



Strong Advocates, Effective Solutions, Integrated Implementation

April 22, 2015

Mr. Nick Sinatra  
Sinatra and Company Real Estate, LLC  
617 Main Street, Suite 350  
Buffalo, New York 14203

Re: Limited Phase II Site Investigation Report  
Spill No. 15-00185  
1661 Main Street Site  
Buffalo, New York

Dear Mr. Sinatra:

At your request, TurnKey Environmental Restoration, LLC (TurnKey) has completed a limited subsurface investigation of the subject property, addressed at 1661 Main Street, Buffalo New York (Site) in accordance with our November 17, 2014 proposal. A description of the investigation and discussion of the findings is presented in the sections below.

### **Site Description and Background**

The Site is comprised of an approximate 0.4 acre parcel located at the corner of Main Street and East Balcom Street, in the City of Buffalo, New York (see Figures 1 and 2), The majority of the Site is covered by the commercial building with an asphalt and concrete parking/loading dock area along E. Balcom Street.

A November 2014 Phase I Environmental Site Assessment (ESA) performed by TurnKey including the 1661 Main Street Site indicated that the Site was used as a commercial storage since at least 1915.

Recognized Environmental Conditions (RECs) identified for the Site included the following:

- An inactive above-ground storage tank (AST) was noted in the basement boiler room of the building. The AST is surrounded by a low concrete wall (enclosure) and is not directly visible when entering the boiler/mechanical room. Suspect petroleum-like odors were noted within the tank enclosure and petroleum product/staining was noted on the exterior of the tank and floor surrounding the AST, with wood chips present (assumed for absorbent purposes). Concrete floor patches leading from the AST enclosure, assumed to be related to the former boiler, were visible. Disconnected fuel

lines were also visible. One vent/fill pipe was visually traced through the building and appears to exit the building to the north along E. Balcom Street.

- Three (3) exterior vent and/or fill pipes were visually evident protruding from below grade next to a building man-door along E. Balcom Street. It is assumed at least one (1) of the lines is associated with the AST located in the basement, and the remaining pipes are unknown.
- 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) dispenser pump in the exterior parking/loading dock area along E. Balcom Street.

Based on the findings of Phase I ESA, TurnKey recommended completion of a Limited Phase II Environmental Site Investigation.

### **Limited Environmental Site Investigation Activities**

A Limited Phase II Environmental Site Investigation was completed on March 23, 2015. Two (2) soil borings (SB-01 and SB-02) were completed in the basement of the building boiler room and six (6) soil borings, (SB-03 through SB-08) were completed in the exterior asphalt parking/loading dock area along E. Balcom Street (see Figure 2).

It should be noted that SB-08 consisted of six (6) shallow borings where equipment refusal was encountered at 3.5 feet below ground surface (fbgs). Exterior and interior boreholes were advanced from the surface into native soils with bottom target depths of approximately 12 fbgs and 8 fbgs, respectively. All boreholes were completed using hydraulically driven direct push drill rigs with a continuous macro-core sampler. Specifically, the interior borings used 2-foot sample cores and the exterior borings used 4-foot sample cores. Samples were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples. TurnKey personnel scanned each core sample for total volatile organic vapors with a photoionization detector (PID) and recorded visual and/or olfactory observations. Photolog is included in Attachment 1.

### **Field Observations**

In general, the two (2) interior borings indicated the presence of native sand beneath the approximately 6-inch thick concrete floor slab. SB-01 was advanced to approximately 8 feet below grade, and SB-02 was advanced to approximately 2.5 feet below slab before equipment refusal on unknown structure. Field evidence of petroleum-like odors with elevated PID readings were noted in both interior boring locations, with elevated PID readings as high as 390 ppm (SB-01).

The exterior soil borings were completed across the asphalt parking area along E. Balcom Street in the area of suspect tanks (see Figure 2). Boreholes were advanced from the surface

to target depths of approximately 12 feet below ground surface (fbgs). In general, the borings indicated the presence of 0-2 feet of reworked soil/fill material beneath the asphalt/subbase overlying reddish brown clay and sand to 12 fbgs, with the exception of SB-08. It should be noted that a subsurface structure was encountered approximately 3 fbgs when advancing SB-03 and SB-08 (between the exterior vent/fill ports and E. Balcom Street). Multiple attempts were made to define the extents of the structure (see Figure 2), however SB-08 encountered equipment refusal at approximately 3 fbgs at each attempted locations. Based on the presence of subgrade utilities and property boundary related to SB-08, we were unable to further investigate the area during the investigation.

However, based on the historic municipal records, the presence of unknown vent/fill lines, and multiple equipment refusal, it is likely that a underground structure (e.g., underground storage tank) is present in the vicinity of SB-08. Further assessment of this area is recommended.

### **Soil Sampling Approach and Analytical Results**

Three (3) soil boring locations were selected for laboratory analysis, including SB-01, SB-02 and SB-03. The soil/fill samples were analyzed for New York State Department of Environmental Conservation (NYSDEC) CP-51 List semi volatile organic compounds (SVOCs), and SB-02 was also analyzed for CP-51 List volatile organic compounds (VOCs). Soil samples were transferred to the laboratory-provided sampling containers, cooled to 4°C in the field, and transported under Chain of Custody to Test America Laboratories, Inc., located in Amherst New York for analysis.

Analytical results are summarized on Table 1 with a comparison to NYSDEC CP-51 Soil Cleanup Levels (SCLs). A copy of the laboratory analytical data package is included electronically in Attachment 2.

As summarized on Table 1, analytical results indicate elevated naphthalene above the CP-51 SCL in SB-01. Based on the presence of AST in the basement, visual evidence of petroleum product exterior of the AST, the presence of stained wood chips within the AST enclosure, olfactory and elevated PIDs readings from the borings completed in the boiler room proximate to the AST, and the elevated analytical result above CP-51 guidelines, the NYSDEC was notified and Spill No. 1500185 was assigned to the Site.

### **Summary and Recommendations**

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

#### **Summary**

- Apparent petroleum contamination, including elevated PID readings and petroleum odors, was observed in SB-1 and SB-2, located adjacent to the AST.

- Visual evidence of petroleum product exterior of the AST, and the presence of petroleum-stained wood chips are indications of apparent release.
- Elevated concentrations of naphthalene, a common fuel oil associated contaminant was detected above NYSDEC CP-51 in SB-1.
- Presence of suspect subgrade structure(s) on the exterior of the property adjacent to existing vent/fill ports (potential filled tank/tank vault).
- NYSDEC Spill No. 1500185 was issued for the Site.

### **Recommendations**

- If not intended for future use, the AST and all appurtenant piping and contents should be removed from the basement in accordance with NYSDEC protocols. Removal of the AST will allow for inspection of the underlying floor for evidence of petroleum release and/or potential source area. If impacted soil/fill is encountered, handling and disposal should be completed in accordance with all local, state and federal regulations.
- During redevelopment activities in the E. Balcom parking lot area, an assessment of the orientation and disposition of the suspect exterior vent and fill ports is recommended. Additional exploration of the subgrade structure(s) is also recommended at that time.
- Since the site is intended for future residential use, completion of a Soil Vapor Intrusion (SVI) investigation should be considered.
- The findings of this report should be provided to the NYSDEC for review and comment.
- TurnKey understands that the Site may be redeveloped for residential use. Given the known contamination and likely additional environmental work to remove tank and/or contaminated soil, consideration should be given to applying to the New York Brownfield Cleanup Program (BCP) prior to Site redevelopment.

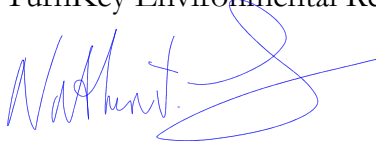
### **Declaration /Limitations**

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

Please do not hesitate to contact us if you have any questions or wish to discuss this report in greater detail.

Sincerely,  
TurnKey Environmental Restoration, LLC



Nathan T. Munley  
Project Manager



Michael Lesakowski  
Principal/Sr. Project Manager

**TABLE**



TABLE 1

SUMMARY OF SUBSURFACE SOIL/FILL SAMPLE ANALYTICAL RESULTS  
LIMITED PHASE II ENVIRONMENTAL SITE INVESTIGATION

1661 Main Street Site  
Buffalo, New York

PARAMETER <sup>1</sup>	CP-51 SCLs <sup>2</sup>	Sample Location (depth)		
		SB-1 (2-4')	SB-2 (0-2')	SB-3 (2-4')
		3/23/2015		
<b>Volatile Organic Compounds (VOCs) - mg/Kg<sup>3</sup></b>				
1,2,4-Trimethylbenzene	3.6	--	0.4 D	--
1,3,5-Trimethylbenzene	8.4	--	0.096 D	--
Benzene	0.06	--	0.00058 J	--
Ethylbenzene	1	--	0.093	--
Isopropylbenzene (Cumene)	2.3	--	0.066	--
n-Butylbenzene	12	--	0.14	--
n-Propylbenzene	3.9	--	0.15	--
p-Cymene (p-isopropyltoluene)	10	--	0.12	--
sec-Butylbenzene	11	--	0.078	--
Toluene	0.7	--	0.0023 J	--
Total Xylenes	0.26	--	0.079 D,J	--
<b>Semi-Volatile Organic Compounds (SVOCs) - mg/Kg<sup>3</sup></b>				
Acenaphthene	20	3	ND	ND
Anthracene	100	1.4	ND	ND
Fluorene	30	8.5	0.79 J	ND
Naphthalene	12	22	1	ND
Phenanthrene	100	15	1.6	ND
Pyrene	100	0.61 J	ND	ND

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 CP-51 Soil Cleanup Levels (SCLs)
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs.

Definitions:

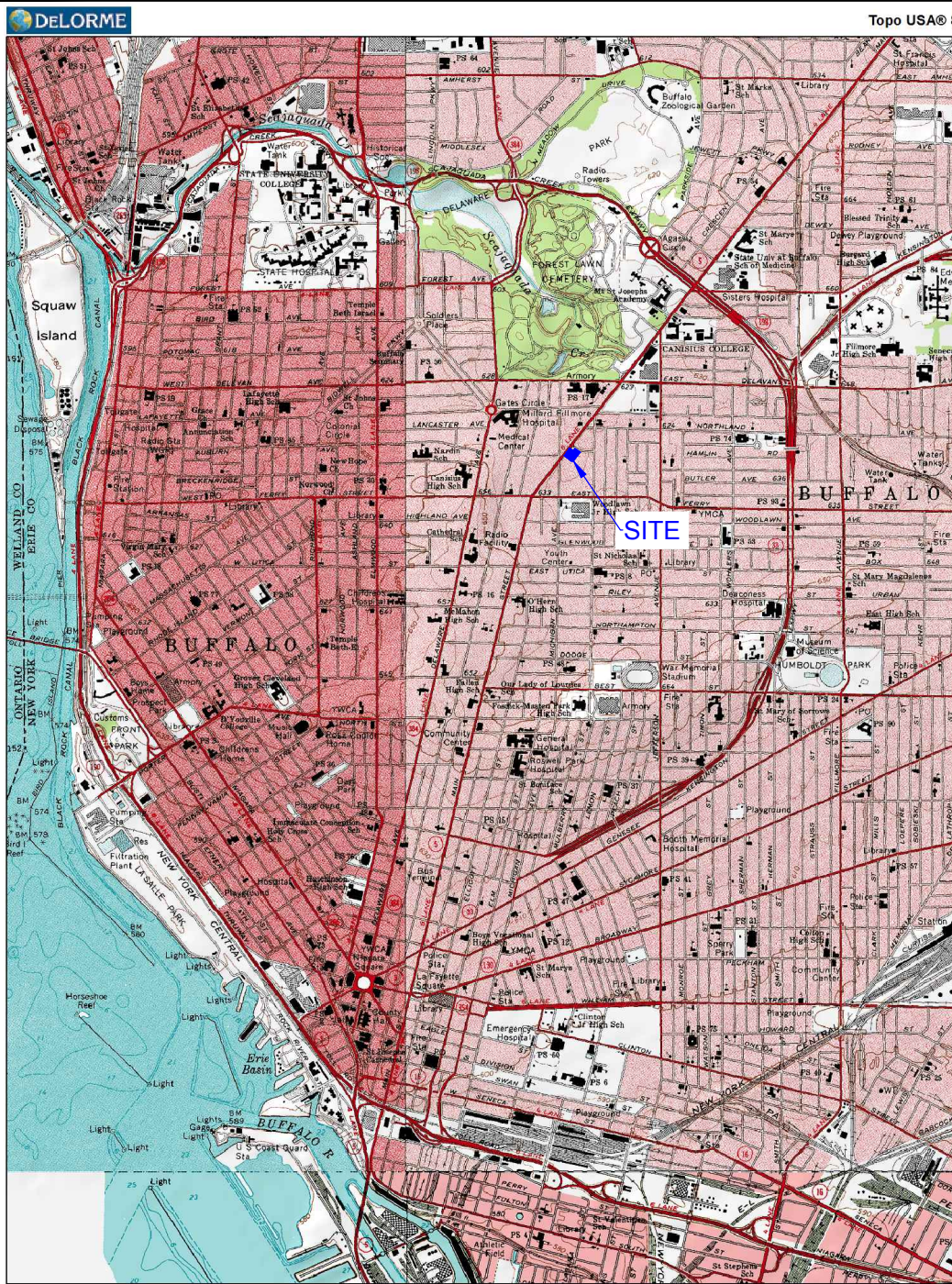
ND = Parameter not detected above laboratory detection limit.  
 "--" = No value available for the parameter; Parameter not analyzed for.  
 J = Estimated value; result is less than the sample quantitation limit but greater than zero.  
 D = Indicates laboratory dilution.

**Bold** = Result exceeds CP-51 SCLs.

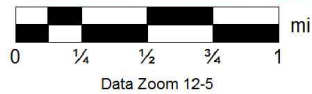
# FIGURES



FIGURE 1



Data use subject to license.  
 © DeLorme. Topo USA® 8.  
 www.delorme.com



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

## SITE LOCATION AND VICINITY MAP

LIMITED PHASE II ENVIRONMENTAL SITE ASSESSMENT

1661 MAIN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

SINATRA & COMPANY REAL ESTATE, LLC


PROJECT NO.: 0239-01-001

DATE: APRIL 2015

DRAFTED BY: BLR

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



2556 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0835

PROJECT NO.: 0239-01-001

DATE: APRIL 2015

DRAFTED BY: BLR

**SAMPLING LOCATION MAP (AERIAL)**

LIMITED PHASE II ENVIRONMENTAL SITE INVESTIGATION

1661 MAIN STREET SITE

BUFFALO, NEW YORK

PREPARED FOR

SINATRA & COMPANY REAL ESTATE, LLC

**FIGURE 2**

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

# ATTACHMENT 1

## PHOTOGRAPHIC LOG

## SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: Basement of the building. Concrete coring at SB-01

Photo 2: Basement of the building. View of SB-01, sump and boiler

Photo 3: Basement of the building. Boring of SB-01 location

Photo 4: Basement of the building. Fuel oil AST



## SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: Northeast portion of the Site. Refusal locations at SB-08

Photo 6: Northeast corner of the building. Note suspect vent/fill pipes

Photo 7: SB-4 location, looking west

Photo 8: Elevated concrete pad, ramp location and SB-6 location, looking north

# ATTACHMENT 2

## LABORATORY ANALYTICAL DATA 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: 480-77270-1

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](mailto:brian.fischer@testamericainc.com)

### LINKS

Review your project  
results through

TotalAccess

Have a Question?



Visit us at:

[www.testamericainc.com](http://www.testamericainc.com)

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

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15



# Table of Contents

Cover Page . . . . .	1
Table of Contents . . . . .	2
Definitions/Glossary . . . . .	3
Case Narrative . . . . .	4
Detection Summary . . . . .	5
Client Sample Results . . . . .	6
Surrogate Summary . . . . .	12
QC Sample Results . . . . .	13
QC Association Summary . . . . .	18
Lab Chronicle . . . . .	19
Certification Summary . . . . .	20
Method Summary . . . . .	21
Sample Summary . . . . .	22
Chain of Custody . . . . .	23
Receipt Checklists . . . . .	24



# 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.
α	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 3.9° 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.

TestAmerica Buffalo

# Client Sample Results

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**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acenaphthene</b>	<b>3000</b>		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
<b>Anthracene</b>	<b>1400</b>		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
<b>Fluorene</b>	<b>8500</b>		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
<b>Naphthalene</b>	<b>22000</b>		950	120	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
<b>Phenanthrene</b>	<b>15000</b>		950	140	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
<b>Pyrene</b>	<b>610</b>	<b>J</b>	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
<b>Bis(2-ethylhexyl) phthalate</b>	<b>600</b>	<b>J B</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
<b>4-Chlorophenyl phenyl ether</b>	<b>1100</b>		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
<b>2-Methylnaphthalene</b>	<b>82000</b>	<b>E</b>	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
<b>N-Nitrosodiphenylamine</b>	<b>4700</b>		950	770	ug/Kg	☼	03/27/15 09:16	03/30/15 11:37	5
<b>Acetophenone</b>	<b>8100</b>		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

TestAmerica Buffalo

# Client Sample Results

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**

**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
<b>Biphenyl</b>	<b>5600</b>		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 Results

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

TestAmerica Job ID: 480-77270-1

**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**

## 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

TestAmerica Buffalo

# Client Sample Results

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

TestAmerica Job ID: 480-77270-1

**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**

**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
<b>Bis(2-ethylhexyl) phthalate</b>	<b>390</b>	<b>J B</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
<b>2-Methylnaphthalene</b>	<b>6500</b>		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
<b>Acetophenone</b>	<b>310</b>	<b>J</b>	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
<b>Biphenyl</b>	<b>520</b>	<b>J</b>	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 Sample Results

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)**

**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**

**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
<b>Bis(2-ethylhexyl) phthalate</b>	<b>430</b>	<b>J B</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

TestAmerica Buffalo



# Client Sample Results

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)**

**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**

**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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (64-126)	BFB (72-126)	DBFM (60-140)	TOL (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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)					
		TBP (39-146)	FBP (37-120)	2FP (18-120)	NBZ (34-132)	PHL (11-120)	TPH (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)

# QC Sample Results

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

**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	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

TestAmerica Buffalo

# QC Sample Results

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 (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	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

TestAmerica Buffalo

# QC Sample Results

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)

**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

TestAmerica Buffalo

# QC Sample Results

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: 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	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

TestAmerica Buffalo

# QC Sample Results

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

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# 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	

TestAmerica Buffalo



# 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)**

**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**

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)**

**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**

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)**

**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**

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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# 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

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

# TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Temperature on Receipt \_\_\_\_\_  
 Drinking Water? Yes  No

## Chain of Custody Record

TAL-4124 (1007)

Client: **Turnkey** Project Manager: **Nate Munkey** Chain of Custody Number: **190634**  
 Address: **2558 Hamburg Turnpike** Telephone Number (Area Code)/Fax Number: **(716) 856-0599 / (716) 856-0583** Lab Number: **3-23-15** Page **1** of **1**  
 City: **Buffalo** State: **NY** Zip Code: **14218** Site Contact: **Fred W. Wetton** Lab Contact: **B. Fischer** Analysis (Attach list if more space):

Carrier/Waybill Number: \_\_\_\_\_  
 Containers & Preservatives: H2SO4, HNO3, HCl, NaOH, ZnAc, NaOH  
 Matrix: Air, Sed, Soil  
 Date: **3-23-15** Time: **10:00**  
 Date: **↓** Time: **10:30**  
 Date: **↓** Time: **11:30**



Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Aqueous	Sed	Soil	Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH
<b>SB-01 (2-4)</b>		<b>10:00</b>			<b>X</b>	<b>Z</b>					
<b>SB-02 (0-2)</b>		<b>10:30</b>			<b>X</b>	<b>Z</b>					
<b>SB-03 (0-2)</b>		<b>11:30</b>			<b>X</b>	<b>Z</b>					

Possible Hazard Identification:  Non-Hazard  Flammable  Skin Irritant  Poison B  Unknown  Return To Client  Disposal By Lab  Archive For \_\_\_\_\_ Months  
 Turn Around Time Required:  24 Hours  48 Hours  7 Days  14 Days  21 Days  Other: **Standard**  
 1. Relinquished By: **[Signature]** Date: **3/23/15** Time: **16:30**  
 2. Relinquished By: **[Signature]** Date: **3/26/15** Time: **12:40**  
 3. Relinquished By: **[Signature]** Date: **3/26/15** Time: **12:40**  
 Comments: **3.9 #**

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



## 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	