	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	120	J	920	120	ug/Kg	5	☼	8270D	Total/NA
Anthracene	830	J	920	230	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2600		920	92	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	2100		920	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	2700		920	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1500		920	97	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1100		920	120	ug/Kg	5	☼	8270D	Total/NA
Carbazole	380	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2400		920	200	ug/Kg	5	☼	8270D	Total/NA
Dibenzofuran	210	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	4800		920	97	ug/Kg	5	☼	8270D	Total/NA
Fluorene	240	J	920	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1300		920	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	3700		920	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	4000		920	110	ug/Kg	5	☼	8270D	Total/NA
Arsenic	8.1		2.2		mg/Kg	1	☼	6010C	Total/NA
Barium	83.4		0.56		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.37		0.22		mg/Kg	1	☼	6010C	Total/NA
Chromium	10.2		0.56		mg/Kg	1	☼	6010C	Total/NA
Lead	174		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.37		0.021		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-9 (3-6) — Lab Sample ID: 480-92594-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	160	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Anthracene	670	J	1000	250	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	3100		1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	2000		1000	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	2600	K	1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1500		1000	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1700		1000	130	ug/Kg	5	☼	8270D	Total/NA
Bis(2-ethylhexyl) phthalate	500	J	1000	350	ug/Kg	5	☼	8270D	Total/NA
Carbazole	270	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	3000		1000	230	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	6100		1000	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1200		1000	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	2600		1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	5300		1000	120	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-9 (3-6) (Continued)

Lab Sample ID: 480-92594-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	17.0		2.5		mg/Kg	1	☼	6010C	Total/NA
Barium	77.1		0.64		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.73		0.25		mg/Kg	1	☼	6010C	Total/NA
Chromium	65.0		3.2		mg/Kg	5	☼	6010C	Total/NA
Lead	190		6.4		mg/Kg	5	☼	6010C	Total/NA
Mercury	0.21		0.025		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: TP-10 (10-12)

Lab Sample ID: 480-92594-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	57	B	32	5.3	ug/Kg	1	☼	8260C	Total/NA
Acenaphthene	1100	J	4200	620	ug/Kg	20	☼	8270D	Total/NA
Anthracene	2700	J	4200	1000	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene	6300		4200	420	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	5100		4200	620	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	8500	K	4200	670	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	4200		4200	450	ug/Kg	20	☼	8270D	Total/NA
Carbazole	1300	J	4200	500	ug/Kg	20	☼	8270D	Total/NA
Chrysene	5700		4200	950	ug/Kg	20	☼	8270D	Total/NA
Dibenzofuran	820	J	4200	500	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	15000		4200	450	ug/Kg	20	☼	8270D	Total/NA
Fluorene	1400	J	4200	500	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3700	J	4200	520	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	10000		4200	620	ug/Kg	20	☼	8270D	Total/NA
Pyrene	13000		4200	500	ug/Kg	20	☼	8270D	Total/NA
Arsenic	7.0		2.6		mg/Kg	1	☼	6010C	Total/NA
Barium	103		0.65		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.75		0.26		mg/Kg	1	☼	6010C	Total/NA
Chromium	18.4		0.65		mg/Kg	1	☼	6010C	Total/NA
Lead	72.0		1.3		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.24		0.025		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: TP-1 (1-4)

Date Collected: 12/10/15 14:10
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-1

Matrix: Solid
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.2	0.38	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,1,2,2-Tetrachloroethane	ND		5.2	0.84	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.2	1.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,1,2-Trichloroethane	ND		5.2	0.68	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,1-Dichloroethane	ND		5.2	0.64	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,1-Dichloroethene	ND		5.2	0.64	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,2,4-Trichlorobenzene	ND		5.2	0.32	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,2,4-Trimethylbenzene	ND		5.2	1.0	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,2-Dibromo-3-Chloropropane	ND		5.2	2.6	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,2-Dichlorobenzene	ND		5.2	0.41	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,2-Dichloroethane	ND		5.2	0.26	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,2-Dichloropropane	ND		5.2	2.6	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,3,5-Trimethylbenzene	ND		5.2	0.34	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,3-Dichlorobenzene	ND		5.2	0.27	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,4-Dichlorobenzene	ND		5.2	0.73	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
2-Hexanone	ND		26	2.6	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
4-Isopropyltoluene	ND		5.2	0.42	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Acetone	ND		26	4.4	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Benzene	ND		5.2	0.26	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Bromoform	ND		5.2	2.6	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Bromomethane	ND		5.2	0.47	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Carbon disulfide	ND		5.2	2.6	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Carbon tetrachloride	ND		5.2	0.50	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Chlorobenzene	ND		5.2	0.69	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Dibromochloromethane	ND		5.2	0.67	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Chloroethane	ND		5.2	1.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Chloroform	**0.34**	**J**	5.2	0.32	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Chloromethane	ND		5.2	0.31	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
cis-1,2-Dichloroethene	ND		5.2	0.67	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
cis-1,3-Dichloropropene	ND		5.2	0.75	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Cyclohexane	ND		5.2	0.73	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Bromodichloromethane	ND		5.2	0.70	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Dichlorodifluoromethane	ND		5.2	0.43	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Ethylbenzene	ND		5.2	0.36	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
1,2-Dibromoethane	ND		5.2	0.67	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Isopropylbenzene	ND		5.2	0.79	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Methyl acetate	ND		5.2	3.1	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
2-Butanone (MEK)	ND	*	26	1.9	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
4-Methyl-2-pentanone (MIBK)	ND		26	1.7	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Methyl tert-butyl ether	ND		5.2	0.51	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Methylcyclohexane	ND		5.2	0.79	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Methylene Chloride	ND		5.2	2.4	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
m,p-Xylene	ND		10	0.87	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
n-Butylbenzene	ND		5.2	0.45	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
N-Propylbenzene	ND		5.2	0.42	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
o-Xylene	ND		5.2	0.68	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
sec-Butylbenzene	ND		5.2	0.45	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Styrene	ND		5.2	0.26	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
tert-Butylbenzene	ND		5.2	0.54	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1

Client Sample ID: TP-1 (1-4)
Date Collected: 12/10/15 14:10
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-1
Matrix: Solid
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		5.2	0.70	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Toluene	ND		5.2	0.39	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
trans-1,2-Dichloroethene	ND		5.2	0.54	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
trans-1,3-Dichloropropene	ND		5.2	2.3	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Trichloroethene	ND		5.2	1.1	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Trichlorofluoromethane	ND		5.2	0.49	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Vinyl chloride	ND		5.2	0.64	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1
Xylenes, Total	ND		10	0.87	ug/Kg	☼	12/14/15 09:56	12/14/15 16:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*12/14/15 09:56*	*12/14/15 16:04*	*1*
Toluene-d8 (Surr)	*102*		*71 - 125*	*12/14/15 09:56*	*12/14/15 16:04*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 126*	*12/14/15 09:56*	*12/14/15 16:04*	*1*
Dibromofluoromethane (Surr)	*104*		*60 - 140*	*12/14/15 09:56*	*12/14/15 16:04*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		3500	510	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
bis (2-chloroisopropyl) ether	ND		3500	700	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2,4,5-Trichlorophenol	ND		3500	940	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2,4,6-Trichlorophenol	ND		3500	700	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2,4-Dichlorophenol	ND		3500	370	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2,4-Dimethylphenol	ND		3500	840	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2,4-Dinitrophenol	ND		34000	16000	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2,4-Dinitrotoluene	ND		3500	720	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2,6-Dinitrotoluene	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2-Chloronaphthalene	ND		3500	570	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2-Chlorophenol	ND		3500	640	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2-Methylphenol	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2-Methylnaphthalene	ND		3500	700	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2-Nitroaniline	ND		6800	510	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
2-Nitrophenol	ND		3500	980	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
3,3'-Dichlorobenzidine	ND		6800	4100	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
3-Nitroaniline	ND		6800	960	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4,6-Dinitro-2-methylphenol	ND		6800	3500	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4-Bromophenyl phenyl ether	ND		3500	490	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4-Chloro-3-methylphenol	ND		3500	860	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4-Chloroaniline	ND		3500	860	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4-Chlorophenyl phenyl ether	ND		3500	430	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4-Methylphenol	ND		6800	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4-Nitroaniline	ND		6800	1800	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
4-Nitrophenol	ND	*	6800	2400	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Acenaphthene	ND		3500	510	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Acenaphthylene	ND		3500	450	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Acetophenone	ND		3500	470	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Anthracene	ND		3500	860	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Atrazine	ND		3500	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Benzaldehyde	ND	*	3500	2800	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Benzo[a]anthracene	ND		3500	350	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Benzo[a]pyrene	ND		3500	510	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20

Client Sample ID: TP-1 (1-4)
Date Collected: 12/10/15 14:10
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-1
Matrix: Solid
Percent Solids: 95.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	ND		3500	550	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Benzo[g,h,i]perylene	ND		3500	370	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Benzo[k]fluoranthene	ND		3500	450	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Bis(2-chloroethoxy)methane	ND		3500	740	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Bis(2-chloroethyl)ether	ND		3500	450	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Bis(2-ethylhexyl) phthalate	ND		3500	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Butyl benzyl phthalate	ND		3500	570	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Caprolactam	ND		3500	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Carbazole	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Chrysene	ND		3500	780	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Dibenz(a,h)anthracene	ND		3500	620	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Di-n-butyl phthalate	ND		3500	600	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Di-n-octyl phthalate	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Dibenzofuran	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Diethyl phthalate	ND		3500	450	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Dimethyl phthalate	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Fluoranthene	ND		3500	370	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Fluorene	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Hexachlorobenzene	ND		3500	470	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Hexachlorobutadiene	ND		3500	510	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Hexachlorocyclopentadiene	ND		3500	470	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Hexachloroethane	ND		3500	450	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Indeno[1,2,3-cd]pyrene	ND		3500	430	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Isophorone	ND		3500	740	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
N-Nitrosodi-n-propylamine	ND		3500	600	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
N-Nitrosodiphenylamine	ND		3500	2800	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Naphthalene	ND		3500	450	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Nitrobenzene	ND		3500	390	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Pentachlorophenol	ND		6800	3500	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Phenanthrene	ND		3500	510	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Phenol	ND		3500	530	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20
Pyrene	ND		3500	410	ug/Kg	☼	12/14/15 08:13	12/15/15 17:17	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*91*		*34 - 132*	*12/14/15 08:13*	*12/15/15 17:17*	*20*
Phenol-d5 (Surr)	*78*		*11 - 120*	*12/14/15 08:13*	*12/15/15 17:17*	*20*
p-Terphenyl-d14 (Surr)	*100*		*65 - 153*	*12/14/15 08:13*	*12/15/15 17:17*	*20*
2,4,6-Tribromophenol (Surr)	*93*		*39 - 146*	*12/14/15 08:13*	*12/15/15 17:17*	*20*
2-Fluorobiphenyl	*88*		*37 - 120*	*12/14/15 08:13*	*12/15/15 17:17*	*20*
2-Fluorophenol (Surr)	*79*		*18 - 120*	*12/14/15 08:13*	*12/15/15 17:17*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.1**		2.2		mg/Kg	☼	12/14/15 11:42	12/15/15 13:40	1
Barium	**24.3**		0.54		mg/Kg	☼	12/14/15 11:42	12/15/15 13:40	1
Cadmium	**0.36**		0.22		mg/Kg	☼	12/14/15 11:42	12/15/15 13:40	1
Chromium	**8.4**		0.54		mg/Kg	☼	12/14/15 11:42	12/15/15 13:40	1
Lead	**31.6**		1.1		mg/Kg	☼	12/14/15 11:42	12/15/15 13:40	1
Selenium	ND		4.3		mg/Kg	☼	12/14/15 11:42	12/15/15 13:40	1
Silver	ND		0.65		mg/Kg	☼	12/14/15 11:42	12/15/15 13:40	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Client Sample ID: TP-1 (1-4)
Date Collected: 12/10/15 14:10
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-1
Matrix: Solid
Percent Solids: 95.7

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.021		mg/Kg	☼	12/14/15 10:20	12/14/15 14:12	1

Client Sample ID: TP-8 (1-3)
Date Collected: 12/10/15 14:00
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-2
Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		920	130	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
bis (2-chloroisopropyl) ether	ND		920	180	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2,4,5-Trichlorophenol	ND		920	250	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2,4,6-Trichlorophenol	ND		920	180	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2,4-Dichlorophenol	ND		920	97	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2,4-Dimethylphenol	ND		920	220	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2,4-Dinitrophenol	ND		8900	4200	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2,4-Dinitrotoluene	ND		920	190	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2,6-Dinitrotoluene	ND		920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2-Chloronaphthalene	ND		920	150	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2-Chlorophenol	ND		920	170	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2-Methylphenol	ND		920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2-Methylnaphthalene	ND		920	180	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2-Nitroaniline	ND		1800	130	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
2-Nitrophenol	ND		920	260	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
3,3'-Dichlorobenzidine	ND		1800	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
3-Nitroaniline	ND		1800	250	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4,6-Dinitro-2-methylphenol	ND		1800	920	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4-Bromophenyl phenyl ether	ND		920	130	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4-Chloro-3-methylphenol	ND		920	230	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4-Chloroaniline	ND		920	230	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4-Chlorophenyl phenyl ether	ND		920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4-Methylphenol	ND		1800	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4-Nitroaniline	ND		1800	480	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
4-Nitrophenol	ND	*	1800	640	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Acenaphthene	**180**	**J**	920	130	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Acenaphthylene	**120**	**J**	920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Acetophenone	ND		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Anthracene	**830**	**J**	920	230	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Atrazine	ND		920	320	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Benzaldehyde	ND	*	920	730	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Benzo[a]anthracene	**2600**		920	92	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Benzo[a]pyrene	**2100**		920	130	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Benzo[b]fluoranthene	**2700**		920	150	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Benzo[g,h,i]perylene	**1500**		920	97	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Benzo[k]fluoranthene	**1100**		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Bis(2-chloroethoxy)methane	ND		920	190	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Bis(2-chloroethyl)ether	ND		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Bis(2-ethylhexyl) phthalate	ND		920	310	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Butyl benzyl phthalate	ND		920	150	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Caprolactam	ND		920	270	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Carbazole	**380**	**J**	920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Chrysene	**2400**		920	200	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Dibenz(a,h)anthracene	ND		920	160	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Di-n-butyl phthalate	ND		920	160	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Di-n-octyl phthalate	ND		920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Dibenzofuran	**210**	**J**	920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Diethyl phthalate	ND		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Dimethyl phthalate	ND		920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5

Client Sample ID: TP-8 (1-3)

Date Collected: 12/10/15 14:00
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-2

Matrix: Solid
Percent Solids: 92.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**4800**		920	97	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Fluorene	**240**	**J**	920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Hexachlorobenzene	ND		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Hexachlorobutadiene	ND		920	130	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Hexachlorocyclopentadiene	ND		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Hexachloroethane	ND		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Indeno[1,2,3-cd]pyrene	**1300**		920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Isophorone	ND		920	190	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
N-Nitrosodi-n-propylamine	ND		920	160	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
N-Nitrosodiphenylamine	ND		920	740	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Naphthalene	ND		920	120	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Nitrobenzene	ND		920	100	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Pentachlorophenol	ND		1800	920	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Phenanthrene	**3700**		920	130	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Phenol	ND		920	140	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5
Pyrene	**4000**		920	110	ug/Kg	☼	12/14/15 08:13	12/15/15 17:44	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*75*		*34 - 132*	*12/14/15 08:13*	*12/15/15 17:44*	*5*
Phenol-d5 (Surr)	*68*		*11 - 120*	*12/14/15 08:13*	*12/15/15 17:44*	*5*
p-Terphenyl-d14 (Surr)	*84*		*65 - 153*	*12/14/15 08:13*	*12/15/15 17:44*	*5*
2,4,6-Tribromophenol (Surr)	*63*		*39 - 146*	*12/14/15 08:13*	*12/15/15 17:44*	*5*
2-Fluorobiphenyl	*82*		*37 - 120*	*12/14/15 08:13*	*12/15/15 17:44*	*5*
2-Fluorophenol (Surr)	*65*		*18 - 120*	*12/14/15 08:13*	*12/15/15 17:44*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.1**		2.2		mg/Kg	☼	12/14/15 11:42	12/15/15 13:44	1
Barium	**83.4**		0.56		mg/Kg	☼	12/14/15 11:42	12/15/15 13:44	1
Cadmium	**0.37**		0.22		mg/Kg	☼	12/14/15 11:42	12/15/15 13:44	1
Chromium	**10.2**		0.56		mg/Kg	☼	12/14/15 11:42	12/15/15 13:44	1
Lead	**174**		1.1		mg/Kg	☼	12/14/15 11:42	12/15/15 13:44	1
Selenium	ND		4.5		mg/Kg	☼	12/14/15 11:42	12/15/15 13:44	1
Silver	ND		0.67		mg/Kg	☼	12/14/15 11:42	12/15/15 13:44	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.37**		0.021		mg/Kg	☼	12/14/15 10:20	12/14/15 14:14	1

Client Sample ID: TP-9 (3-6)
Date Collected: 12/10/15 13:45
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-3
Matrix: Solid
Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		1000	150	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
bis (2-chloroisopropyl) ether	ND		1000	210	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2,4,5-Trichlorophenol	ND		1000	280	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2,4,6-Trichlorophenol	ND		1000	210	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2,4-Dichlorophenol	ND		1000	110	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2,4-Dimethylphenol	ND		1000	250	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2,4-Dinitrophenol	ND		10000	4700	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2,4-Dinitrotoluene	ND		1000	210	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2,6-Dinitrotoluene	ND		1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2-Chloronaphthalene	ND		1000	170	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2-Chlorophenol	ND		1000	190	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2-Methylphenol	ND		1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2-Methylnaphthalene	ND		1000	210	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2-Nitroaniline	ND		2000	150	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
2-Nitrophenol	ND		1000	290	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
3,3'-Dichlorobenzidine	ND		2000	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
3-Nitroaniline	ND		2000	280	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4,6-Dinitro-2-methylphenol	ND		2000	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4-Bromophenyl phenyl ether	ND		1000	140	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4-Chloro-3-methylphenol	ND		1000	250	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4-Chloroaniline	ND		1000	250	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4-Chlorophenyl phenyl ether	ND		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4-Methylphenol	ND		2000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4-Nitroaniline	ND		2000	540	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
4-Nitrophenol	ND	*	2000	720	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Acenaphthene	**160**	**J**	1000	150	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Acetophenone	ND		1000	140	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Anthracene	**670**	**J**	1000	250	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Atrazine	ND		1000	360	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Benzaldehyde	ND	*	1000	820	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Benzo[a]anthracene	**3100**		1000	100	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Benzo[a]pyrene	**2000**		1000	150	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Benzo[b]fluoranthene	**2600**	**K**	1000	160	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Benzo[g,h,i]perylene	**1500**		1000	110	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Benzo[k]fluoranthene	**1700**		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Bis(2-chloroethoxy)methane	ND		1000	220	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Bis(2-chloroethyl)ether	ND		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Bis(2-ethylhexyl) phthalate	**500**	**J**	1000	350	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Butyl benzyl phthalate	ND		1000	170	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Caprolactam	ND		1000	310	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Carbazole	**270**	**J**	1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Chrysene	**3000**		1000	230	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Di-n-butyl phthalate	ND		1000	180	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Di-n-octyl phthalate	ND		1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Dibenzofuran	ND		1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Diethyl phthalate	ND		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Dimethyl phthalate	ND		1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5

Client Sample ID: TP-9 (3-6)

Date Collected: 12/10/15 13:45
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-3

Matrix: Solid
Percent Solids: 80.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoranthene	**6100**		1000	110	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Fluorene	ND		1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Hexachlorobenzene	ND		1000	140	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Hexachlorobutadiene	ND		1000	150	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Hexachlorocyclopentadiene	ND		1000	140	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Hexachloroethane	ND		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Indeno[1,2,3-cd]pyrene	**1200**		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Isophorone	ND		1000	220	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
N-Nitrosodi-n-propylamine	ND		1000	180	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
N-Nitrosodiphenylamine	ND		1000	830	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Naphthalene	ND		1000	130	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Nitrobenzene	ND		1000	110	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Pentachlorophenol	ND		2000	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Phenanthrene	**2600**		1000	150	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Phenol	ND		1000	160	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5
Pyrene	**5300**		1000	120	ug/Kg	☼	12/14/15 08:13	12/15/15 18:10	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*82*		*34 - 132*	*12/14/15 08:13*	*12/15/15 18:10*	*5*
Phenol-d5 (Surr)	*72*		*11 - 120*	*12/14/15 08:13*	*12/15/15 18:10*	*5*
p-Terphenyl-d14 (Surr)	*91*		*65 - 153*	*12/14/15 08:13*	*12/15/15 18:10*	*5*
2,4,6-Tribromophenol (Surr)	*54*		*39 - 146*	*12/14/15 08:13*	*12/15/15 18:10*	*5*
2-Fluorobiphenyl	*87*		*37 - 120*	*12/14/15 08:13*	*12/15/15 18:10*	*5*
2-Fluorophenol (Surr)	*72*		*18 - 120*	*12/14/15 08:13*	*12/15/15 18:10*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**17.0**		2.5		mg/Kg	☼	12/14/15 11:42	12/15/15 13:56	1
Barium	**77.1**		0.64		mg/Kg	☼	12/14/15 11:42	12/15/15 13:56	1
Cadmium	**0.73**		0.25		mg/Kg	☼	12/14/15 11:42	12/15/15 13:56	1
Chromium	**65.0**		3.2		mg/Kg	☼	12/14/15 11:42	12/16/15 11:15	5
Lead	**190**		6.4		mg/Kg	☼	12/14/15 11:42	12/16/15 11:15	5
Selenium	ND		25.5		mg/Kg	☼	12/14/15 11:42	12/16/15 11:15	5
Silver	ND		3.8		mg/Kg	☼	12/14/15 11:42	12/16/15 11:15	5

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.21**		0.025		mg/Kg	☼	12/14/15 10:20	12/14/15 14:16	1

Client Sample ID: TP-10 (10-12)
Date Collected: 12/10/15 16:30
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-4
Matrix: Solid
Percent Solids: 78.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6.3	0.46	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,1,2,2-Tetrachloroethane	ND		6.3	1.0	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.3	1.4	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,1,2-Trichloroethane	ND		6.3	0.83	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,1-Dichloroethane	ND		6.3	0.77	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,1-Dichloroethene	ND		6.3	0.78	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,2,4-Trichlorobenzene	ND		6.3	0.39	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,2,4-Trimethylbenzene	ND		6.3	1.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,2-Dibromo-3-Chloropropane	ND		6.3	3.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,2-Dichlorobenzene	ND		6.3	0.50	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,2-Dichloroethane	ND		6.3	0.32	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,2-Dichloropropane	ND		6.3	3.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,3,5-Trimethylbenzene	ND		6.3	0.41	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,3-Dichlorobenzene	ND		6.3	0.33	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,4-Dichlorobenzene	ND		6.3	0.89	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
2-Hexanone	ND		32	3.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
4-Isopropyltoluene	ND		6.3	0.51	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Acetone	**57**	**B**	32	5.3	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Benzene	ND		6.3	0.31	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Bromoform	ND		6.3	3.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Bromomethane	ND		6.3	0.57	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Carbon disulfide	ND		6.3	3.2	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Carbon tetrachloride	ND		6.3	0.61	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Chlorobenzene	ND		6.3	0.84	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Dibromochloromethane	ND		6.3	0.81	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Chloroethane	ND		6.3	1.4	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Chloroform	ND		6.3	0.39	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Chloromethane	ND		6.3	0.38	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
cis-1,2-Dichloroethene	ND		6.3	0.81	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
cis-1,3-Dichloropropene	ND		6.3	0.91	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Cyclohexane	ND		6.3	0.89	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Bromodichloromethane	ND		6.3	0.85	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Dichlorodifluoromethane	ND		6.3	0.52	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Ethylbenzene	ND		6.3	0.44	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
1,2-Dibromoethane	ND		6.3	0.82	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Isopropylbenzene	ND		6.3	0.96	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Methyl acetate	ND		6.3	3.8	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
2-Butanone (MEK)	ND	*	32	2.3	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
4-Methyl-2-pentanone (MIBK)	ND		32	2.1	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Methyl tert-butyl ether	ND		6.3	0.62	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Methylcyclohexane	ND		6.3	0.96	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Methylene Chloride	ND		6.3	2.9	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
m,p-Xylene	ND		13	1.1	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
n-Butylbenzene	ND		6.3	0.55	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
N-Propylbenzene	ND		6.3	0.51	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
o-Xylene	ND		6.3	0.83	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
sec-Butylbenzene	ND		6.3	0.55	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Styrene	ND		6.3	0.32	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
tert-Butylbenzene	ND		6.3	0.66	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1

Client Sample ID: TP-10 (10-12)
Date Collected: 12/10/15 16:30
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-4
Matrix: Solid
Percent Solids: 78.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		6.3	0.85	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Toluene	ND		6.3	0.48	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
trans-1,2-Dichloroethene	ND		6.3	0.66	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
trans-1,3-Dichloropropene	ND		6.3	2.8	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Trichloroethene	ND		6.3	1.4	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Trichlorofluoromethane	ND		6.3	0.60	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Vinyl chloride	ND		6.3	0.77	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1
Xylenes, Total	ND		13	1.1	ug/Kg	☼	12/14/15 09:56	12/14/15 16:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*12/14/15 09:56*	*12/14/15 16:31*	*1*
Toluene-d8 (Surr)	*103*		*71 - 125*	*12/14/15 09:56*	*12/14/15 16:31*	*1*
4-Bromofluorobenzene (Surr)	*92*		*72 - 126*	*12/14/15 09:56*	*12/14/15 16:31*	*1*
Dibromofluoromethane (Surr)	*105*		*60 - 140*	*12/14/15 09:56*	*12/14/15 16:31*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		4200	620	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
bis (2-chloroisopropyl) ether	ND		4200	850	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2,4,5-Trichlorophenol	ND		4200	1100	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2,4,6-Trichlorophenol	ND		4200	850	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2,4-Dichlorophenol	ND		4200	450	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2,4-Dimethylphenol	ND		4200	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2,4-Dinitrophenol	ND		41000	20000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2,4-Dinitrotoluene	ND		4200	870	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2,6-Dinitrotoluene	ND		4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2-Chloronaphthalene	ND		4200	700	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2-Chlorophenol	ND		4200	770	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2-Methylphenol	ND		4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2-Methylnaphthalene	ND		4200	850	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2-Nitroaniline	ND		8200	620	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
2-Nitrophenol	ND		4200	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
3,3'-Dichlorobenzidine	ND		8200	5000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
3-Nitroaniline	ND		8200	1200	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4,6-Dinitro-2-methylphenol	ND		8200	4200	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4-Bromophenyl phenyl ether	ND		4200	600	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4-Chloro-3-methylphenol	ND		4200	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4-Chloroaniline	ND		4200	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4-Chlorophenyl phenyl ether	ND		4200	520	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4-Methylphenol	ND		8200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4-Nitroaniline	ND		8200	2200	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
4-Nitrophenol	ND	*	8200	3000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Acenaphthene	**1100**	**J**	4200	620	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Acenaphthylene	ND		4200	550	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Acetophenone	ND		4200	570	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Anthracene	**2700**	**J**	4200	1000	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Atrazine	ND		4200	1500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Benzaldehyde	ND	*	4200	3400	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Benzo[a]anthracene	**6300**		4200	420	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Benzo[a]pyrene	**5100**		4200	620	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20

Client Sample ID: TP-10 (10-12)
Date Collected: 12/10/15 16:30
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-4
Matrix: Solid
Percent Solids: 78.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[b]fluoranthene	**8500**	**K**	4200	670	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Benzo[g,h,i]perylene	**4200**		4200	450	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Benzo[k]fluoranthene	ND		4200	550	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Bis(2-chloroethoxy)methane	ND		4200	900	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Bis(2-chloroethyl)ether	ND		4200	550	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Bis(2-ethylhexyl) phthalate	ND		4200	1400	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Butyl benzyl phthalate	ND		4200	700	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Caprolactam	ND		4200	1300	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Carbazole	**1300**	**J**	4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Chrysene	**5700**		4200	950	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Dibenz(a,h)anthracene	ND		4200	750	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Di-n-butyl phthalate	ND		4200	720	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Di-n-octyl phthalate	ND		4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Dibenzofuran	**820**	**J**	4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Diethyl phthalate	ND		4200	550	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Dimethyl phthalate	ND		4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Fluoranthene	**15000**		4200	450	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Fluorene	**1400**	**J**	4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Hexachlorobenzene	ND		4200	570	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Hexachlorobutadiene	ND		4200	620	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Hexachlorocyclopentadiene	ND		4200	570	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Hexachloroethane	ND		4200	550	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Indeno[1,2,3-cd]pyrene	**3700**	**J**	4200	520	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Isophorone	ND		4200	900	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
N-Nitrosodi-n-propylamine	ND		4200	720	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
N-Nitrosodiphenylamine	ND		4200	3400	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Naphthalene	ND		4200	550	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Nitrobenzene	ND		4200	470	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Pentachlorophenol	ND		8200	4200	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Phenanthrene	**10000**		4200	620	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Phenol	ND		4200	650	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20
Pyrene	**13000**		4200	500	ug/Kg	☼	12/14/15 08:13	12/15/15 18:37	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*80*		*34 - 132*	*12/14/15 08:13*	*12/15/15 18:37*	*20*
Phenol-d5 (Surr)	*67*		*11 - 120*	*12/14/15 08:13*	*12/15/15 18:37*	*20*
p-Terphenyl-d14 (Surr)	*100*		*65 - 153*	*12/14/15 08:13*	*12/15/15 18:37*	*20*
2,4,6-Tribromophenol (Surr)	*104*		*39 - 146*	*12/14/15 08:13*	*12/15/15 18:37*	*20*
2-Fluorobiphenyl	*86*		*37 - 120*	*12/14/15 08:13*	*12/15/15 18:37*	*20*
2-Fluorophenol (Surr)	*81*		*18 - 120*	*12/14/15 08:13*	*12/15/15 18:37*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**7.0**		2.6		mg/Kg	☼	12/14/15 11:42	12/15/15 14:00	1
Barium	**103**		0.65		mg/Kg	☼	12/14/15 11:42	12/15/15 14:00	1
Cadmium	**0.75**		0.26		mg/Kg	☼	12/14/15 11:42	12/15/15 14:00	1
Chromium	**18.4**		0.65		mg/Kg	☼	12/14/15 11:42	12/15/15 14:00	1
Lead	**72.0**		1.3		mg/Kg	☼	12/14/15 11:42	12/15/15 14:00	1
Selenium	ND		5.2		mg/Kg	☼	12/14/15 11:42	12/15/15 14:00	1
Silver	ND		0.78		mg/Kg	☼	12/14/15 11:42	12/15/15 14:00	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Client Sample ID: TP-10 (10-12)
Date Collected: 12/10/15 16:30
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-4
Matrix: Solid
Percent Solids: 78.1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.24		0.025		mg/Kg	☼	12/14/15 10:20	12/14/15 14:18	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		12DCE	TOL	BFB	DBFM
Lab Sample ID	Client Sample ID	(64-126)	(71-125)	(72-126)	(60-140)
480-92594-1	TP-1 (1-4)	102	102	95	104
480-92594-4	TP-10 (10-12)	104	103	92	105
LCS 480-279590/1-A	Lab Control Sample	109	104	101	101
MB 480-279590/2-A	Method Blank	105	101	100	103

Surrogate Legend

12DCE = 1,2-Dichloroethane-d4 (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		NBZ	PHL	TPH	TBP	FBP	2FP
Lab Sample ID	Client Sample ID	(34-132)	(11-120)	(65-153)	(39-146)	(37-120)	(18-120)
480-92594-1	TP-1 (1-4)	91	78	100	93	88	79
480-92594-2	TP-8 (1-3)	75	68	84	63	82	65
480-92594-3	TP-9 (3-6)	82	72	91	54	87	72
480-92594-4	TP-10 (10-12)	80	67	100	104	86	81
LCS 480-279536/2-A	Lab Control Sample	95	79	97	104	92	77
MB 480-279536/1-A	Method Blank	87	76	89	90	83	73

Surrogate Legend

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

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

Lab Sample ID: MB 480-279590/2-A
Matrix: Solid
Analysis Batch: 279534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279590

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.9	0.36	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,1,2,2-Tetrachloroethane	ND		4.9	0.80	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.9	1.1	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,1,2-Trichloroethane	ND		4.9	0.64	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,1-Dichloroethane	ND		4.9	0.60	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,1-Dichloroethene	ND		4.9	0.60	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,2,4-Trichlorobenzene	ND		4.9	0.30	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,2,4-Trimethylbenzene	ND		4.9	0.94	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,2-Dibromo-3-Chloropropane	ND		4.9	2.5	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,2-Dichlorobenzene	ND		4.9	0.38	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,2-Dichloroethane	ND		4.9	0.25	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,2-Dichloropropane	ND		4.9	2.5	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,3,5-Trimethylbenzene	ND		4.9	0.32	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,3-Dichlorobenzene	ND		4.9	0.25	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,4-Dichlorobenzene	ND		4.9	0.69	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
2-Hexanone	ND		25	2.5	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
4-Isopropyltoluene	ND		4.9	0.39	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Acetone	6.62	J	25	4.1	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Benzene	ND		4.9	0.24	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Bromoform	ND		4.9	2.5	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Bromomethane	ND		4.9	0.44	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Carbon disulfide	ND		4.9	2.5	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Carbon tetrachloride	ND		4.9	0.48	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Chlorobenzene	ND		4.9	0.65	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Dibromochloromethane	ND		4.9	0.63	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Chloroethane	ND		4.9	1.1	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Chloroform	ND		4.9	0.30	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Chloromethane	ND		4.9	0.30	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
cis-1,2-Dichloroethene	ND		4.9	0.63	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
cis-1,3-Dichloropropene	ND		4.9	0.71	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Cyclohexane	ND		4.9	0.69	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Bromodichloromethane	ND		4.9	0.66	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Dichlorodifluoromethane	ND		4.9	0.41	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Ethylbenzene	ND		4.9	0.34	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
1,2-Dibromoethane	ND		4.9	0.63	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Isopropylbenzene	ND		4.9	0.74	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Methyl acetate	ND		4.9	3.0	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Methyl tert-butyl ether	ND		4.9	0.48	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Methylcyclohexane	ND		4.9	0.75	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Methylene Chloride	ND		4.9	2.3	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
m,p-Xylene	ND		9.8	0.83	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
n-Butylbenzene	ND		4.9	0.43	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
N-Propylbenzene	ND		4.9	0.39	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
o-Xylene	ND		4.9	0.64	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
sec-Butylbenzene	ND		4.9	0.43	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Styrene	ND		4.9	0.25	ug/Kg		12/14/15 09:56	12/14/15 12:10	1

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

Lab Sample ID: MB 480-279590/2-A
Matrix: Solid
Analysis Batch: 279534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279590

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		4.9	0.51	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Tetrachloroethene	ND		4.9	0.66	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Toluene	ND		4.9	0.37	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
trans-1,2-Dichloroethene	ND		4.9	0.51	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
trans-1,3-Dichloropropene	ND		4.9	2.2	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Trichloroethene	ND		4.9	1.1	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Trichlorofluoromethane	ND		4.9	0.46	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Vinyl chloride	ND		4.9	0.60	ug/Kg		12/14/15 09:56	12/14/15 12:10	1
Xylenes, Total	ND		9.8	0.83	ug/Kg		12/14/15 09:56	12/14/15 12:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*64 - 126*	*12/14/15 09:56*	*12/14/15 12:10*	*1*
Toluene-d8 (Surr)	*101*		*71 - 125*	*12/14/15 09:56*	*12/14/15 12:10*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 126*	*12/14/15 09:56*	*12/14/15 12:10*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*12/14/15 09:56*	*12/14/15 12:10*	*1*

Lab Sample ID: LCS 480-279590/1-A
Matrix: Solid
Analysis Batch: 279534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279590

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloroethane	49.7	46.3		ug/Kg		93	73 - 126
1,1-Dichloroethene	49.7	45.7		ug/Kg		92	59 - 125
1,2,4-Trimethylbenzene	49.7	48.5		ug/Kg		98	74 - 120
1,2-Dichlorobenzene	49.7	46.7		ug/Kg		94	75 - 120
1,2-Dichloroethane	49.7	44.0		ug/Kg		88	77 - 122
Benzene	49.7	44.2		ug/Kg		89	79 - 127
Chlorobenzene	49.7	46.5		ug/Kg		93	76 - 124
cis-1,2-Dichloroethene	49.7	45.7		ug/Kg		92	81 - 117
Ethylbenzene	49.7	48.2		ug/Kg		97	80 - 120
Methyl tert-butyl ether	49.7	46.8		ug/Kg		94	63 - 125
m,p-Xylene	49.7	48.6		ug/Kg		98	70 - 130
o-Xylene	49.7	47.6		ug/Kg		96	70 - 130
Tetrachloroethene	49.7	51.0		ug/Kg		103	74 - 122
Toluene	49.7	45.2		ug/Kg		91	74 - 128
trans-1,2-Dichloroethene	49.7	46.6		ug/Kg		94	78 - 126
Trichloroethene	49.7	45.8		ug/Kg		92	77 - 129

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*109*		*64 - 126*
Toluene-d8 (Surr)	*104*		*71 - 125*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*
Dibromofluoromethane (Surr)	*101*		*60 - 140*

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

Lab Sample ID: MB 480-279536/1-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Biphenyl	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
bis (2-chloroisopropyl) ether	ND		170	34	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4,5-Trichlorophenol	ND		170	45	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4,6-Trichlorophenol	ND		170	34	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dichlorophenol	ND		170	18	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dimethylphenol	ND		170	40	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dinitrophenol	ND		1600	770	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,4-Dinitrotoluene	ND		170	35	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2,6-Dinitrotoluene	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Chloronaphthalene	ND		170	28	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Chlorophenol	ND		170	31	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Methylphenol	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Methylnaphthalene	ND		170	34	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Nitroaniline	ND		330	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
2-Nitrophenol	ND		170	47	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
3,3'-Dichlorobenzidine	ND		330	200	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
3-Nitroaniline	ND		330	46	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4,6-Dinitro-2-methylphenol	ND		330	170	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Bromophenyl phenyl ether	ND		170	24	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Chloro-3-methylphenol	ND		170	41	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Chloroaniline	ND		170	41	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Chlorophenyl phenyl ether	ND		170	21	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Methylphenol	ND		330	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Nitroaniline	ND		330	88	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
4-Nitrophenol	ND		330	120	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Acenaphthene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Acenaphthylene	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Acetophenone	ND		170	23	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Anthracene	ND		170	41	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Atrazine	ND		170	58	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzaldehyde	ND		170	130	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[a]anthracene	ND		170	17	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[a]pyrene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Bis(2-chloroethoxy)methane	ND		170	36	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Bis(2-chloroethyl)ether	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Bis(2-ethylhexyl) phthalate	ND		170	57	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Butyl benzyl phthalate	ND		170	28	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Caprolactam	ND		170	50	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Carbazole	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Chrysene	ND		170	37	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Di-n-butyl phthalate	ND		170	29	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Di-n-octyl phthalate	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Dibenzofuran	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Diethyl phthalate	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1

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

Lab Sample ID: MB 480-279536/1-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279536

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dimethyl phthalate	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Fluoranthene	ND		170	18	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Fluorene	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachlorobenzene	ND		170	23	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachlorobutadiene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachlorocyclopentadiene	ND		170	23	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Hexachloroethane	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Isophorone	ND		170	36	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
N-Nitrosodi-n-propylamine	ND		170	29	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
N-Nitrosodiphenylamine	ND		170	140	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Naphthalene	ND		170	22	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Nitrobenzene	ND		170	19	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Pentachlorophenol	ND		330	170	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Phenanthrene	ND		170	25	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Phenol	ND		170	26	ug/Kg		12/14/15 08:13	12/15/15 09:20	1
Pyrene	ND		170	20	ug/Kg		12/14/15 08:13	12/15/15 09:20	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Nitrobenzene-d5 (Surr)	*87*		*34 - 132*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
Phenol-d5 (Surr)	*76*		*11 - 120*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
p-Terphenyl-d14 (Surr)	*89*		*65 - 153*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
2,4,6-Tribromophenol (Surr)	*90*		*39 - 146*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
2-Fluorobiphenyl	*83*		*37 - 120*	*12/14/15 08:13*	*12/15/15 09:20*	*1*
2-Fluorophenol (Surr)	*73*		*18 - 120*	*12/14/15 08:13*	*12/15/15 09:20*	*1*

Lab Sample ID: LCS 480-279536/2-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279536

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Biphenyl	1630	1520		ug/Kg		93	71 - 120
bis (2-chloroisopropyl) ether	1630	1270		ug/Kg		78	44 - 120
2,4,5-Trichlorophenol	1630	1580		ug/Kg		97	59 - 126
2,4,6-Trichlorophenol	1630	1530		ug/Kg		94	59 - 123
2,4-Dichlorophenol	1630	1440		ug/Kg		89	52 - 120
2,4-Dimethylphenol	1630	1640		ug/Kg		101	36 - 120
2,4-Dinitrophenol	3260	2950		ug/Kg		90	35 - 146
2,4-Dinitrotoluene	1630	1680		ug/Kg		103	55 - 125
2,6-Dinitrotoluene	1630	1630		ug/Kg		100	66 - 128
2-Chloronaphthalene	1630	1460		ug/Kg		90	57 - 120
2-Chlorophenol	1630	1330		ug/Kg		82	38 - 120
2-Methylphenol	1630	1340		ug/Kg		82	48 - 120
2-Methylnaphthalene	1630	1440		ug/Kg		88	47 - 120
2-Nitroaniline	1630	1830		ug/Kg		112	61 - 130
2-Nitrophenol	1630	1350		ug/Kg		83	50 - 120
3,3'-Dichlorobenzidine	3260	2940		ug/Kg		90	48 - 126
3-Nitroaniline	1630	1440		ug/Kg		89	61 - 127

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

Lab Sample ID: LCS 480-279536/2-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279536

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4,6-Dinitro-2-methylphenol	3260	3230		ug/Kg		99	49 - 155
4-Bromophenyl phenyl ether	1630	1530		ug/Kg		94	58 - 131
4-Chloro-3-methylphenol	1630	1610		ug/Kg		99	49 - 125
4-Chloroaniline	1630	1280		ug/Kg		79	49 - 120
4-Chlorophenyl phenyl ether	1630	1500		ug/Kg		92	63 - 124
4-Methylphenol	1630	1340		ug/Kg		82	50 - 119
4-Nitroaniline	1630	1530		ug/Kg		94	63 - 128
4-Nitrophenol	3260	5350	*	ug/Kg		164	43 - 137
Acenaphthene	1630	1540		ug/Kg		95	53 - 120
Acenaphthylene	1630	1530		ug/Kg		94	58 - 121
Acetophenone	1630	1430		ug/Kg		88	66 - 120
Anthracene	1630	1690		ug/Kg		104	62 - 129
Atrazine	3260	3820		ug/Kg		117	60 - 164
Benzaldehyde	3260	4810	E *	ug/Kg		148	21 - 120
Benzo[a]anthracene	1630	1690		ug/Kg		104	65 - 133
Benzo[a]pyrene	1630	1600		ug/Kg		98	64 - 127
Benzo[b]fluoranthene	1630	1660		ug/Kg		102	64 - 135
Benzo[g,h,i]perylene	1630	1510		ug/Kg		93	50 - 152
Benzo[k]fluoranthene	1630	1570		ug/Kg		96	58 - 138
Bis(2-chloroethoxy)methane	1630	1320		ug/Kg		81	61 - 133
Bis(2-chloroethyl)ether	1630	1240		ug/Kg		76	45 - 120
Bis(2-ethylhexyl) phthalate	1630	2050		ug/Kg		126	61 - 133
Butyl benzyl phthalate	1630	1990		ug/Kg		122	61 - 129
Caprolactam	3260	2800		ug/Kg		86	54 - 133
Carbazole	1630	1640		ug/Kg		101	59 - 129
Chrysene	1630	1570		ug/Kg		96	64 - 131
Dibenz(a,h)anthracene	1630	1520		ug/Kg		93	54 - 148
Di-n-butyl phthalate	1630	2000		ug/Kg		123	58 - 130
Di-n-octyl phthalate	1630	2070		ug/Kg		127	62 - 133
Dibenzofuran	1630	1570		ug/Kg		96	56 - 120
Diethyl phthalate	1630	1910		ug/Kg		117	66 - 126
Dimethyl phthalate	1630	1730		ug/Kg		106	65 - 124
Fluoranthene	1630	1670		ug/Kg		103	62 - 131
Fluorene	1630	1570		ug/Kg		97	63 - 126
Hexachlorobenzene	1630	1620		ug/Kg		99	60 - 132
Hexachlorobutadiene	1630	1610		ug/Kg		99	45 - 120
Hexachlorocyclopentadiene	1630	1400		ug/Kg		86	31 - 120
Hexachloroethane	1630	1440		ug/Kg		88	41 - 120
Indeno[1,2,3-cd]pyrene	1630	1570		ug/Kg		96	56 - 149
Isophorone	1630	1510		ug/Kg		93	56 - 120
N-Nitrosodi-n-propylamine	1630	1370		ug/Kg		84	46 - 120
Naphthalene	1630	1380		ug/Kg		85	46 - 120
Nitrobenzene	1630	1490		ug/Kg		91	49 - 120
Pentachlorophenol	3260	2820		ug/Kg		87	33 - 136
Phenanthrene	1630	1710		ug/Kg		105	60 - 130
Phenol	1630	1270		ug/Kg		78	36 - 120
Pyrene	1630	1660		ug/Kg		102	51 - 133

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

Lab Sample ID: LCS 480-279536/2-A
Matrix: Solid
Analysis Batch: 279734

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279536

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*95*		*34 - 132*
Phenol-d5 (Surr)	*79*		*11 - 120*
p-Terphenyl-d14 (Surr)	*97*		*65 - 153*
2,4,6-Tribromophenol (Surr)	*104*		*39 - 146*
2-Fluorobiphenyl	*92*		*37 - 120*
2-Fluorophenol (Surr)	*77*		*18 - 120*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-279591/1-A
Matrix: Solid
Analysis Batch: 279950

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279591

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.1		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Barium	ND		0.53		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Cadmium	ND		0.21		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Chromium	ND		0.53		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Lead	ND		1.1		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Selenium	ND		4.2		mg/Kg		12/14/15 11:42	12/15/15 13:04	1
Silver	ND		0.63		mg/Kg		12/14/15 11:42	12/15/15 13:04	1

Lab Sample ID: LCSSRM 480-279591/2-A
Matrix: Solid
Analysis Batch: 279950

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279591

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	98.5	86.58		mg/Kg		87.9	69.3 - 145.2
Barium	308	268.8		mg/Kg		87.3	74.0 - 126.0
Cadmium	146	130.5		mg/Kg		89.4	73.3 - 126.7
Chromium	182	155.0		mg/Kg		85.2	70.9 - 129.7
Lead	130	123.2		mg/Kg		94.8	72.5 - 126.9
Selenium	154	133.8		mg/Kg		86.9	67.5 - 132.5
Silver	40.9	33.61		mg/Kg		82.2	66.0 - 133.7

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-279559/1-A
Matrix: Solid
Analysis Batch: 279658

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 279559

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.020		mg/Kg		12/14/15 10:20	12/14/15 13:44	1

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

Lab Sample ID: LCSSRM 480-279559/2-A ^5
Matrix: Solid
Analysis Batch: 279658

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 279559

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	7.10	7.96		mg/Kg		112.1	51.3 - 149.3

GC/MS VOA

Analysis Batch: 279534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	8260C	279590
480-92594-4	TP-10 (10-12)	Total/NA	Solid	8260C	279590
LCS 480-279590/1-A	Lab Control Sample	Total/NA	Solid	8260C	279590
MB 480-279590/2-A	Method Blank	Total/NA	Solid	8260C	279590

Prep Batch: 279590

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	5035A	
480-92594-4	TP-10 (10-12)	Total/NA	Solid	5035A	
LCS 480-279590/1-A	Lab Control Sample	Total/NA	Solid	5035A	
MB 480-279590/2-A	Method Blank	Total/NA	Solid	5035A	

GC/MS Semi VOA

Prep Batch: 279536

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	3550C	
480-92594-2	TP-8 (1-3)	Total/NA	Solid	3550C	
480-92594-3	TP-9 (3-6)	Total/NA	Solid	3550C	
480-92594-4	TP-10 (10-12)	Total/NA	Solid	3550C	
LCS 480-279536/2-A	Lab Control Sample	Total/NA	Solid	3550C	
MB 480-279536/1-A	Method Blank	Total/NA	Solid	3550C	

Analysis Batch: 279734

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	8270D	279536
480-92594-2	TP-8 (1-3)	Total/NA	Solid	8270D	279536
480-92594-3	TP-9 (3-6)	Total/NA	Solid	8270D	279536
480-92594-4	TP-10 (10-12)	Total/NA	Solid	8270D	279536
LCS 480-279536/2-A	Lab Control Sample	Total/NA	Solid	8270D	279536
MB 480-279536/1-A	Method Blank	Total/NA	Solid	8270D	279536

Metals

Prep Batch: 279559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	7471B	
480-92594-2	TP-8 (1-3)	Total/NA	Solid	7471B	
480-92594-3	TP-9 (3-6)	Total/NA	Solid	7471B	
480-92594-4	TP-10 (10-12)	Total/NA	Solid	7471B	
LCSSRM 480-279559/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	
MB 480-279559/1-A	Method Blank	Total/NA	Solid	7471B	

Prep Batch: 279591

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	3050B	
480-92594-2	TP-8 (1-3)	Total/NA	Solid	3050B	
480-92594-3	TP-9 (3-6)	Total/NA	Solid	3050B	
480-92594-4	TP-10 (10-12)	Total/NA	Solid	3050B	
LCSSRM 480-279591/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Metals (Continued)

Prep Batch: 279591 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-279591/1-A	Method Blank	Total/NA	Solid	3050B	

Analysis Batch: 279658

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	7471B	279559
480-92594-2	TP-8 (1-3)	Total/NA	Solid	7471B	279559
480-92594-3	TP-9 (3-6)	Total/NA	Solid	7471B	279559
480-92594-4	TP-10 (10-12)	Total/NA	Solid	7471B	279559
LCSSRM 480-279559/2-A ^5	Lab Control Sample	Total/NA	Solid	7471B	279559
MB 480-279559/1-A	Method Blank	Total/NA	Solid	7471B	279559

Analysis Batch: 279950

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	6010C	279591
480-92594-2	TP-8 (1-3)	Total/NA	Solid	6010C	279591
480-92594-3	TP-9 (3-6)	Total/NA	Solid	6010C	279591
480-92594-4	TP-10 (10-12)	Total/NA	Solid	6010C	279591
LCSSRM 480-279591/2-A	Lab Control Sample	Total/NA	Solid	6010C	279591
MB 480-279591/1-A	Method Blank	Total/NA	Solid	6010C	279591

Analysis Batch: 280242

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-3	TP-9 (3-6)	Total/NA	Solid	6010C	279591

General Chemistry

Analysis Batch: 279439

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-92594-1	TP-1 (1-4)	Total/NA	Solid	Moisture	
480-92594-2	TP-8 (1-3)	Total/NA	Solid	Moisture	
480-92594-3	TP-9 (3-6)	Total/NA	Solid	Moisture	
480-92594-4	TP-10 (10-12)	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Client Sample ID: TP-1 (1-4)
Date Collected: 12/10/15 14:10
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	279439	12/12/15 04:12	CSW	TAL BUF

Client Sample ID: TP-1 (1-4)
Date Collected: 12/10/15 14:10
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-1
Matrix: Solid
Percent Solids: 95.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			279590	12/14/15 09:56	CDC	TAL BUF
Total/NA	Analysis	8260C		1	279534	12/14/15 16:04	NMD1	TAL BUF
Total/NA	Prep	3550C			279536	12/14/15 08:13	TRG	TAL BUF
Total/NA	Analysis	8270D		20	279734	12/15/15 17:17	LMW	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		1	279950	12/15/15 13:40	AMH	TAL BUF
Total/NA	Prep	7471B			279559	12/14/15 10:20	TAS	TAL BUF
Total/NA	Analysis	7471B		1	279658	12/14/15 14:12	TAS	TAL BUF

Client Sample ID: TP-8 (1-3)
Date Collected: 12/10/15 14:00
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	279439	12/12/15 04:12	CSW	TAL BUF

Client Sample ID: TP-8 (1-3)
Date Collected: 12/10/15 14:00
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-2
Matrix: Solid
Percent Solids: 92.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			279536	12/14/15 08:13	TRG	TAL BUF
Total/NA	Analysis	8270D		5	279734	12/15/15 17:44	LMW	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		1	279950	12/15/15 13:44	AMH	TAL BUF
Total/NA	Prep	7471B			279559	12/14/15 10:20	TAS	TAL BUF
Total/NA	Analysis	7471B		1	279658	12/14/15 14:14	TAS	TAL BUF

Client Sample ID: TP-9 (3-6)
Date Collected: 12/10/15 13:45
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	279439	12/12/15 04:12	CSW	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Client Sample ID: TP-9 (3-6)

Date Collected: 12/10/15 13:45
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-3

Matrix: Solid
Percent Solids: 80.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			279536	12/14/15 08:13	TRG	TAL BUF
Total/NA	Analysis	8270D		5	279734	12/15/15 18:10	LMW	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		1	279950	12/15/15 13:56	AMH	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		5	280242	12/16/15 11:15	AMH	TAL BUF
Total/NA	Prep	7471B			279559	12/14/15 10:20	TAS	TAL BUF
Total/NA	Analysis	7471B		1	279658	12/14/15 14:16	TAS	TAL BUF

Client Sample ID: TP-10 (10-12)

Date Collected: 12/10/15 16:30
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-4

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	279439	12/12/15 04:12	CSW	TAL BUF

Client Sample ID: TP-10 (10-12)

Date Collected: 12/10/15 16:30
Date Received: 12/11/15 12:05

Lab Sample ID: 480-92594-4

Matrix: Solid
Percent Solids: 78.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			279590	12/14/15 09:56	CDC	TAL BUF
Total/NA	Analysis	8260C		1	279534	12/14/15 16:31	NMD1	TAL BUF
Total/NA	Prep	3550C			279536	12/14/15 08:13	TRG	TAL BUF
Total/NA	Analysis	8270D		20	279734	12/15/15 18:37	LMW	TAL BUF
Total/NA	Prep	3050B			279591	12/14/15 11:42	CMM	TAL BUF
Total/NA	Analysis	6010C		1	279950	12/15/15 14:00	AMH	TAL BUF
Total/NA	Prep	7471B			279559	12/14/15 10:20	TAS	TAL BUF
Total/NA	Analysis	7471B		1	279658	12/14/15 14:18	TAS	TAL BUF

Laboratory References:

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

Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Certification ID	Expiration Date
New York	NELAP	2	10026	03-31-16

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1661 Main St.site

TestAmerica Job ID: 480-92594-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-92594-1	TP-1 (1-4)	Solid	12/10/15 14:10	12/11/15 12:05
480-92594-2	TP-8 (1-3)	Solid	12/10/15 14:00	12/11/15 12:05
480-92594-3	TP-9 (3-6)	Solid	12/10/15 13:45	12/11/15 12:05
480-92594-4	TP-10 (10-12)	Solid	12/10/15 16:30	12/11/15 12:05

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt ______

Drinking Water? Yes ☐ No ☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client: TurnKey Environmental	Project Manager: N. Munley	Date: 10 Dec 2015	Chain of Custody Number: 296350
Address: 2558 Hamburg Turnpike	Telephone Number (Area Code)/Fax Number: 716-856-0635	Lab Number	Page 1 of 1
City: Lackawanna State: NY Zip Code: 14218	Site Contact: PWW Lab Contact: B. Fischer		
Project Name and Location (State): Main + Bolcom	Carrier/Waybill Number		
Contract/Purchase Order/Quote No.: 0239-014-001-003			

Analysis (Attach list if more space is needed): TCL VOCs - 8260 ; TCL SVOCs - 8270 ; RCRA Metals

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Air	Aqueous	Sed.	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	TCL VOCs - 8260	TCL SVOCs - 8270	RCRA Metals
TP-1 (1-4)	10 Dec	1410				X	X						1	1	1
TP-8 (1-3)	|	1400				X	X							1	1
TP-9 (3-6)	|	1345				X	X							1	1
TP-10 (10-12)	|	1630				X	X						1	1	1

Special Instructions/ Conditions of Receipt

480-92594 Chain of Custody

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

Sample Disposal
☐ Return To Client ☒ Disposal By Lab ☐ Archive For ______ Months (A fee may be assessed if samples are retained longer than 1 month)

Turn Around Time Required
☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☒ Other Standard

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	12-10-15	1700	1. Received By: [signature]	12/11/15	10:35
2. Relinquished By: [signature]	12/11/15	12:05	2. Received By: [signature]	12/11/15	1205
3. Relinquished By			3. Received By		

Comments: 3.6 #1

DISTRIBUTION: WHITE - Returned to Client with Report; CANARY - Stays with the Sample; PINK - Field Copy

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-92594-1

Login Number: 92594
List Number: 1
Creator: Janish, Carl M

List Source: TestAmerica Buffalo

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.	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.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
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	