

# Phase II Environmental Investigation Report

*3.54 Acre Parcel (SBL No. 150.16-1-2.12)  
0 Lake Avenue (AKA 250 Lake Avenue)  
Hamburg, New York*

December 2018

0472-018-001

Prepared For:

250 Lake Avenue Associates, LLC



Prepared By:



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# PHASE II ENVIRONMENTAL INVESTIGATION REPORT

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Prepared by:



**Benchmark Environmental Engineering & Science, PLLC**  
**2558 Hamburg Turnpike, Suite 300**  
**Buffalo, New York 14218**

# PHASE II ENVIRONMENTAL INVESTIGATION REPORT

0 Lake Avenue (AKA 250 Lake Avenue Site)  
Hamburg, New York

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# PHASE II ENVIRONMENTAL INVESTIGATION REPORT

0 Lake Avenue (AKA 250 Lake Avenue Site)  
Hamburg, New York

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## 1.0 INTRODUCTION

### 1.1 Background and Site Description

Benchmark Environmental Engineering & Science, PLLC (Benchmark) performed a Phase II Environmental Investigation on behalf of 250 Lake Avenue Associates, LLC at 0 Lake Avenue (AKA 250 Lake Avenue), SBL No. 150.16-1-2.12, Hamburg, New York (Site).

The Site, totaling 3.54-acres, is located in a highly developed industrial area (see Figure 1). As shown on Figure 2, one industrial building is currently present on the Site. The existing building (approx. 154,202 square feet, SF) is currently used for storage and distribution. Past uses of the property and at least part of the structure included steel product manufacturing and other fabricating related to steel production. The Site is supplied with municipal sanitary sewer, electric, natural-gas and public water.

As further detailed below, previous environmental assessments have been completed by others at the Site.

### 1.2 Previous Studies

A 2015 Phase I Environmental Site Assessment (ESA) prepared by LaBella Associates D.P.C (LaBella) identified Recognized Environmental Conditions (RECs) associated with the past industrial use of the property; the presence of rail tracks on the Site; storage of miscellaneous petroleum and chemical products (generally in small quantities); and a 2003 Phase 2 investigation (historic boring locations are shown on Figure 2) performed by another firm which reportedly identified chlorinated solvents, petroleum-related constituents, semi-volatile organics (SVOCs), polychlorinated biphenyls (PCBs) and metals in soils on the property and/or beneath the building floor. Groundwater samples were reportedly collected as well, with no impacts identified. However, no data summaries or analytical reports were provided with the ESA to confirm the accuracy of these findings or allow for comparison of the data to current New York State Department of Environmental Conservation (NYSDEC) regulatory cleanup guidance for soil per 6NYCRR Part 375.

In consideration of the RECs identified by LaBella, this Phase II was completed to further assess subsurface soil/fill conditions at the Site.

## 2.0 SITE INVESTIGATION ACTIVITIES

### 2.1 Soil Boring Investigation

On December 5 and 6, 2018, Benchmark's subcontractor, TREC Environmental Services, Inc. (TREC), mobilized a direct-push Geoprobe 6620DT drill rig equipped with a 1.5-inch diameter, 48-inch-long macro-core sampler to the Site to assist in collection of subsurface soil samples. As shown on Figure 2, 19 soil borings designated as SB-1 through SB-19 were completed at the Site. The soil borings were advanced to depths between 12 feet below ground surface (fbgs) and 16 fbgs except for SB-17, which was completed to equipment refusal at 7 fbgs.

The sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples by Benchmark's environmental engineer. The physical characteristics of all soil borings were classified using the ASTM D2488 Visual-Manual Procedure Description. Soils from each boring were screened via headspace screening using a MiniRae 3000 Photoionization Detector (PID). Field observations, including lithology, depths, PID scan results, olfactory evidence of impact, etc. are summarized in the Soil Boring Log sheets provided in Appendix A. Photographs taken during the work are included in Appendix B.

Soil borings SB-1 through SB-8 and SB-11 were completed on the exterior of the building in areas of miscellaneous stored equipment and materials. Soil borings SB-9, SB-10, and SB-12 through SB-19 were completed on the interior of the building. More specifically, SB-12 through SB-16, and SB-19 were completed in the northern portion of the building primarily in the vicinity of former trenches that are currently filled with concrete. SB-9 and SB-10 were completed within the former fabricating shop in the vicinity of the railroad tracks. SB-18 was completed within the former fabricating shop in the area of an unknown pipe protruding from the ground. SB-17 was completed within the former wire shop north of the loading dock in the vicinity of stored 55-gallon drums.

Soil/fill samples selected for laboratory analysis were transported under chain-of-custody command to TestAmerica Laboratories, Inc. (TestAmerica) in Amherst, New York, including analysis of eight soil/fill samples for Target Compound List (TCL) plus NYSDEC Commissioners Policy 51 (CP-51) List volatile organic compounds (VOCs) and 12 soil/fill samples analyzed for polycyclic aromatic hydrocarbons (PAHs), Resource Conservation and

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Recovery Act (RCRA) metals (cyanide added to SB-8 due to blue staining observed in the field) and polychlorinated biphenyls (PCBs). All samples were collected in laboratory provided sample bottles and were cooled to 4<sup>0</sup> C prior to transport.

### 3.0 INVESTIGATION FINDINGS

#### 3.1 Site Geology/Hydrogeology

The overburden geology observed during the soil boring investigation is generally described as non-native fill mainly consisting of slag and gravel with silt to depths ranging between 3 fbgs and 8 fbgs overlying native sandy clay or lean clay to a depth of at least 16 fbgs. Brick and ash were noted at certain boring locations. As indicated above, equipment refusal was encountered at one soil boring (SB-17) at 7 fbgs (see Soil Boring Logs in Appendix A). Groundwater was encountered at certain borings at depths ranging between two fbgs and five fbgs.

Groundwater flow is likely to the west or northwest toward Lake Erie or consistent with topography in the area of the Site. Local groundwater flow, however, may be influenced by subsurface features, such as excavations, utilities, and localized fill-conditions.

#### 3.2 Field Observations

Soil samples from the soil boring investigation were observed and scanned via headspace screening for volatile organics using a PID. A brief description of the field observations during the boring investigation is presented below:

Investigation Location ID	Environmental Concern Assessed	Highest PID reading (parts per million, ppm) and depth (fbgs)	Other Observations
SB-1	Exterior, in the vicinity of miscellaneous stored equipment and materials.	0.0 ppm throughout boring.	Fill to 5 fbgs. Ashy fill observed from 3.0 to 4.0 fbgs.
SB-2		0.1 ppm at 3.5 fbgs.	Fill to 5 fbgs. Non-descript odors from 3.0 to 5.0 fbgs.
SB-3		0.0 ppm throughout boring.	Fill to 3.5 fbgs.
SB-4		0.0 ppm throughout boring.	Fill to 3 fbgs.
SB-5		0.0 ppm throughout boring.	Fill to 4 fbgs.
SB-6	Exterior, between the building and railroad tracks.	0.0 ppm throughout boring.	Some blue stained gravel and slag and non-descript odors from 0.0 to 3.0 fbgs. Fill to at least 5 fbgs.
SB-7		0.0 ppm throughout boring.	Some blue stained gravel and slag from 0.0 to 3.0 fbgs.
SB-8		0.0 ppm throughout boring.	Blue and white stained slag from 2.0 to 4.0 fbgs.



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<b>Investigation Location ID</b>	<b>Environmental Concern Assessed</b>	<b>Highest PID reading (parts per million, ppm) and depth (fbgs)</b>	<b>Other Observations</b>
SB-9	Interior, within the former fabricating shop in the vicinity of the railroad tracks.	36.1 ppm at 3 fbgs.	Non-descript odors from 1.0 to 11.0 fbgs. Fill to 4 fbgs.
SB-10	Interior, within the former fabricating shop in the vicinity of the railroad tracks and a former concrete trench.	30.0 ppm at 8 fbgs.	Non-descript odors from 4.0 to 9.0 fbgs. Fill to 8 fbgs.
SB-11	Exterior, in the vicinity of miscellaneous stored equipment and materials.	13.2 ppm at 3 fbgs.	Non-descript odors from 2.5 to 5.5 fbgs. Fill to 3.5 fbgs.
SB-12	Interior, within the former factory building in the vicinity of the former concrete trenches.	84.7 ppm at 4 fbgs.	Fill to 3.5 fbgs. Black asphalt-like fill material and non-descript odors from 2.5 to 3.0 fbgs. Non-descript odors from 7.0 to 13.0 fbgs.
SB-13	Interior, within the former factory building in the vicinity of the former concrete trenches.	30.0 ppm at 3 fbgs.	Fill to 5 fbgs. Black asphalt-like fill material observed from 0.0 to 2.0 fbgs. Non-descript odors from 2.0 to 8.0 fbgs.
SB-14	Interior, within the former factory building in the area of staining identified in a previous study.	0.7 ppm at 2.5 fbgs.	Rust colored slag and fill material and Non-descript odors from 2.0 to 4.0 fbgs.
SB-15	Interior, within the former factory building in the vicinity of the concrete filled trenches.	937 ppm at 4 fbgs.	Stained blue slag and gravel and ashy material from 2.0 to 4.0 fbgs. Non-descript odors from 4.0 to 8.0 fbgs. Black liquid with a non-descript odor in the core sleeve from 12.0 to 16.0 fbgs. No visual or olfactory impacts within the clay.
SB-16	Interior, within the former factory building in the vicinity of the former concrete trenches.	386 ppm at 6 fbgs.	Fill to 4 fbgs. Black asphalt-like fill material observed from 0.0 to 2.0 fbgs. Non-descript odors from 2.0 to 8.0 fbgs.
SB-17	Interior, within the former wire shop north of the loading dock in the vicinity of stored 55-gallon drums.	1.6 ppm at 3 fbgs.	Fill to 6 fbgs. Black asphalt-like fill material observed from 0.0 to 2.0 fbgs. Non-descript odors from 2.0 to 6.0 fbgs.
SB-18	Interior, within the former fabricating shop in the area of an unknown pipe protruding from the ground.	0.0 ppm throughout boring.	None
SB-19	Interior, within the former factory building in the vicinity of the former concrete trenches.	1,805 ppm at 4 fbgs.	Fill to 4 fbgs. Non-descript odors from 3.0 to 14.0 fbgs.

### 3.3 Soil Analytical Results

Table 1 presents a summary of the analytical results from the 17 soil/fill samples that were analyzed. For comparative purposes, Table 1 includes 6NYCRR Part 375 Unrestricted Use Soil Cleanup Objectives (USCOs), Commercial Use Soil Cleanup Objectives (CSCOs), and Industrial Use Soil Cleanup Objectives (ISCOs). Part 375 SCOs are specific to the intended reuse of the site and are typically employed for comparison at other remediation sites with NYSDEC oversight, such as Brownfield sites. Based upon current zoning and the anticipated future use of the site in a commercial or industrial capacity the CSCOs and ISCOs were considered applicable comparative criteria. A copy of the laboratory analytical data package is included in Appendix C. As summarized on Table 1, petroleum VOCs 1,2,4-trimethylbenzene, ethylbenzene and m&p-xylene were detected at concentrations exceeding their respective USCOs at SB-15 at 4-6 fbgs. m&p xylene also yielded a concentration above its respective USCO at the 3-4 fbgs interval at SB-15.

Several individual PAH concentrations exceed their respective Part 375 USCOs, CSCOs and/or ISCOs in 6 of the 12 soil/fill samples collected across the Site in interior and exterior locations. Specifically, one or more individual PAH concentrations exceed CSCOs and/or ISCOs at exterior borings SB-2, SB-5, SB-6 and SB-11 and interior boring SB-13.

Metals exceed Part 375 USCOs, CSCOs and/or ISCOs were identified in 11 of the 12 soil/fill samples collected across the Site. Specifically, arsenic was detected exceeding its respective ISCO of 16 milligrams per kilogram (mg/kg) at exterior locations SB-2 (139 mg/kg), SB-5 (60.9 mg/kg), SB-6 (53.2 mg/kg), SB-8 (40.9 mg/kg), SB-11 (52.5 mg/kg), and interior location SB-15 (39 mg/kg). Mercury was detected exceeding its respective ISCO of 5.7 mg/kg at exterior boring SB-2 (23.6 mg/kg). Lead exceeded its respective CSCO of 1,000 mg/kg at exterior borings SB-1 (1,180 mg/kg) and SB-2 (1,340 mg/kg) and barium exceeded its respective CSCO of 400 mg/kg at SB-2 (950 mg/kg). The blue stained fill at SB-8 yielded a cyanide concentration of 26.4 mg/kg, which is below its respective USCO of 27 mg/kg.

Polychlorinated biphenyls (PCBs) were not detected above laboratory detection limits in all 12 soil/fill samples analyzed for PCBs.

## 4.0 CONCLUSIONS AND RECOMMENDATIONS

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

- The 3.54 acre Site, currently developed with one building measuring over 154,000 SF, has an industrial history with former operations related to steel product manufacturing and other fabricating related to steel production.
- Fill material mainly consisting of slag, gravel and silt was noted across the Site in interior and exterior areas at depths ranging between 3 fbs and 8 fbs. Brick and ash were noted at certain boring locations. In addition, blue staining was identified at 3 exterior boring locations. As further described below, the analytical scheme was expanded to include cyanide based on this field observation, as blue staining can be an indicator of complexed cyanide compounds.
- Non-descript odors and elevated PID readings above background (0.0 ppm) were identified at 11 of the 19 total soil boring locations. The highest PID reading of 1,805 ppm was noted within the northern portion of the building (to the north of concrete-filled trenches) at SB-19. The second highest PID reading of 937 ppm was also noted within the northern portion of the building at SB-15 completed south of SB-19 (adjacent to the concrete-filled trenches). Black liquid with a non-descript odor was observed at SB-15.
- Analytical results indicate the presence of fill materials impacted by PAHs and metals across the Site with concentrations exceeding 6NYCRR Part 375 USCOs, CSCOs and ISCOs. To a lesser extent, based on laboratory results and/or field observations, impacted soil/fill is present in the northern portion of the building proximate to the concrete-filled trenches at SB-15 and SB-19.
- The blue stained fill at SB-8 yielded a cyanide concentration of 26.4 mg/kg, which is below its respective USCO of 27 mg/kg.
- Based on the findings detailed above, the Site is a potential candidate for the New York Brownfield Cleanup Program (BCP). Regardless of whether the BCP is pursued, impacted soil/fill present on-Site will require exposure control, remediation and/or proper soil management.

## 5.0 LIMITATIONS

This report has been prepared for the exclusive use of 250 Lake Avenue Associates, 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 250 Lake Avenue Associates, LLC. Use of or reliance on this report or its findings by any other person or entity is prohibited without written permission of Benchmark Environmental Engineering & Science, PLLC.

# FIGURES

**FIGURE 1**



2558 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
(716) 856-0599

**SITE LOCATION & VICINITY MAP**  
PHASE II ENVIRONMENTAL INVESTIGATION REPORT

3.54 ACRE PARCEL (SBL NO. 150.16-1-2.12)  
0 LAKE AVENUE (AKA 250 LAKE AVENUE)  
HAMBURG, NEW YORK

PREPARED FOR  
250 LAKE AVENUE ASSOCIATES, LLC

PROJECT NO.: B0472-018-001



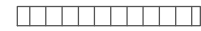

DATE: DECEMBER 2018

DRAFTED BY: CCB

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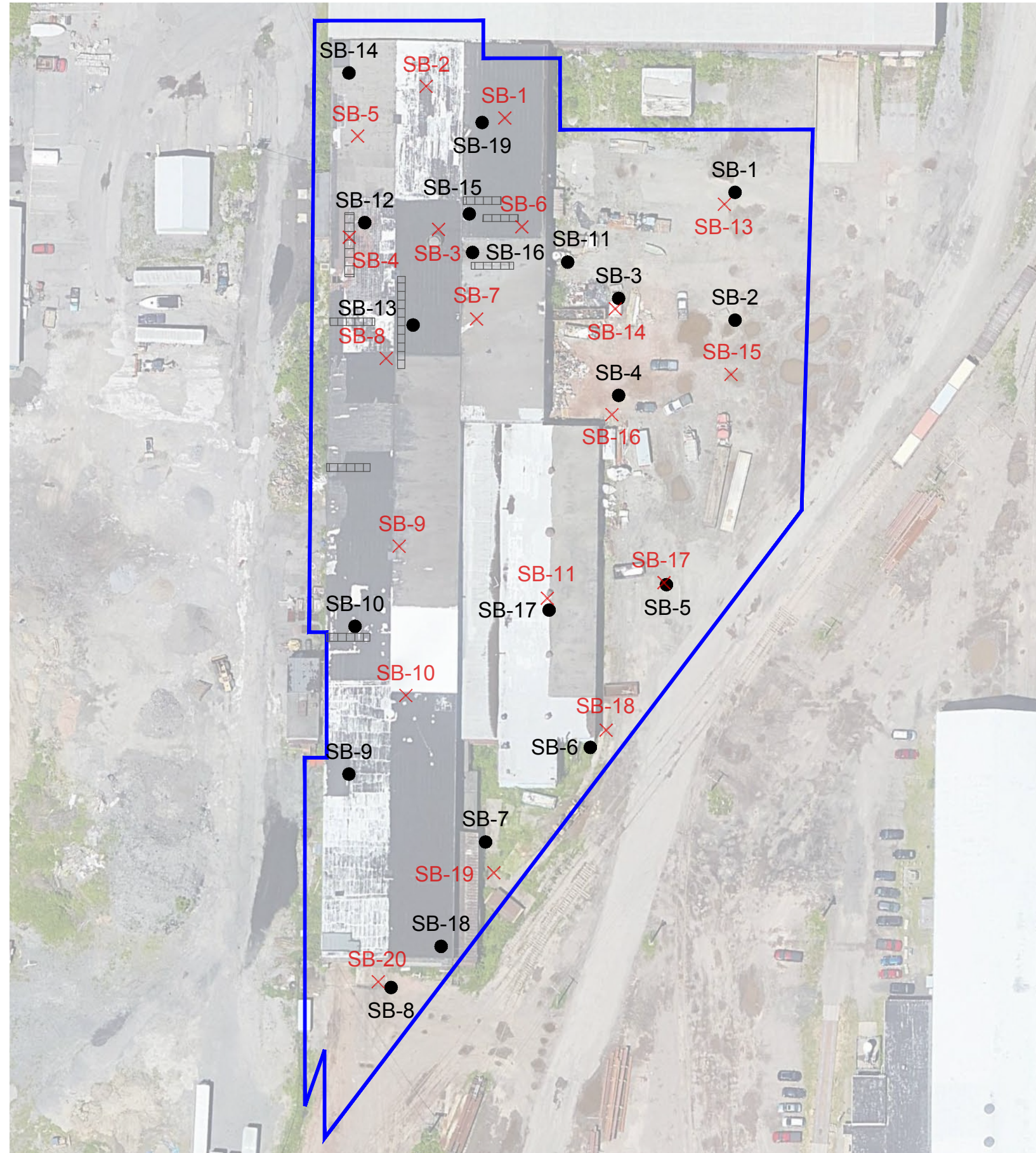
DATE: DECEMBER 2018  
DRAFTED BY: CCB

LEGEND:

-  PROPERTY BOUNDARY
-  SB-15 HISTORIC SOIL BORING (BY OTHERS)
-  FORMER CONCRETE TRENCH
-  SB-1 SOIL BORING (BY BENCHMARK)



SCALE: 1 INCH = 80 FEET  
SCALE IN FEET  
(approximate)



**INVESTIGATION LOCATIONS**

PHASE II ENVIRONMENTAL INVESTIGATION REPORT  
3.54 ACRE PARCEL (SBL NO. 150.16-1-2.12)  
0 LAKE AVENUE (AKA 250 LAKE AVENUE)  
HAMBURG, NEW YORK  
PREPARED FOR  
250 LAKE AVENUE ASSOCIATES, LLC

**FIGURE 2**

**BENCHMARK**  
ENVIRONMENTAL  
ENGINEERING &  
SCIENCE, PLLC  
2556 HAMBURG TURNPIKE  
SUITE 300  
BUFFALO, NY 14218  
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**TABLE**



TABLE 1

SUMMARY OF SUBSURFACE SOIL/FILL SAMPLE ANALYTICAL RESULTS  
 PHASE II ENVIRONMENTAL INVESTIGATION REPORT  
 0 LAKE AVENUE (AKA 250 LAKE AVENUE)  
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PARAMETER <sup>1</sup>	Unrestricted Use SCOs <sup>2</sup>	Commercial Use SCOs <sup>2</sup>	Industrial Use SCOs <sup>2</sup>	Sample Location (Depth - ft)																
				SB-1 (3-4)	SB-2 (3-5)	SB-5 (1-3)	SB-6 (0-3)	SB-8 (2-4)	SB-9 (2-4)	SB-11 (2.5-3.5)	SB-13 (2-4)	SB-14 (2-4)	SB-15 (3-4)	SB-15 (4-6)	SB-15 (9-12)	SB-17 (2-4)	SB-17 (4-6)	SB-19 (3-4)	SB-19 (4-6)	SB-19 (10-11)
				12/5/2018								12/6/2018								
<b>Volatile Organic Compounds (VOCs) - mg/Kg<sup>3</sup></b>																				
1,2,4-Trimethylbenzene	3.6	190	380	--	--	--	--	--	--	0.0066 vs*	ND	--	0.83 J	7.5	0.12 vs	--	0.011 J vs	--	0.66 J	ND
1,3,5-Trimethylbenzene	8.4	190	380	--	--	--	--	--	--	0.029 vs*	ND	--	ND	3.3	0.066 vs	--	0.0046 J vs	--	ND	ND
Acetone	0.05	500	1000	--	--	--	--	--	--	0.011 J vs	ND	--	ND	ND	0.049 J vs	--	0.022 J vs	--	ND	ND
Benzene	0.06	44	89	--	--	--	--	--	--	0.0013 J vs	ND	--	ND	ND	ND	--	ND	--	ND	ND
Cyclohexane	--	--	--	--	--	--	--	--	--	ND	ND	--	1.5 J	8.5	0.21 vs	--	0.0054 J vs	--	5.3	ND
Ethylbenzene	1	390	780	--	--	--	--	--	--	0.0048 J vs	ND	--	ND	3.8	0.0089 J vs	--	0.0095 J vs	--	ND	ND
Isopropylbenzene (Cumene)	--	--	--	--	--	--	--	--	--	0.046 vs*	ND	--	ND	2.4	0.072 vs	--	ND	--	0.97 J	0.19 J
Methyl acetate	--	--	--	--	--	--	--	--	--	ND	ND	--	ND	1.9 J	ND	--	ND	--	ND	ND
Methylcyclohexane	--	--	--	--	--	--	--	--	--	ND	ND	--	ND	53	1.1 vs	--	0.026 vs	--	36	15
n-Butylbenzene	12	500	1000	--	--	--	--	--	--	0.0061 J vs*	ND	--	ND	0.41 J	ND	--	ND	--	ND	ND
n-Propylbenzene	3.9	500	1000	--	--	--	--	--	--	0.024 vs*	ND	--	ND	2.9	0.094 vs	--	0.0029 J vs	--	0.93 J	ND
p-Cymene (p-isopropyltoluene)	--	--	--	--	--	--	--	--	--	0.013 vs*	ND	--	ND	ND	0.015 J vs	--	0.0035 J vs	--	ND	ND
sec-Butylbenzene	11	500	1000	--	--	--	--	--	--	0.015 vs*	ND	--	ND	ND	0.022 J vs	--	ND	--	ND	ND
Toluene	0.7	500	1000	--	--	--	--	--	--	0.0031 J vs	ND	--	ND	ND	ND	--	ND	--	ND	ND
m&p-Xylene	0.26	500	1000	--	--	--	--	--	--	0.0037 J vs	ND	--	2.6 J	28	0.085 J vs	--	0.039 J vs	--	ND	ND
o-Xylenes	0.26	500	1000	--	--	--	--	--	--	0.0014 J vs	ND	--	ND	ND	0.085 J vs	--	0.017 J vs	--	ND	ND
Total Xylenes	0.26	500	1000	--	--	--	--	--	--	0.0051 J vs	ND	--	2.6 J	28	ND	--	0.056 vs	--	ND	ND
<b>Polycyclic Aromatic Hydrocarbons (PAHs) - mg/Kg<sup>3</sup></b>																				
Acenaphthene	20	500	1000	0.14 J	ND	ND	1.2	ND	ND	ND	ND	ND	ND	ND	--	--	ND	--	ND	--
Acenaphthylene	100	500	1000	ND	ND	0.98 J	0.55 J	0.061 J	ND	ND	ND	ND	ND	ND	--	--	ND	--	ND	--
Anthracene	100	500	1000	0.4 J	ND	0.76 J	2.8	0.096 J	ND	ND	1.5 J	ND	ND	ND	--	--	ND	--	ND	--
Benzo(a)anthracene	1	5.6	11	0.7 J	2.7 J	4.9	7.7	0.26	0.094 J	1.4 J	2.8 J	4.4 J	0.19 J	--	--	ND	--	ND	--	--
Benzo(a)pyrene	1	1	1.1	0.62 J	1.4 J	5.6	7.3	0.24 J	0.069 J	1.4 J	2.3 J	ND	ND	--	--	ND	--	ND	--	--
Benzo(b)fluoranthene	1	5.6	11	1 K	1.9 J	6.6	8.9	0.29	0.11 J	1.9 J	2.5 J	ND	ND	--	--	ND	--	ND	--	--
Benzo(ghi)perylene	100	500	1000	0.32 J	0.94 J	3.9	5.4	0.16 J	0.082 J	ND	1.6 J	ND	ND	--	--	ND	--	ND	--	--
Benzo(k)fluoranthene	0.8	56	110	ND	0.58 J	3.9	4.6	0.15 J	0.038 J	0.86 J	1.9 J	ND	ND	--	--	ND	--	ND	--	--
Chrysene	1	56	110	0.91	ND	4.9	7.3	0.3	0.21 J	2.7 J	2.4 J	ND	ND	--	--	ND	--	ND	--	--
Fluoranthene	100	500	1000	1.6	3 J	9.2	17	0.41	ND	2.8 J	5.5	8 J	0.34 J	--	--	0.32 J	--	2.4 J	--	--
Fluorene	30	500	1000	0.28 J	ND	0.19 J	1.2	0.055 J	ND	ND	0.83 J	ND	ND	--	--	ND	--	ND	--	--
Indeno(1,2,3-cd)pyrene	0.5	5.6	11	0.32 J	0.85 J	3.5	4.6	0.15 J	0.057 J	ND	1.3 J	ND	ND	--	--	ND	--	ND	--	--
Naphthalene	12	500	1000	ND	ND	ND	0.7 J	ND	0.15 J	ND	ND	ND	ND	--	--	ND	--	ND	--	--
Phenanthrene	100	500	1000	1.6	2.3 J	2.1	12	0.31	0.19 J	2.1 J	5.1	6.6 J	0.23 J	--	--	1.8 J	--	ND	--	--
Pyrene	100	500	1000	1.2	2.9 J	8.7	14	0.33	0.23 J	2.7 J	4.6 J	6.3 J	0.29 J	--	--	2.7	--	ND	--	--
<b>Metals - mg/Kg</b>																				
Arsenic	13	16	16	10.2	139	60.9	53.2	40.9	7.8	52.5	12.1	11.2	39	--	--	5.4	--	12.2	--	--
Barium	350	400	10000	106 B	950 B	292 B	196 B	227 B	161 B	146 B	126 B	195 B	158 B	--	--	353 B	--	80 B	--	--
Cadmium	2.5	9.3	60	0.31	7.9	5.7	0.68	0.13 J	0.56	1.6	0.65	0.63 J	0.93 J	--	--	0.71	--	0.3	--	--
Chromium	30	1500	6800	8.8	263	29.6	26.1	5.8	7.4	37.4	20.9	32.8	31.7	--	--	14.8	--	37.1	--	--
Lead	63	1000	3900	1180 B	1340 B	227 B	65.6 B	5.1 B	30.9 B	158 B	64.7 B	270 B	63 B	--	--	49.9 B	--	73.4 B	--	--
Mercury	0.18	2.8	5.7	0.12	23.6	0.19	0.062	0.025 J	0.025 J	1.7	0.038	0.12	0.11	--	--	0.017 J	--	0.036	--	--
Selenium	3.9	1500	6800	1 J	3.2 J	3 J	2 J	3.8 J	3.1 J	3.2 J	1.6 J	ND	2 J	--	--	1.8 J	--	1.3 J	--	--
Silver	2	1500	6800	ND	2.1 J	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	--	ND	--	--
Cyanide - Total	27	27	10000	--	--	--	--	26.4	--	--	--	--	--	--	--	--	--	--	--	--
<b>Polychlorinated biphenyls (PCBs) - mg/Kg<sup>3</sup></b>																				
Total PCBs	0.1	1	25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	--	--	ND	--	ND	--	--

- Notes:**
- Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
  - Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
  - 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.  
 K = Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as benzo(b)fluoranthene.  
 B = Compound was found in the blank and sample.  
 vs = Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L.  
 \* = ISTD response or retention time outside acceptable limits.

<b>Bold</b>	= Result exceeds Unrestricted Use SCOs.
<b>Bold</b>	= Result exceeds Commercial Use SCOs.
<b>Bold</b>	= Result exceeds Industrial use SCOs.

# APPENDIX A

## SOIL BORING LOGS

Project No: B0472-018-001

Borehole Number: SB-1



Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:

Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	-1.0	<b>Gravel and Slag</b> Brown, moist, loose, with coarse gravel and crushed slag. No odor.	C1	NA	3.5	●	0.0	Sampled (3-4)	
	-1.0	<b>Slag with Fill</b> Brown/grey/black, wet (2.75 fbgs), loose, with crushed slag, silt, and fine gravel. No odor.							
	-3.0	<b>Ashy Fill</b> Grey, dry, loose, ashy, with fine gravel. No odor.				●	0.0		
	-4.0	<b>Slag</b> Black, moist, with fine to coarse gravel and silt. No odor.	C2	NA	3.75	●	0.0		
	-4.0	<b>Sandy Clay</b> Grey, moist, medium density, mostly medium plasticity fines, some fine sand. No odor.							
	-8.0	<b>Lean Clay</b> Brown, moist, stiff mostly medium plasticity fines. No odor.	C3	NA	3.5	●	0.0		
	-8.0								
	-12.0	End of Borehole				●	0.0		
15.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-2

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	-1.0	<b>Gravel and Slag</b> Brown, moist, loose, with coarse gravel and slag. No odor.					0.0		
	-1.0	<b>Soil/Fill</b> Brown/grey, moist, loose when disturbed, with crushed slag, silt, fine to coarse gravel, and trace wood chips. No odor.	C1	NA	3.5		0.0		
	-3.0	<b>Slag and Fill</b> Black/brown, wet (4.0 fbgs), mostly non-plastic fines, few fine to coarse gravel, silt, and trace brick. Non-descript odor.					0.1	Sampled (3-5)	
	-3.0						0.0		
5.0	-5.0	<b>Sandy Clay</b> Grey, moist, medium density, mostly medium plasticity fines, some fine sand. No odor.	C2	NA	3.5		0.0		
							0.0		
							0.0		
10.0			C3	NA	3.5		0.0		
							0.0		
	-12.0	End of Borehole					0.0		
	12.0								
15.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-3

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	-1.0	<b>Gravel and Slag</b> Brown, moist, loose, with coarse gravel and slag. No odor.					0.0		
	-2.5	<b>Soil/Fill</b> Brown/grey, moist, loose when disturbed, mostly non-plastic fines, with crushed slag, silt, and fine to coarse gravel. No odor.	C1	NA	3.25		0.0		
	-3.5	<b>Slag with Fill</b> Black, wet (2.5 fbgs), mostly non-plastic fines, few fine gravel, and silt. No odor.					0.0		
	-5.0	<b>Sandy Clay</b> Grey/brown, moist, soft ot medium density, mostly medium plasticity fines, some fine sand. No odor.					0.0		
	-6.0	<b>Lean Clay</b> Brown, moist, stiff mostly medium plasticity fines. No odor.	C2	NA	4		0.0		
	-8.0	<b>Sandy Lean Clay</b> Brown, moist, medium density, mostly medium plasticity fines, some fine sand. No odor.					0.0		
	-10.0		C3	NA	2		0.0		
	-12.0	End of Borehole					0.0		
15.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-4

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	-1.0	<b>Gravel and Slag</b> Brown, moist, loose, with coarse gravel and slag. No odor.					0.0		
	-2.0	<b>Soil/Fill</b> Brown, moist, loose when disturbed, fine to coarse gravel, with crushed slag, and silt. No odor.	C1	NA	3.5		0.0		
	-3.0	<b>Slag with Fill</b> Black, wet (2.5 fbgs), mostly non-plastic fines, some medium plasticity fines, few fine gravel, and silt. No odor.					0.0		
	-5.0	<b>Clay with Sand</b> Grey, moist, soft, mostly medium plasticity fines, and some fine sand. No odor.					0.0		
	-8.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.	C2	NA	4		0.0		
	-10.0	<b>Sandy Lean Clay</b> Brown, moist, medium density, mostly medium plasticity fines, some fine sand. No odor.	C3	NA	4		0.0		
	-12.0	End of Borehole					0.0		

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-5

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	-1.0	<b>Gravel and Slag</b> Brown, moist, loose, with coarse gravel and slag. No odor.					0.0		
	1.0	<b>Soil/Fill</b> Maroon, moist, loose, mostly non-plastic fines, with fine gravel and crushed slag. No odor.	C1	NA	3		0.0	Sampled (1-3)	
	-3.0	<b>Slag with Fill</b> Black, wet (2.5 fbgs), crushed slag, mostly non-plastic fines, some medium plasticity fines, few fine gravel and silt. No odor.					0.0		
	3.0	<b>Sandy Clay</b> Brown/grey, moist, soft, mostly medium plasticity fines, and some fine sand. No odor.	C2	NA	4		0.0		
	-4.0						0.0		
	4.0						0.0		
	-8.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.	C3	NA	4		0.0		
	8.0						0.0		
	-12.0	End of Borehole					0.0		
	12.0						0.0		
	15.0								

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

**Project No:** B0472-018-001

**Borehole Number:** SB-6

**Project:** Phase II Environmental Investigation

**A.K.A.:**

**Client:** 250 Lake Avenue Associates, LLC

**Logged By:** CCB

**Site Location:** Blasdell, New York

**Checked By:**



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		<b>Soil/Fill</b> Dark brown, moist, loose, with blue stained coarse gravel and crushed slag, some brick, roots. Non-descript odor.	C1	NA	2		0.0	Sampled (1-3)	
	-3.0 3.0	<b>Crushed Brick</b> Orange/brown, loose when disturbed, some crushed slag, and trace silt. No odor.					0.0		
5.0	-5.0 5.0	<b>Sandy Clay</b> Grey, wet (5 fbgs), soft, mostly medium plasticity fines, some fine sand, and trace crushed slag. No odor.	C2	NA	2.5		0.0		
							0.0		
10.0	-10.0 10.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.	C3	NA	4		0.0		
	-12.0 12.0	End of Borehole					0.0		
15.0									

**Drilled By:** TREC Environmental Services, Inc.  
**Drill Rig Type:** Geoprobe 6620DT  
**Drill Method:** Direct Push  
**Comments:**  
**Drill Date(s):** 12/5/18

**Hole Size:** 1.5-inch  
**Stick-up:** NA  
**Datum:** NA  
**Sheet:** 1 of 1



Project No: B0472-018-001

Borehole Number: SB-7

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		<b>Soil/Fill</b> Brown, wet (2.5 fbgs), loose, mostly non-plastic fines, with blue stained coarse gravel and crushed slag, trace silt. No odor.	C1	NA	2		0.0		
	-3.0 3.0	<b>Sandy Clay</b> Grey with some black, moist, medium dense, mostly medium plasticity fines, and some fine sand. No odor.					0.0		
5.0			C2	NA	2		0.0		
	-8.0 8.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.					0.0		
10.0			C3	NA	4		0.0		
	-12.0 12.0	End of Borehole					0.0		
15.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-8

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
		<b>Soil/Fill</b> Brown, moist, loose, mostly non-plastic fines, with fine gravel and crushed slag, trace silt. No odor.					0.0		
	-2.0 2.0	<b>Slag</b> Blue and white, wet (2.5 fbgs), mostly non-plastic fines. No odor.	C1	NA	2.5		0.0	Sampled (2-4)	
	-4.0 4.0	<b>Sandy Clay</b> Grey, moist, medium dense, mostly medium plasticity fines, and some fine sand. No odor.					0.0		
5.0	-6.0 6.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.	C2	NA	2.75		0.0		
							0.0		
10.0			C3	NA	4		0.0		
							0.0		
	-12.0 12.0	End of Borehole							
15.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-9

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
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 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	-1.0	<b>Concrete</b> Grey/white, dry, chalky, loose when disturbed. No odor.							
	1.0	<b>Slag with Fill</b> Black, wet (2 fbg), crushed slag, with mostly non-plastic fines. Non-descript odor.	C1	NA	3		0.0 36.1	Sampled (2-4)	
	-4.0	<b>Clay</b> Grey/black, moist, soft to firm with depth, and mostly medium plasticity fines. Non-descript odor.	C2	NA	4		19.6		
	4.0								
	-8.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. Non-descript odor.	C3	NA	4		9.0		
	8.0						5.0		
	-12.0	End of Borehole					0.0		
	12.0								
15.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-10

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		<b>Concrete</b> Grey/white, dry, chalky, loose when disturbed. No odor.	C1	NA	3		0.0		
							0.0		
5.0	-4.0 4.0	<b>Slag and Fill with Clay</b> Black/grey, wet (4 fbgs), crushed slag, with some medium plasticity fines. Non-descript odor.	C2	NA	1.75		19.6		
							30.0		
							19.0		
10.0	-8.0 8.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. Non-descript odor.	C3	NA	4		0.0		
							0.0		
		End of Borehole							
15.0	-12.0 12.0								

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-11

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 50 100	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
		<b>Soil/Fill</b> Brown/grey, moist, loose when disturbed, with crushed slag, silt, and fine to coarse gravel. No odor.	C1	NA	3.25		0.0		
	-2.5 2.5	<b>Slag with Fill</b> Black, wet (2.5 fbgs), mostly non-plastic fines, few fine gravel, and silt. Non-descript odor.					13.2	Sampled (2.5-3.5)	
	-3.5 3.5	<b>Clay</b> Grey, wet, soft, mostly medium plasticity fines. Non-descript odor.					2.2		
5.0	-5.5 5.5	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.	C2	NA	2		1.8		
							0.0		
10.0			C3	NA	3.5		0.0		
	-12.0 12.0	End of Borehole					0.0		
15.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/5/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA

Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-12

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
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 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
		<b>Concrete</b> Grey/white, dry, chalky, loose when disturbed. No odor.					2.5		
	-2.5		C1	NA	3.25		18.3		
	-3.0	<b>Slag with Fill</b> Black, moist, medium dense, mostly non-plastic fines, asphalt-like material. Non-descript odor.					84.7		
	-3.5	<b>Concrete and Ashy Fill</b> Grey, dry, chalky, loose when disturbed, with brittle rock fragments. No odor.					26.0		
5.0		<b>Clay</b> Dark grey, moist, medium dense, mostly medium plasticity fines. Non-descript odor.	C2	NA	3.75		50.0		
							21.0		
10.0		As above. Increased moisture (7 to 13 fbg). Non-descript odor.	C3	NA	4		15.0		
							45.0		
							39.0		
			C4	NA	3		20.0		
		As above. No odor.					2.0		
15.0							0.0		
	-16.0	End of Borehole							
20.0	16.0								

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-13

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



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 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		<b>Fill with Slag and Gravel</b> Grey/black, dry, loose when disturbed fine to coarse gravel and slag, some asphalt-like material. No odor.					0.0		
	-2.0 2.0	<b>Slag with Fill</b> Black, wet (2.5 fbgs), mostly non-plastic fines. Non-descript odor.	C1	NA	2		30.0	Sampled (2-4)	
	-5.0 5.0	<b>Clay</b> Grey, moist, medium dense, mostly medium plasticity fines. Non-descript odor.	C2	NA	3		13.0		
		As above. Non-descript odor.					0.0		
	10.0		C3	NA	3				
	-12.0 12.0	End of Borehole					0.0		
	15.0								
	20.0								

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-14

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
		<b>Concrete</b> Grey/white, dry, chalky, loose when disturbed. No odor.					0.0		
	-2.0 2.0	<b>Slag with Fill</b> Black/brown, moist, mostly non-plastic fines, some rust colored fill material. Non-descript odor.	C1	NA	3		0.7	Sampled (2-4)	
	-4.0 4.0	<b>Lean Clay</b> Brown, moist, medium dense, mostly medium plasticity fines. No odor.	C2	NA	4		0.0		
	-9.0 9.0	<b>Clay</b> Grey, wet and soft (9-10 fbgs) to moist and firm (10-12 fbgs), mostly medium plasticity fines. No odor.	C3	NA	2		0.0		
	-12.0 12.0	End of Borehole					0.0		
15.0									
20.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1



Project No: B0472-018-001

Borehole Number: SB-15



Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:

Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
		<b>Concrete</b> Grey/white, dry, chalky, loose when disturbed. No odor.					0.0		
	-2.0 2.0	<b>Slag with Fill</b> Tinted blue, dry, ashy, loose when disturbed, mostly non-plastic fines, some fine gravel. No odor.	C1	NA	2.5		0.0 678.0	Sampled (3-4)	
	-4.0 4.0	<b>Clay</b> Grey, moist, stiff, mostly medium plasticity fines. Non-descript odor.					937.0 290.0	Sampled (4-6)	
	-6.0 6.0	<b>Lean Clay</b> Brown, moist, stiff (soft 10-11 fbgs), mostly medium plasticity fines.	C2	NA	4		58.0 50.8		
		As above. Non-descript odor.					110.0 237.0		
		As above. Black liquid with non-descript odor in sleeve from 12 to 16 fbgs. No visual or olfactory impacts within the clay.	C3	NA	4		180.0 231.0	Sampled (9-12)	
							31.0		
	-16.0 16.0	End of Borehole	C4	NA	2		0.0		
20.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-16

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		<b>Concrete and Fill</b> Grey/white, dry, chalky, loose when disturbed, with some black asphalt-like fill material. Non-descript odor.					10.1		
	-2.0 2.0	<b>Fill</b> Brown/black/maroon, moist, mostly non-plastic fines, with some fine to coarse gravel and slag. Non-descript odor.	C1	NA	2		9.0		
							2.8		
	-4.0 4.0	<b>Clay</b> Grey, moist, medium dense, mostly medium plasticity fines. Non-descript odor.					26.6		
5.0							201.0		
			C2	NA	3.25		386.0		
							4.9		
	-8.0 8.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.					9.0		
10.0			C3	NA	3		0.0		
							0.0		
	-12.0 12.0	End of Borehole							
15.0									
20.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-17

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
		<b>Concrete and Fill</b> Grey/white, dry, chalky, loose when disturbed, with some black asphalt-like fill material.							
	-2.0 2.0	<b>Slag with Fill</b> Black/white/grey, wet (2.5 fbgs), mostly non-plastic fines, with some silt. Non-descript odor.	C1	NA	2	0.6 1.6		Sampled (2-4)	
	-4.0 4.0	<b>Fine Gravel and Slag</b> Grey, wet, mostly non-plastic fines, with some silt. Non-descript odor.				0.7		Sampled (4-6)	
	-6.0 6.0	<b>Clay</b> Grey, moist, medium dense, mostly medium plasticity fines. No odor.	C2	NA	2	0.0			
	-7.0 7.0	End of Borehole							
10.0									
15.0									
20.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-18

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		<b>No Recovery</b>							
			C1	NA	0		0.0		
							0.0		
	-4.0 4.0	<b>Sandy Clay</b> Brown/grey, moist, medium dense, mostly medium plasticity fines, some fine sand. No odor.							
5.0			C2	NA	2.5		0.0		
							0.0		
	-8.0 8.0	<b>Lean Clay</b> Brown, moist, stiff, mostly medium plasticity fines. No odor.							
10.0			C3	NA	4		0.0		
							0.0		
	-12.0 12.0	End of Borehole							
15.0									
20.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

Project No: B0472-018-001

Borehole Number: SB-19

Project: Phase II Environmental Investigation

A.K.A.:

Client: 250 Lake Avenue Associates, LLC

Logged By: CCB

Site Location: Blasdell, New York

Checked By:



Benchmark Environmental Engineering & Science, PLLC  
 2558 Hamburg Turnpike, Suite 300  
 Buffalo, NY 14218  
 (716) 856-0599

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 1000 2000	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
		<b>Concrete</b> Grey/white, dry, chalky, loose when disturbed. No odor.							
	-2.0 2.0	<b>Slag with Fill</b> Black/brown, wet (2.5 fbgs), mostly non-plastic fines, some silt and fine gravel and crushed slag. Non-descript odor.	C1	NA	2.5		1.1 63.0	Sampled (3-4)	
	-4.0 4.0	<b>Clay</b> Grey, moist, stiff (soft 7-7.5 fbgs), mostly medium plasticity fines. Non-descript odor.	C2	NA	4		1805.0 205.0 1236.0	Sampled (4-6)	
		As above.					129.0 80.0		
	-10.0 10.0	<b>Lean Clay</b> Brown, moist, stiff (soft 10-12 fbgs), mostly medium plasticity fines.	C3	NA	4		10.6 1156.0	Sampled (10-11)	
		As above. Non-descript odor.					30.0		
		As above. No odor.	C4	NA	2		0.0		
	-16.0 16.0	End of Borehole					0.0		
20.0									

Drilled By: TREC Environmental Services, Inc.  
 Drill Rig Type: Geoprobe 6620DT  
 Drill Method: Direct Push  
 Comments:  
 Drill Date(s): 12/6/18

Hole Size: 1.5-inch  
 Stick-up: NA  
 Datum: NA  
 Sheet: 1 of 1

# APPENDIX B

## PHOTO LOG

## SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: Soil Boring Investigation – 6620DT Geoprobe Drill Rig (SB-8).

Photo 2: Soil Boring Investigation - Maroon colored soil/fill (SB-5).

Photo 3: Soil Boring Investigation – Blue stained slag and gravel (SB-8).

Photo 4: Soil Boring Investigation – Asphalt-like material beneath concrete floor (SB-13).

**0 Lake Avenue (AKA 250 Lake Avenue  
Site) Hamburg, New York**

Photo Date: December, 2018



## SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 5: Soil Boring Investigation – Typical fill with intermingled slag (SB-11).

Photo 6: Soil Boring Investigation – Clay with highest PID reading of 1,805 ppm identified in SB-19.

**0 Lake Avenue (AKA 250 Lake Avenue  
Site) Hamburg, New York**

Photo Date: December, 2018





# APPENDIX C

## 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: 480-146502-1

Client Project/Site: Benchmark - 250 Lake Ave. site

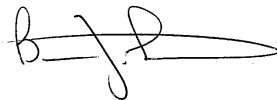
For:

Benchmark Env. Eng. & Science, PLLC

2558 Hamburg Turnpike

Lackawanna, New York 14218

Attn: Bryan Mayback



*Authorized for release by:*

*12/21/2018 11:50:53 AM*

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.*

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# Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## 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.
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.
*	ISTD response or retention time outside acceptable limits
X	Surrogate is outside control limits

### GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
K	Benzo (b&k) fluoranthene are unresolved due to matrix, result is reported as Benzo(b)fluoranthene.
X	Surrogate is outside control limits

### Metals

Qualifier	Qualifier Description
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.
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.
F2	MS/MSD RPD exceeds control limits

## 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	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

# Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Job ID: 480-146502-1

### Laboratory: TestAmerica Buffalo

#### Narrative

#### Job Narrative 480-146502-1

#### Comments

No additional comments.

#### Receipt

The samples were received on 12/7/2018 5:15 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.2° C.

#### GC/MS VOA

Method(s) 8260C: The following sample was analyzed at a reduced weight and diluted to bring the concentration of target analytes within the calibration range: SB-15 (9-12) (480-146502-12). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: Internal standard and Surrogate responses were outside of acceptance limits for the following sample: SB-11 (2.5-3.5) (480-146502-6). The sample shows evidence of matrix interference.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-449888 recovered outside acceptance criteria, low biased, for Carbon disulfide and Cyclohexane. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: SB-11 (2.5-3.5) (480-146502-6).

Method(s) 8260C: The following sample was analyzed at a reduced weight due to the nature of the sample matrix: SB-17 (4-6) (480-146502-14). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were analyzed using medium level soil analysis diluted due to the nature of the sample matrix: SB-13 (2-4) (480-146502-7), SB-15 (3-4) (480-146502-10), SB-15 (4-6) (480-146502-11), SB-19 (4-6) (480-146502-16) and SB-19 (10-11) (480-146502-17). 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.

#### GC/MS Semi VOA

Method(s) 8270D: The following samples were diluted due to color, appearance, and viscosity: SB-1 (3-4) (480-146502-1), SB-2 (3-5) (480-146502-2), SB-5 (1-3) (480-146502-3), SB-6 (0-3) (480-146502-4), SB-11 (2.5-3.5) (480-146502-6), SB-13 (2-4) (480-146502-7), SB-14 (2-4) (480-146502-9) and SB-15 (3-4) (480-146502-10). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples required a dilution due to the nature of the sample matrix: SB-2 (3-5) (480-146502-2), SB-11 (2.5-3.5) (480-146502-6) and SB-13 (2-4) (480-146502-7). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The following sample was diluted due to the nature of the sample matrix: SB-14 (2-4) (480-146502-9). 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: SB-19 (3-4) (480-146502-15). 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 color, appearance, and viscosity: SB-19 (3-4) (480-146502-15). 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

Method(s) 6010C: The following sample was diluted due to the presence of Iron which interferes with Total Silver, Cadmium, and Lead: SB-5 (1-3) (480-146502-3). Elevated reporting limits (RLs) are provided.

# Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

---

## Job ID: 480-146502-1 (Continued)

---

### Laboratory: TestAmerica Buffalo (Continued)

Method(s) 6010C: The following samples were diluted due to the presence of Iron which interferes with Total Silver, Cadmium, and Lead: SB-2 (3-5) (480-146502-2), SB-14 (2-4) (480-146502-9), SB-15 (3-4) (480-146502-10) and SB-19 (3-4) (480-146502-15). 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.

### General Chemistry

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

### Organic Prep

Method(s) 3550C: The following sample: SB-19 (3-4) (480-146502-15) was decanted prior to preparation.

Method(s) 3550C: Due to the matrix, the following samples could not be concentrated to the final method required volume: SB-14 (2-4) (480-146502-9), SB-17 (2-4) (480-146502-13) and SB-19 (3-4) (480-146502-15). 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 - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Client Sample ID: SB-1 (3-4)

## Lab Sample ID: 480-146502-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	140	J	900	130	ug/Kg	5	☼	8270D	Total/NA
Anthracene	400	J	900	220	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	700	J	900	90	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	620	J	900	130	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	1000	K	900	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	320	J	900	95	ug/Kg	5	☼	8270D	Total/NA
Chrysene	910		900	200	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	1600		900	95	ug/Kg	5	☼	8270D	Total/NA
Fluorene	280	J	900	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	320	J	900	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	1600		900	130	ug/Kg	5	☼	8270D	Total/NA
Pyrene	1200		900	110	ug/Kg	5	☼	8270D	Total/NA
Arsenic	10.2		2.1	0.43	mg/Kg	1	☼	6010C	Total/NA
Barium	106	B	0.53	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.31		0.21	0.032	mg/Kg	1	☼	6010C	Total/NA
Chromium	8.8		0.53	0.21	mg/Kg	1	☼	6010C	Total/NA
Lead	1180	B	1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.0	J	4.3	0.43	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.12		0.021	0.0084	mg/Kg	1	☼	7471B	Total/NA

## Client Sample ID: SB-2 (3-5)

## Lab Sample ID: 480-146502-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	2700	J	4400	440	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	1400	J	4400	650	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	1900	J	4400	700	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	940	J	4400	470	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	580	J	4400	570	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	3000	J	4400	470	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	850	J	4400	540	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	2300	J	4400	650	ug/Kg	20	☼	8270D	Total/NA
Pyrene	2900	J	4400	520	ug/Kg	20	☼	8270D	Total/NA
Arsenic	139		2.5	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	950	B	0.63	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	7.9		1.3	0.19	mg/Kg	5	☼	6010C	Total/NA
Chromium	263		0.63	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	1340	B	6.3	1.5	mg/Kg	5	☼	6010C	Total/NA
Selenium	3.2	J	5.1	0.51	mg/Kg	1	☼	6010C	Total/NA
Silver	2.1	J	3.8	1.3	mg/Kg	5	☼	6010C	Total/NA
Mercury	23.6		6.1	2.5	mg/Kg	250	☼	7471B	Total/NA

## Client Sample ID: SB-5 (1-3)

## Lab Sample ID: 480-146502-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	980	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Anthracene	760	J	1100	260	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	4900		1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	5600		1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	6600		1100	170	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	3900		1100	110	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Client Sample ID: SB-5 (1-3) (Continued)

## Lab Sample ID: 480-146502-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	3900		1100	140	ug/Kg	5	☼	8270D	Total/NA
Chrysene	4900		1100	240	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	9200		1100	110	ug/Kg	5	☼	8270D	Total/NA
Fluorene	190	J	1100	130	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	3500		1100	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	2100		1100	160	ug/Kg	5	☼	8270D	Total/NA
Pyrene	8700		1100	130	ug/Kg	5	☼	8270D	Total/NA
Arsenic	60.9		2.5	0.49	mg/Kg	1	☼	6010C	Total/NA
Barium	292	B	0.61	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	5.7		1.2	0.18	mg/Kg	5	☼	6010C	Total/NA
Chromium	29.6		0.61	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	227	B	6.1	1.5	mg/Kg	5	☼	6010C	Total/NA
Selenium	3.0	J	4.9	0.49	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.19		0.024	0.0097	mg/Kg	1	☼	7471B	Total/NA

## Client Sample ID: SB-6 (0-3)

## Lab Sample ID: 480-146502-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	1200		1100	160	ug/Kg	5	☼	8270D	Total/NA
Acenaphthylene	550	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Anthracene	2800		1100	280	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	7700		1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	7300		1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	8900		1100	180	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	5400		1100	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	4600		1100	140	ug/Kg	5	☼	8270D	Total/NA
Chrysene	7300		1100	250	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	17000		1100	120	ug/Kg	5	☼	8270D	Total/NA
Fluorene	1200		1100	130	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	4600		1100	140	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	700	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	12000		1100	160	ug/Kg	5	☼	8270D	Total/NA
Pyrene	14000		1100	130	ug/Kg	5	☼	8270D	Total/NA
Arsenic	53.2		2.7	0.53	mg/Kg	1	☼	6010C	Total/NA
Barium	196	B	0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.68		0.27	0.040	mg/Kg	1	☼	6010C	Total/NA
Chromium	26.1		0.67	0.27	mg/Kg	1	☼	6010C	Total/NA
Lead	65.6	B	1.3	0.32	mg/Kg	1	☼	6010C	Total/NA
Selenium	2.0	J	5.3	0.53	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.062		0.027	0.011	mg/Kg	1	☼	7471B	Total/NA

## Client Sample ID: SB-8 (2-4)

## Lab Sample ID: 480-146502-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	61	J	260	33	ug/Kg	1	☼	8270D	Total/NA
Anthracene	96	J	260	63	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	260		260	26	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	240	J	260	38	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	290		260	41	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	160	J	260	27	ug/Kg	1	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo



## Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

### Client Sample ID: SB-8 (2-4) (Continued)

### Lab Sample ID: 480-146502-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[k]fluoranthene	150	J	260	33	ug/Kg	1	☼	8270D	Total/NA
Chrysene	300		260	57	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	410		260	27	ug/Kg	1	☼	8270D	Total/NA
Fluorene	55	J	260	30	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	150	J	260	32	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	310		260	38	ug/Kg	1	☼	8270D	Total/NA
Pyrene	330		260	30	ug/Kg	1	☼	8270D	Total/NA
Arsenic	40.9		3.1	0.62	mg/Kg	1	☼	6010C	Total/NA
Barium	227	B	0.78	0.17	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.13	J	0.31	0.047	mg/Kg	1	☼	6010C	Total/NA
Chromium	5.8		0.78	0.31	mg/Kg	1	☼	6010C	Total/NA
Lead	5.1	B	1.6	0.37	mg/Kg	1	☼	6010C	Total/NA
Selenium	3.8	J	6.2	0.62	mg/Kg	1	☼	6010C	Total/NA
Cyanide, Total	26.4		1.5	0.74	mg/Kg	1	☼	9012B	Total/NA

### Client Sample ID: SB-11 (2.5-3.5)

### Lab Sample ID: 480-146502-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	6.6	vs *	6.6	1.3	ug/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	29	vs *	6.6	0.42	ug/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	13	vs *	6.6	0.53	ug/Kg	1	☼	8260C	Total/NA
Acetone	11	J vs	33	5.5	ug/Kg	1	☼	8260C	Total/NA
Benzene	1.3	J vs	6.6	0.32	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	4.8	J vs	6.6	0.45	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	46	vs *	6.6	0.99	ug/Kg	1	☼	8260C	Total/NA
m,p-Xylene	3.7	J vs	13	1.1	ug/Kg	1	☼	8260C	Total/NA
n-Butylbenzene	6.1	J vs *	6.6	0.57	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	24	vs *	6.6	0.53	ug/Kg	1	☼	8260C	Total/NA
o-Xylene	1.4	J vs	6.6	0.86	ug/Kg	1	☼	8260C	Total/NA
sec-Butylbenzene	15	vs *	6.6	0.57	ug/Kg	1	☼	8260C	Total/NA
Toluene	3.1	J vs	6.6	0.50	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	5.1	J vs	13	1.1	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	1400	J	4600	460	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	1400	J	4600	670	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	1900	J	4600	730	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	860	J	4600	590	ug/Kg	20	☼	8270D	Total/NA
Chrysene	2700	J	4600	1000	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	2800	J	4600	490	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	2100	J	4600	670	ug/Kg	20	☼	8270D	Total/NA
Pyrene	2700	J	4600	540	ug/Kg	20	☼	8270D	Total/NA
Arsenic	52.5		2.7	0.55	mg/Kg	1	☼	6010C	Total/NA
Barium	146	B	0.69	0.15	mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.6		0.27	0.041	mg/Kg	1	☼	6010C	Total/NA
Chromium	37.4		0.69	0.27	mg/Kg	1	☼	6010C	Total/NA
Lead	158	B	1.4	0.33	mg/Kg	1	☼	6010C	Total/NA
Selenium	3.2	J	5.5	0.55	mg/Kg	1	☼	6010C	Total/NA
Mercury	1.7		0.028	0.011	mg/Kg	1	☼	7471B	Total/NA

### Client Sample ID: SB-13 (2-4)

### Lab Sample ID: 480-146502-7

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Client Sample ID: SB-13 (2-4) (Continued)

## Lab Sample ID: 480-146502-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Anthracene	1500	J	4800	1200	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]anthracene	2800	J	4800	480	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	2300	J	4800	700	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	2500	J	4800	760	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1600	J	4800	500	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	1900	J	4800	620	ug/Kg	20	☼	8270D	Total/NA
Chrysene	2400	J	4800	1100	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	5500		4800	500	ug/Kg	20	☼	8270D	Total/NA
Fluorene	830	J	4800	560	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1300	J	4800	590	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	5100		4800	700	ug/Kg	20	☼	8270D	Total/NA
Pyrene	4600	J	4800	560	ug/Kg	20	☼	8270D	Total/NA
Arsenic	12.1		2.8	0.57	mg/Kg	1	☼	6010C	Total/NA
Barium	126	B	0.71	0.16	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.65		0.28	0.042	mg/Kg	1	☼	6010C	Total/NA
Chromium	20.9		0.71	0.28	mg/Kg	1	☼	6010C	Total/NA
Lead	64.7	B	1.4	0.34	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.6	J	5.7	0.57	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.038		0.028	0.011	mg/Kg	1	☼	7471B	Total/NA

## Client Sample ID: SB-9 (2-4)

## Lab Sample ID: 480-146502-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	94	J	250	25	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	69	J	250	36	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	110	J	250	39	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	82	J	250	26	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	38	J	250	32	ug/Kg	1	☼	8270D	Total/NA
Chrysene	210	J	250	55	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	57	J	250	30	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	150	J	250	32	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	190	J	250	36	ug/Kg	1	☼	8270D	Total/NA
Pyrene	230	J	250	29	ug/Kg	1	☼	8270D	Total/NA
Arsenic	7.8		2.8	0.57	mg/Kg	1	☼	6010C	Total/NA
Barium	161	B	0.71	0.16	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.56		0.28	0.043	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.4		0.71	0.28	mg/Kg	1	☼	6010C	Total/NA
Lead	30.9	B	1.4	0.34	mg/Kg	1	☼	6010C	Total/NA
Selenium	3.1	J	5.7	0.57	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.025	J	0.029	0.012	mg/Kg	1	☼	7471B	Total/NA

## Client Sample ID: SB-14 (2-4)

## Lab Sample ID: 480-146502-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	4400	J	39000	3900	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	8000	J	39000	4100	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	6600	J	39000	5700	ug/Kg	20	☼	8270D	Total/NA
Pyrene	6300	J	39000	4600	ug/Kg	20	☼	8270D	Total/NA
Arsenic	11.2		2.3	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	195	B	0.58	0.13	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

## Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

### Client Sample ID: SB-14 (2-4) (Continued)

### Lab Sample ID: 480-146502-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cadmium	0.63	J	1.2	0.17	mg/Kg	5	☼	6010C	Total/NA
Chromium	32.8		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Lead	270	B	5.8	1.4	mg/Kg	5	☼	6010C	Total/NA
Mercury	0.12		0.023	0.0093	mg/Kg	1	☼	7471B	Total/NA

### Client Sample ID: SB-15 (3-4)

### Lab Sample ID: 480-146502-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	830	J	2800	770	ug/Kg	20	☼	8260C	Total/NA
Cyclohexane	1500	J	2800	610	ug/Kg	20	☼	8260C	Total/NA
m,p-Xylene	2600	J	5500	1500	ug/Kg	20	☼	8260C	Total/NA
Xylenes, Total	2600	J	5500	1500	ug/Kg	20	☼	8260C	Total/NA
Benzo[a]anthracene	190	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	340	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	230	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Pyrene	290	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Arsenic	39.2		2.5	0.51	mg/Kg	1	☼	6010C	Total/NA
Barium	158	B	0.64	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.93	J	1.3	0.19	mg/Kg	5	☼	6010C	Total/NA
Chromium	31.7		0.64	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	63.0	B	6.4	1.5	mg/Kg	5	☼	6010C	Total/NA
Selenium	2.0	J	5.1	0.51	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.11		0.024	0.0098	mg/Kg	1	☼	7471B	Total/NA

### Client Sample ID: SB-15 (4-6)

### Lab Sample ID: 480-146502-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	7500		1400	390	ug/Kg	10	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	3300		1400	420	ug/Kg	10	☼	8260C	Total/NA
Cyclohexane	8500		1400	310	ug/Kg	10	☼	8260C	Total/NA
Ethylbenzene	3800		1400	410	ug/Kg	10	☼	8260C	Total/NA
Isopropylbenzene	2400		1400	210	ug/Kg	10	☼	8260C	Total/NA
Methyl acetate	1900	J	7000	670	ug/Kg	10	☼	8260C	Total/NA
Methylcyclohexane	53000		1400	650	ug/Kg	10	☼	8260C	Total/NA
m,p-Xylene	28000		2800	770	ug/Kg	10	☼	8260C	Total/NA
n-Butylbenzene	410	J	1400	410	ug/Kg	10	☼	8260C	Total/NA
N-Propylbenzene	2900		1400	370	ug/Kg	10	☼	8260C	Total/NA
Xylenes, Total	28000		2800	770	ug/Kg	10	☼	8260C	Total/NA

### Client Sample ID: SB-15 (9-12)

### Lab Sample ID: 480-146502-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	120	vs	52	10	ug/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	66	vs	52	3.4	ug/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	15	J vs	52	4.2	ug/Kg	1	☼	8260C	Total/NA
Acetone	49	J vs	260	44	ug/Kg	1	☼	8260C	Total/NA
Cyclohexane	210	vs	52	7.3	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	8.9	J vs	52	3.6	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	72	vs	52	7.9	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	1100	vs	52	7.9	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Client Sample ID: SB-15 (9-12) (Continued)

## Lab Sample ID: 480-146502-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
m,p-Xylene	85	J vs	100	8.8	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	94	vs	52	4.2	ug/Kg	1	☼	8260C	Total/NA
sec-Butylbenzene	22	J vs	52	4.5	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	85	J vs	100	8.8	ug/Kg	1	☼	8260C	Total/NA

## Client Sample ID: SB-17 (2-4)

## Lab Sample ID: 480-146502-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	320	J	1900	200	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	1800	J	1900	280	ug/Kg	1	☼	8270D	Total/NA
Pyrene	2700		1900	220	ug/Kg	1	☼	8270D	Total/NA
Arsenic	5.4		2.2	0.44	mg/Kg	1	☼	6010C	Total/NA
Barium	353	B	0.55	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.71		0.22	0.033	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.8		0.55	0.22	mg/Kg	1	☼	6010C	Total/NA
Lead	49.9	B	1.1	0.26	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.8	J	4.4	0.44	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.017	J	0.023	0.0094	mg/Kg	1	☼	7471B	Total/NA

## Client Sample ID: SB-17 (4-6)

## Lab Sample ID: 480-146502-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	11	J vs	25	4.9	ug/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	4.6	J vs	25	1.6	ug/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	3.5	J vs	25	2.0	ug/Kg	1	☼	8260C	Total/NA
Acetone	22	J vs	130	21	ug/Kg	1	☼	8260C	Total/NA
Cyclohexane	5.4	J vs	25	3.5	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	9.5	J vs	25	1.7	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	26	vs	25	3.9	ug/Kg	1	☼	8260C	Total/NA
m,p-Xylene	39	J vs	51	4.3	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	2.9	J vs	25	2.0	ug/Kg	1	☼	8260C	Total/NA
o-Xylene	17	J vs	25	3.3	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	56	vs	51	4.3	ug/Kg	1	☼	8260C	Total/NA

## Client Sample ID: SB-19 (3-4)

## Lab Sample ID: 480-146502-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	2400	J	16000	1700	ug/Kg	5	☼	8270D	Total/NA
Arsenic	12.2		2.7	0.54	mg/Kg	1	☼	6010C	Total/NA
Barium	80.0	B	0.67	0.15	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.30	J	1.3	0.20	mg/Kg	5	☼	6010C	Total/NA
Chromium	37.1		0.67	0.27	mg/Kg	1	☼	6010C	Total/NA
Lead	73.4	B	6.7	1.6	mg/Kg	5	☼	6010C	Total/NA
Selenium	1.3	J	5.4	0.54	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.036		0.026	0.011	mg/Kg	1	☼	7471B	Total/NA

## Client Sample ID: SB-19 (4-6)

## Lab Sample ID: 480-146502-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	660	J	1300	370	ug/Kg	10	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

# Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Client Sample ID: SB-19 (4-6) (Continued)

## Lab Sample ID: 480-146502-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cyclohexane	5300		1300	290	ug/Kg	10	☼	8260C	Total/NA
Isopropylbenzene	970	J	1300	200	ug/Kg	10	☼	8260C	Total/NA
Methylcyclohexane	36000		1300	620	ug/Kg	10	☼	8260C	Total/NA
N-Propylbenzene	930	J	1300	350	ug/Kg	10	☼	8260C	Total/NA

## Client Sample ID: SB-19 (10-11)

## Lab Sample ID: 480-146502-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Isopropylbenzene	190	J	1100	160	ug/Kg	8	☼	8260C	Total/NA
Methylcyclohexane	15000		1100	500	ug/Kg	8	☼	8260C	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 - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-1 (3-4)**

**Lab Sample ID: 480-146502-1**

Date Collected: 12/05/18 09:40

Matrix: Solid

Date Received: 12/07/18 17:15

Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Acenaphthene</b>	<b>140</b>	<b>J</b>	900	130	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
Acenaphthylene	ND		900	120	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Anthracene</b>	<b>400</b>	<b>J</b>	900	220	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Benzo[a]anthracene</b>	<b>700</b>	<b>J</b>	900	90	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Benzo[a]pyrene</b>	<b>620</b>	<b>J</b>	900	130	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Benzo[b]fluoranthene</b>	<b>1000</b>	<b>K</b>	900	140	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Benzo[g,h,i]perylene</b>	<b>320</b>	<b>J</b>	900	95	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
Benzo[k]fluoranthene	ND		900	120	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Chrysene</b>	<b>910</b>		900	200	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
Dibenz(a,h)anthracene	ND		900	160	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Fluoranthene</b>	<b>1600</b>		900	95	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Fluorene</b>	<b>280</b>	<b>J</b>	900	110	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Indeno[1,2,3-cd]pyrene</b>	<b>320</b>	<b>J</b>	900	110	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
Naphthalene	ND		900	120	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Phenanthrene</b>	<b>1600</b>		900	130	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Pyrene</b>	<b>1200</b>		900	110	ug/Kg	☼	12/11/18 15:09	12/13/18 17:07	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	96		60 - 120				12/11/18 15:09	12/13/18 17:07	5
Nitrobenzene-d5 (Surr)	91		53 - 120				12/11/18 15:09	12/13/18 17:07	5
p-Terphenyl-d14 (Surr)	97		65 - 121				12/11/18 15:09	12/13/18 17:07	5

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>10.2</b>		2.1	0.43	mg/Kg	☼	12/13/18 09:13	12/14/18 00:23	1
<b>Barium</b>	<b>106</b>	<b>B</b>	0.53	0.12	mg/Kg	☼	12/13/18 09:13	12/14/18 00:23	1
<b>Cadmium</b>	<b>0.31</b>		0.21	0.032	mg/Kg	☼	12/13/18 09:13	12/14/18 00:23	1
<b>Chromium</b>	<b>8.8</b>		0.53	0.21	mg/Kg	☼	12/13/18 09:13	12/14/18 00:23	1
<b>Lead</b>	<b>1180</b>	<b>B</b>	1.1	0.26	mg/Kg	☼	12/13/18 09:13	12/14/18 00:23	1
<b>Selenium</b>	<b>1.0</b>	<b>J</b>	4.3	0.43	mg/Kg	☼	12/13/18 09:13	12/14/18 00:23	1
Silver	ND		0.64	0.21	mg/Kg	☼	12/13/18 09:13	12/14/18 00:23	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.12</b>		0.021	0.0084	mg/Kg	☼	12/12/18 12:36	12/12/18 14:03	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-2 (3-5)**

**Date Collected: 12/05/18 10:00**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-2**

**Matrix: Solid**

**Percent Solids: 76.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4400	650	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
Acenaphthylene	ND		4400	570	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
Anthracene	ND		4400	1100	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Benzo[a]anthracene</b>	<b>2700</b>	<b>J</b>	4400	440	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Benzo[a]pyrene</b>	<b>1400</b>	<b>J</b>	4400	650	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Benzo[b]fluoranthene</b>	<b>1900</b>	<b>J</b>	4400	700	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Benzo[g,h,i]perylene</b>	<b>940</b>	<b>J</b>	4400	470	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Benzo[k]fluoranthene</b>	<b>580</b>	<b>J</b>	4400	570	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
Chrysene	ND		4400	980	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
Dibenz(a,h)anthracene	ND		4400	780	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Fluoranthene</b>	<b>3000</b>	<b>J</b>	4400	470	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
Fluorene	ND		4400	520	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Indeno[1,2,3-cd]pyrene</b>	<b>850</b>	<b>J</b>	4400	540	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
Naphthalene	ND		4400	570	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Phenanthrene</b>	<b>2300</b>	<b>J</b>	4400	650	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Pyrene</b>	<b>2900</b>	<b>J</b>	4400	520	ug/Kg	☼	12/11/18 15:09	12/13/18 17:32	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	86		60 - 120				12/11/18 15:09	12/13/18 17:32	20
Nitrobenzene-d5 (Surr)	79		53 - 120				12/11/18 15:09	12/13/18 17:32	20
p-Terphenyl-d14 (Surr)	101		65 - 121				12/11/18 15:09	12/13/18 17:32	20

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>139</b>		2.5	0.51	mg/Kg	☼	12/13/18 09:13	12/14/18 00:38	1
<b>Barium</b>	<b>950</b>	<b>B</b>	0.63	0.14	mg/Kg	☼	12/13/18 09:13	12/14/18 00:38	1
<b>Cadmium</b>	<b>7.9</b>		1.3	0.19	mg/Kg	☼	12/13/18 09:13	12/14/18 10:33	5
<b>Chromium</b>	<b>263</b>		0.63	0.25	mg/Kg	☼	12/13/18 09:13	12/14/18 00:38	1
<b>Lead</b>	<b>1340</b>	<b>B</b>	6.3	1.5	mg/Kg	☼	12/13/18 09:13	12/14/18 10:33	5
<b>Selenium</b>	<b>3.2</b>	<b>J</b>	5.1	0.51	mg/Kg	☼	12/13/18 09:13	12/14/18 00:38	1
<b>Silver</b>	<b>2.1</b>	<b>J</b>	3.8	1.3	mg/Kg	☼	12/13/18 09:13	12/14/18 10:33	5

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>23.6</b>		6.1	2.5	mg/Kg	☼	12/12/18 12:36	12/12/18 14:41	250

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-5 (1-3)**

**Lab Sample ID: 480-146502-3**

Date Collected: 12/05/18 11:00

Matrix: Solid

Date Received: 12/07/18 17:15

Percent Solids: 79.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Acenaphthylene</b>	<b>980</b>	<b>J</b>	1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Anthracene</b>	<b>760</b>	<b>J</b>	1100	260	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Benzo[a]anthracene</b>	<b>4900</b>		1100	110	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Benzo[a]pyrene</b>	<b>5600</b>		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Benzo[b]fluoranthene</b>	<b>6600</b>		1100	170	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Benzo[g,h,i]perylene</b>	<b>3900</b>		1100	110	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Benzo[k]fluoranthene</b>	<b>3900</b>		1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Chrysene</b>	<b>4900</b>		1100	240	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Fluoranthene</b>	<b>9200</b>		1100	110	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Fluorene</b>	<b>190</b>	<b>J</b>	1100	130	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Indeno[1,2,3-cd]pyrene</b>	<b>3500</b>		1100	130	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
Naphthalene	ND		1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Phenanthrene</b>	<b>2100</b>		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Pyrene</b>	<b>8700</b>		1100	130	ug/Kg	☼	12/11/18 15:09	12/13/18 17:58	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	84		60 - 120				12/11/18 15:09	12/13/18 17:58	5
Nitrobenzene-d5 (Surr)	82		53 - 120				12/11/18 15:09	12/13/18 17:58	5
p-Terphenyl-d14 (Surr)	96		65 - 121				12/11/18 15:09	12/13/18 17:58	5

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>60.9</b>		2.5	0.49	mg/Kg	☼	12/13/18 09:13	12/14/18 00:42	1
<b>Barium</b>	<b>292</b>	<b>B</b>	0.61	0.14	mg/Kg	☼	12/13/18 09:13	12/14/18 00:42	1
<b>Cadmium</b>	<b>5.7</b>		1.2	0.18	mg/Kg	☼	12/13/18 09:13	12/14/18 14:57	5
<b>Chromium</b>	<b>29.6</b>		0.61	0.25	mg/Kg	☼	12/13/18 09:13	12/14/18 00:42	1
<b>Lead</b>	<b>227</b>	<b>B</b>	6.1	1.5	mg/Kg	☼	12/13/18 09:13	12/14/18 14:57	5
<b>Selenium</b>	<b>3.0</b>	<b>J</b>	4.9	0.49	mg/Kg	☼	12/13/18 09:13	12/14/18 00:42	1
Silver	ND		3.7	1.2	mg/Kg	☼	12/13/18 09:13	12/14/18 14:57	5

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.19</b>		0.024	0.0097	mg/Kg	☼	12/12/18 12:36	12/12/18 14:19	1



# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-6 (0-3)**

**Lab Sample ID: 480-146502-4**

Date Collected: 12/05/18 11:40

Matrix: Solid

Date Received: 12/07/18 17:15

Percent Solids: 75.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	1200		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Acenaphthylene	550	J	1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Anthracene	2800		1100	280	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Benzo[a]anthracene	7700		1100	110	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Benzo[a]pyrene	7300		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Benzo[b]fluoranthene	8900		1100	180	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Benzo[g,h,i]perylene	5400		1100	120	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Benzo[k]fluoranthene	4600		1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Chrysene	7300		1100	250	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Dibenz(a,h)anthracene	ND		1100	200	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Fluoranthene	17000		1100	120	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Fluorene	1200		1100	130	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Indeno[1,2,3-cd]pyrene	4600		1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Naphthalene	700	J	1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Phenanthrene	12000		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
Pyrene	14000		1100	130	ug/Kg	☼	12/11/18 15:09	12/13/18 18:24	5
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	80		60 - 120				12/11/18 15:09	12/13/18 18:24	5
Nitrobenzene-d5 (Surr)	73		53 - 120				12/11/18 15:09	12/13/18 18:24	5
p-Terphenyl-d14 (Surr)	86		65 - 121				12/11/18 15:09	12/13/18 18:24	5

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	53.2		2.7	0.53	mg/Kg	☼	12/13/18 09:13	12/14/18 00:46	1
Barium	196	B	0.67	0.15	mg/Kg	☼	12/13/18 09:13	12/14/18 00:46	1
Cadmium	0.68		0.27	0.040	mg/Kg	☼	12/13/18 09:13	12/14/18 00:46	1
Chromium	26.1		0.67	0.27	mg/Kg	☼	12/13/18 09:13	12/14/18 00:46	1
Lead	65.6	B	1.3	0.32	mg/Kg	☼	12/13/18 09:13	12/14/18 00:46	1
Selenium	2.0	J	5.3	0.53	mg/Kg	☼	12/13/18 09:13	12/14/18 00:46	1
Silver	ND		0.80	0.27	mg/Kg	☼	12/13/18 09:13	12/14/18 00:46	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.062		0.027	0.011	mg/Kg	☼	12/12/18 12:36	12/12/18 14:20	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-8 (2-4)**

**Lab Sample ID: 480-146502-5**

Date Collected: 12/05/18 12:45

Matrix: Solid

Date Received: 12/07/18 17:15

Percent Solids: 65.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		260	38	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Acenaphthylene</b>	<b>61</b>	<b>J</b>	260	33	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Anthracene</b>	<b>96</b>	<b>J</b>	260	63	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Benzo[a]anthracene</b>	<b>260</b>		260	26	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Benzo[a]pyrene</b>	<b>240</b>	<b>J</b>	260	38	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Benzo[b]fluoranthene</b>	<b>290</b>		260	41	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Benzo[g,h,i]perylene</b>	<b>160</b>	<b>J</b>	260	27	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Benzo[k]fluoranthene</b>	<b>150</b>	<b>J</b>	260	33	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Chrysene</b>	<b>300</b>		260	57	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
Dibenz(a,h)anthracene	ND		260	45	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Fluoranthene</b>	<b>410</b>		260	27	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Fluorene</b>	<b>55</b>	<b>J</b>	260	30	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>150</b>	<b>J</b>	260	32	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
Naphthalene	ND		260	33	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Phenanthrene</b>	<b>310</b>		260	38	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Pyrene</b>	<b>330</b>		260	30	ug/Kg	☼	12/11/18 15:09	12/13/18 18:50	1
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	102		60 - 120				12/11/18 15:09	12/13/18 18:50	1
Nitrobenzene-d5 (Surr)	105		53 - 120				12/11/18 15:09	12/13/18 18:50	1
p-Terphenyl-d14 (Surr)	107		65 - 121				12/11/18 15:09	12/13/18 18:50	1

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>40.9</b>		3.1	0.62	mg/Kg	☼	12/13/18 09:13	12/14/18 00:50	1
<b>Barium</b>	<b>227</b>	<b>B</b>	0.78	0.17	mg/Kg	☼	12/13/18 09:13	12/14/18 00:50	1
<b>Cadmium</b>	<b>0.13</b>	<b>J</b>	0.31	0.047	mg/Kg	☼	12/13/18 09:13	12/14/18 00:50	1
<b>Chromium</b>	<b>5.8</b>		0.78	0.31	mg/Kg	☼	12/13/18 09:13	12/14/18 00:50	1
<b>Lead</b>	<b>5.1</b>	<b>B</b>	1.6	0.37	mg/Kg	☼	12/13/18 09:13	12/14/18 00:50	1
<b>Selenium</b>	<b>3.8</b>	<b>J</b>	6.2	0.62	mg/Kg	☼	12/13/18 09:13	12/14/18 00:50	1
Silver	ND		0.94	0.31	mg/Kg	☼	12/13/18 09:13	12/14/18 00:50	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.031	0.013	mg/Kg	☼	12/12/18 12:36	12/12/18 14:22	1

## General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Cyanide, Total</b>	<b>26.4</b>		1.5	0.74	mg/Kg	☼	12/14/18 11:30	12/14/18 14:47	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-11 (2.5-3.5)**

**Lab Sample ID: 480-146502-6**

**Date Collected: 12/05/18 15:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 73.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.6	0.48	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,1,2,2-Tetrachloroethane	ND	vs *	6.6	1.1	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.6	1.5	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,1,2-Trichloroethane	ND	vs	6.6	0.85	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,1-Dichloroethane	ND	vs	6.6	0.80	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,1-Dichloroethene	ND	vs	6.6	0.80	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,2,4-Trichlorobenzene	ND	vs *	6.6	0.40	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>1,2,4-Trimethylbenzene</b>	<b>6.6</b>	<b>vs *</b>	6.6	1.3	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,2-Dibromo-3-Chloropropane	ND	vs *	6.6	3.3	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,2-Dichlorobenzene	ND	vs *	6.6	0.51	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,2-Dichloroethane	ND	vs	6.6	0.33	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,2-Dichloropropane	ND	vs	6.6	3.3	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>1,3,5-Trimethylbenzene</b>	<b>29</b>	<b>vs *</b>	6.6	0.42	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,3-Dichlorobenzene	ND	vs *	6.6	0.34	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,4-Dichlorobenzene	ND	vs *	6.6	0.92	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
2-Butanone (MEK)	ND	vs	33	2.4	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
2-Hexanone	ND	vs	33	3.3	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>4-Isopropyltoluene</b>	<b>13</b>	<b>vs *</b>	6.6	0.53	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
4-Methyl-2-pentanone (MIBK)	ND	vs	33	2.2	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>Acetone</b>	<b>11</b>	<b>J vs</b>	33	5.5	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>Benzene</b>	<b>1.3</b>	<b>J vs</b>	6.6	0.32	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Bromoform	ND	vs	6.6	3.3	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Bromomethane	ND	vs	6.6	0.59	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Carbon disulfide	ND	vs	6.6	3.3	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Carbon tetrachloride	ND	vs	6.6	0.64	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Chlorobenzene	ND	vs	6.6	0.87	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Dibromochloromethane	ND	vs	6.6	0.84	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Chloroethane	ND	vs	6.6	1.5	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Chloroform	ND	vs	6.6	0.41	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Chloromethane	ND	vs	6.6	0.40	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
cis-1,2-Dichloroethene	ND	vs	6.6	0.84	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Cyclohexane	ND	vs	6.6	0.92	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Bromodichloromethane	ND	vs	6.6	0.88	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Dichlorodifluoromethane	ND	vs	6.6	0.54	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>Ethylbenzene</b>	<b>4.8</b>	<b>J vs</b>	6.6	0.45	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
1,2-Dibromoethane	ND	vs	6.6	0.84	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>Isopropylbenzene</b>	<b>46</b>	<b>vs *</b>	6.6	0.99	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Methyl acetate	ND	vs	33	4.0	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Methyl tert-butyl ether	ND	vs	6.6	0.65	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Methylcyclohexane	ND	vs	6.6	1.0	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Methylene Chloride	ND	vs	6.6	3.0	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>m,p-Xylene</b>	<b>3.7</b>	<b>J vs</b>	13	1.1	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>n-Butylbenzene</b>	<b>6.1</b>	<b>J vs *</b>	6.6	0.57	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>N-Propylbenzene</b>	<b>24</b>	<b>vs *</b>	6.6	0.53	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>o-Xylene</b>	<b>1.4</b>	<b>J vs</b>	6.6	0.86	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>sec-Butylbenzene</b>	<b>15</b>	<b>vs *</b>	6.6	0.57	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Tetrachloroethene	ND	vs	6.6	0.88	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>Toluene</b>	<b>3.1</b>	<b>J vs</b>	6.6	0.50	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
trans-1,2-Dichloroethene	ND	vs	6.6	0.68	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-11 (2.5-3.5)**

**Lab Sample ID: 480-146502-6**

**Date Collected: 12/05/18 15:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 73.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	vs	6.6	2.9	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Trichloroethene	ND	vs	6.6	1.4	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Trichlorofluoromethane	ND	vs	6.6	0.62	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Vinyl chloride	ND	vs	6.6	0.80	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
<b>Xylenes, Total</b>	<b>5.1</b>	<b>J vs</b>	13	1.1	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
cis-1,3-Dichloropropene	ND	vs	6.6	0.95	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Styrene	ND	vs	6.6	0.33	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
tert-Butylbenzene	ND	vs *	6.6	0.68	ug/Kg	☼	12/10/18 10:25	12/10/18 14:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	236	X	64 - 126				12/10/18 10:25	12/10/18 14:15	1
4-Bromofluorobenzene (Surr)	88		72 - 126				12/10/18 10:25	12/10/18 14:15	1
Toluene-d8 (Surr)	127	X	71 - 125				12/10/18 10:25	12/10/18 14:15	1
Dibromofluoromethane (Surr)	106		60 - 140				12/10/18 10:25	12/10/18 14:15	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4600	670	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Acenaphthylene	ND		4600	590	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Anthracene	ND		4600	1100	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Benzo[a]anthracene</b>	<b>1400</b>	<b>J</b>	4600	460	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Benzo[a]pyrene</b>	<b>1400</b>	<b>J</b>	4600	670	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Benzo[b]fluoranthene</b>	<b>1900</b>	<b>J</b>	4600	730	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Benzo[g,h,i]perylene	ND		4600	490	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Benzo[k]fluoranthene</b>	<b>860</b>	<b>J</b>	4600	590	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Chrysene</b>	<b>2700</b>	<b>J</b>	4600	1000	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Dibenz(a,h)anthracene	ND		4600	810	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Fluoranthene</b>	<b>2800</b>	<b>J</b>	4600	490	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Fluorene	ND		4600	540	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Indeno[1,2,3-cd]pyrene	ND		4600	570	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Naphthalene	ND		4600	590	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Phenanthrene</b>	<b>2100</b>	<b>J</b>	4600	670	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
<b>Pyrene</b>	<b>2700</b>	<b>J</b>	4600	540	ug/Kg	☼	12/11/18 15:09	12/13/18 19:15	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	78		60 - 120				12/11/18 15:09	12/13/18 19:15	20
Nitrobenzene-d5 (Surr)	67		53 - 120				12/11/18 15:09	12/13/18 19:15	20
p-Terphenyl-d14 (Surr)	100		65 - 121				12/11/18 15:09	12/13/18 19:15	20

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>52.5</b>		2.7	0.55	mg/Kg	☼	12/13/18 09:13	12/14/18 00:54	1
<b>Barium</b>	<b>146</b>	<b>B</b>	0.69	0.15	mg/Kg	☼	12/13/18 09:13	12/14/18 00:54	1
<b>Cadmium</b>	<b>1.6</b>		0.27	0.041	mg/Kg	☼	12/13/18 09:13	12/14/18 00:54	1
<b>Chromium</b>	<b>37.4</b>		0.69	0.27	mg/Kg	☼	12/13/18 09:13	12/14/18 00:54	1
<b>Lead</b>	<b>158</b>	<b>B</b>	1.4	0.33	mg/Kg	☼	12/13/18 09:13	12/14/18 00:54	1
<b>Selenium</b>	<b>3.2</b>	<b>J</b>	5.5	0.55	mg/Kg	☼	12/13/18 09:13	12/14/18 00:54	1
Silver	ND		0.82	0.27	mg/Kg	☼	12/13/18 09:13	12/14/18 00:54	1

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-11 (2.5-3.5)**

**Lab Sample ID: 480-146502-6**

**Date Collected: 12/05/18 15:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 73.7**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	1.7		0.028	0.011	mg/Kg	☼	12/12/18 12:36	12/12/18 14:26	1

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

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-13 (2-4)**

**Lab Sample ID: 480-146502-7**

**Date Collected: 12/06/18 10:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 71.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		320	89	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,1,2,2-Tetrachloroethane	ND		320	52	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		320	160	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,1,2-Trichloroethane	ND		320	68	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,1-Dichloroethane	ND		320	100	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,1-Dichloroethene	ND		320	110	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,2,4-Trichlorobenzene	ND		320	120	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,2,4-Trimethylbenzene	ND		320	90	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,2-Dibromo-3-Chloropropane	ND		320	160	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,2-Dichlorobenzene	ND		320	82	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,2-Dichloroethane	ND		320	130	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,2-Dichloropropane	ND		320	52	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,3,5-Trimethylbenzene	ND		320	97	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,3-Dichlorobenzene	ND		320	86	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,4-Dichlorobenzene	ND		320	45	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
2-Butanone (MEK)	ND		1600	960	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
2-Hexanone	ND		1600	660	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
4-Isopropyltoluene	ND		320	110	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
4-Methyl-2-pentanone (MIBK)	ND		1600	100	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Acetone	ND		1600	1300	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Benzene	ND		320	61	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Bromoform	ND		320	160	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Bromomethane	ND		320	71	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Carbon disulfide	ND		320	150	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Carbon tetrachloride	ND		320	82	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Chlorobenzene	ND		320	43	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Dibromochloromethane	ND		320	160	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Chloroethane	ND		320	67	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Chloroform	ND		320	220	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Chloromethane	ND		320	77	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
cis-1,2-Dichloroethene	ND		320	89	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Cyclohexane	ND		320	72	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Bromodichloromethane	ND		320	65	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Dichlorodifluoromethane	ND		320	140	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Ethylbenzene	ND		320	94	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
1,2-Dibromoethane	ND		320	56	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Isopropylbenzene	ND		320	48	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Methyl acetate	ND		1600	150	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Methyl tert-butyl ether	ND		320	120	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Methylcyclohexane	ND		320	150	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Methylene Chloride	ND		320	64	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
m,p-Xylene	ND		650	180	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
n-Butylbenzene	ND		320	94	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
N-Propylbenzene	ND		320	85	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
o-Xylene	ND		320	42	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
sec-Butylbenzene	ND		320	120	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Tetrachloroethene	ND		320	43	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Toluene	ND		320	86	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
trans-1,2-Dichloroethene	ND		320	76	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-13 (2-4)**

**Lab Sample ID: 480-146502-7**

**Date Collected: 12/06/18 10:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 71.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		320	32	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Trichloroethene	ND		320	90	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Trichlorofluoromethane	ND		320	150	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Vinyl chloride	ND		320	110	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Xylenes, Total	ND		650	180	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
cis-1,3-Dichloropropene	ND		320	77	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Styrene	ND		320	78	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
tert-Butylbenzene	ND		320	90	ug/Kg	☼	12/11/18 14:21	12/14/18 00:46	2
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		53 - 146				12/11/18 14:21	12/14/18 00:46	2
4-Bromofluorobenzene (Surr)	112		49 - 148				12/11/18 14:21	12/14/18 00:46	2
Toluene-d8 (Surr)	91		50 - 149				12/11/18 14:21	12/14/18 00:46	2
Dibromofluoromethane (Surr)	86		60 - 140				12/11/18 14:21	12/14/18 00:46	2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4800	700	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
Acenaphthylene	ND		4800	620	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Anthracene</b>	<b>1500</b>	<b>J</b>	4800	1200	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Benzo[a]anthracene</b>	<b>2800</b>	<b>J</b>	4800	480	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Benzo[a]pyrene</b>	<b>2300</b>	<b>J</b>	4800	700	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Benzo[b]fluoranthene</b>	<b>2500</b>	<b>J</b>	4800	760	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Benzo[g,h,i]perylene</b>	<b>1600</b>	<b>J</b>	4800	500	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Benzo[k]fluoranthene</b>	<b>1900</b>	<b>J</b>	4800	620	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Chrysene</b>	<b>2400</b>	<b>J</b>	4800	1100	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
Dibenz(a,h)anthracene	ND		4800	840	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Fluoranthene</b>	<b>5500</b>		4800	500	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Fluorene</b>	<b>830</b>	<b>J</b>	4800	560	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Indeno[1,2,3-cd]pyrene</b>	<b>1300</b>	<b>J</b>	4800	590	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
Naphthalene	ND		4800	620	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Phenanthrene</b>	<b>5100</b>		4800	700	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
<b>Pyrene</b>	<b>4600</b>	<b>J</b>	4800	560	ug/Kg	☼	12/11/18 15:09	12/13/18 19:41	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	87		60 - 120				12/11/18 15:09	12/13/18 19:41	20
Nitrobenzene-d5 (Surr)	81		53 - 120				12/11/18 15:09	12/13/18 19:41	20
p-Terphenyl-d14 (Surr)	99		65 - 121				12/11/18 15:09	12/13/18 19:41	20

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>12.1</b>		2.8	0.57	mg/Kg	☼	12/13/18 09:13	12/14/18 00:58	1
<b>Barium</b>	<b>126</b>	<b>B</b>	0.71	0.16	mg/Kg	☼	12/13/18 09:13	12/14/18 00:58	1
<b>Cadmium</b>	<b>0.65</b>		0.28	0.042	mg/Kg	☼	12/13/18 09:13	12/14/18 00:58	1
<b>Chromium</b>	<b>20.9</b>		0.71	0.28	mg/Kg	☼	12/13/18 09:13	12/14/18 00:58	1
<b>Lead</b>	<b>64.7</b>	<b>B</b>	1.4	0.34	mg/Kg	☼	12/13/18 09:13	12/14/18 00:58	1
<b>Selenium</b>	<b>1.6</b>	<b>J</b>	5.7	0.57	mg/Kg	☼	12/13/18 09:13	12/14/18 00:58	1
Silver	ND		0.85	0.28	mg/Kg	☼	12/13/18 09:13	12/14/18 00:58	1

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-13 (2-4)**

**Date Collected: 12/06/18 10:00**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-7**

**Matrix: Solid**

**Percent Solids: 71.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.038		0.028	0.011	mg/Kg	☼	12/12/18 12:36	12/12/18 14:27	1

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



# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-9 (2-4)**

**Lab Sample ID: 480-146502-8**

**Date Collected: 12/05/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 67.8**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		250	36	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
Acenaphthylene	ND		250	32	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
Anthracene	ND		250	61	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Benzo[a]anthracene</b>	<b>94</b>	<b>J</b>	250	25	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Benzo[a]pyrene</b>	<b>69</b>	<b>J</b>	250	36	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Benzo[b]fluoranthene</b>	<b>110</b>	<b>J</b>	250	39	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Benzo[g,h,i]perylene</b>	<b>82</b>	<b>J</b>	250	26	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Benzo[k]fluoranthene</b>	<b>38</b>	<b>J</b>	250	32	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Chrysene</b>	<b>210</b>	<b>J</b>	250	55	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
Dibenz(a,h)anthracene	ND		250	43	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
Fluoranthene	ND		250	26	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
Fluorene	ND		250	29	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Indeno[1,2,3-cd]pyrene</b>	<b>57</b>	<b>J</b>	250	30	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Naphthalene</b>	<b>150</b>	<b>J</b>	250	32	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Phenanthrene</b>	<b>190</b>	<b>J</b>	250	36	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
<b>Pyrene</b>	<b>230</b>	<b>J</b>	250	29	ug/Kg	☼	12/11/18 15:09	12/13/18 20:07	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	96		60 - 120				12/11/18 15:09	12/13/18 20:07	1
Nitrobenzene-d5 (Surr)	99		53 - 120				12/11/18 15:09	12/13/18 20:07	1
p-Terphenyl-d14 (Surr)	108		65 - 121				12/11/18 15:09	12/13/18 20:07	1

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>7.8</b>		2.8	0.57	mg/Kg	☼	12/13/18 09:13	12/14/18 01:02	1
<b>Barium</b>	<b>161</b>	<b>B</b>	0.71	0.16	mg/Kg	☼	12/13/18 09:13	12/14/18 01:02	1
<b>Cadmium</b>	<b>0.56</b>		0.28	0.043	mg/Kg	☼	12/13/18 09:13	12/14/18 01:02	1
<b>Chromium</b>	<b>7.4</b>		0.71	0.28	mg/Kg	☼	12/13/18 09:13	12/14/18 01:02	1
<b>Lead</b>	<b>30.9</b>	<b>B</b>	1.4	0.34	mg/Kg	☼	12/13/18 09:13	12/14/18 01:02	1
<b>Selenium</b>	<b>3.1</b>	<b>J</b>	5.7	0.57	mg/Kg	☼	12/13/18 09:13	12/14/18 01:02	1
Silver	ND		0.85	0.28	mg/Kg	☼	12/13/18 09:13	12/14/18 01:02	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.025</b>	<b>J</b>	0.029	0.012	mg/Kg	☼	12/12/18 12:36	12/12/18 14:28	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-14 (2-4)**

**Lab Sample ID: 480-146502-9**

**Date Collected: 12/06/18 11:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 84.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		39000	5700	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Acenaphthylene	ND		39000	5100	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Anthracene	ND		39000	9700	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
<b>Benzo[a]anthracene</b>	<b>4400</b>	<b>J</b>	39000	3900	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Benzo[a]pyrene	ND		39000	5700	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Benzo[b]fluoranthene	ND		39000	6200	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Benzo[g,h,i]perylene	ND		39000	4100	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Benzo[k]fluoranthene	ND		39000	5100	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Chrysene	ND		39000	8700	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Dibenz(a,h)anthracene	ND		39000	6900	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
<b>Fluoranthene</b>	<b>8000</b>	<b>J</b>	39000	4100	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Fluorene	ND		39000	4600	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Indeno[1,2,3-cd]pyrene	ND		39000	4800	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
Naphthalene	ND		39000	5100	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
<b>Phenanthrene</b>	<b>6600</b>	<b>J</b>	39000	5700	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
<b>Pyrene</b>	<b>6300</b>	<b>J</b>	39000	4600	ug/Kg	☼	12/11/18 15:09	12/13/18 20:33	20
<b>Surrogate</b>	<b>%Recovery</b>	<b>Qualifier</b>	<b>Limits</b>				<b>Prepared</b>	<b>Analyzed</b>	<b>Dil Fac</b>
2-Fluorobiphenyl	0	X	60 - 120				12/11/18 15:09	12/13/18 20:33	20
Nitrobenzene-d5 (Surr)	0	X	53 - 120				12/11/18 15:09	12/13/18 20:33	20
p-Terphenyl-d14 (Surr)	0	X	65 - 121				12/11/18 15:09	12/13/18 20:33	20

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>11.2</b>		2.3	0.47	mg/Kg	☼	12/13/18 09:13	12/14/18 01:06	1
<b>Barium</b>	<b>195</b>	<b>B</b>	0.58	0.13	mg/Kg	☼	12/13/18 09:13	12/14/18 01:06	1
<b>Cadmium</b>	<b>0.63</b>	<b>J</b>	1.2	0.17	mg/Kg	☼	12/13/18 09:13	12/14/18 10:36	5
<b>Chromium</b>	<b>32.8</b>		0.58	0.23	mg/Kg	☼	12/13/18 09:13	12/14/18 01:06	1
<b>Lead</b>	<b>270</b>	<b>B</b>	5.8	1.4	mg/Kg	☼	12/13/18 09:13	12/14/18 10:36	5
Selenium	ND		4.7	0.47	mg/Kg	☼	12/13/18 09:13	12/14/18 01:06	1
Silver	ND		3.5	1.2	mg/Kg	☼	12/13/18 09:13	12/14/18 10:36	5

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.12</b>		0.023	0.0093	mg/Kg	☼	12/12/18 12:36	12/12/18 14:29	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (3-4)**

**Lab Sample ID: 480-146502-10**

**Date Collected: 12/06/18 11:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 79.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2800	760	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,1,2,2-Tetrachloroethane	ND		2800	450	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2800	1400	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,1,2-Trichloroethane	ND		2800	580	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,1-Dichloroethane	ND		2800	850	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,1-Dichloroethene	ND		2800	950	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,2,4-Trichlorobenzene	ND		2800	1000	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
<b>1,2,4-Trimethylbenzene</b>	<b>830</b>	<b>J</b>	2800	770	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,2-Dibromo-3-Chloropropane	ND		2800	1400	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,2-Dichlorobenzene	ND		2800	700	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,2-Dichloroethane	ND		2800	1100	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,2-Dichloropropane	ND		2800	450	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,3,5-Trimethylbenzene	ND		2800	830	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,3-Dichlorobenzene	ND		2800	740	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,4-Dichlorobenzene	ND		2800	390	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
2-Butanone (MEK)	ND		14000	8200	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
2-Hexanone	ND		14000	5600	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
4-Isopropyltoluene	ND		2800	930	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
4-Methyl-2-pentanone (MIBK)	ND		14000	880	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Acetone	ND		14000	11000	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Benzene	ND		2800	520	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Bromoform	ND		2800	1400	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Bromomethane	ND		2800	610	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Carbon disulfide	ND		2800	1300	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Carbon tetrachloride	ND		2800	700	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Chlorobenzene	ND		2800	360	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Dibromochloromethane	ND		2800	1300	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Chloroethane	ND		2800	570	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Chloroform	ND		2800	1900	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Chloromethane	ND		2800	660	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
cis-1,2-Dichloroethene	ND		2800	760	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
<b>Cyclohexane</b>	<b>1500</b>	<b>J</b>	2800	610	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Bromodichloromethane	ND		2800	550	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Dichlorodifluoromethane	ND		2800	1200	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Ethylbenzene	ND		2800	800	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
1,2-Dibromoethane	ND		2800	480	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Isopropylbenzene	ND		2800	410	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Methyl acetate	ND		14000	1300	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Methyl tert-butyl ether	ND		2800	1000	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Methylcyclohexane	ND		2800	1300	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Methylene Chloride	ND		2800	550	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
<b>m,p-Xylene</b>	<b>2600</b>	<b>J</b>	5500	1500	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
n-Butylbenzene	ND		2800	800	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
N-Propylbenzene	ND		2800	720	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
o-Xylene	ND		2800	360	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
sec-Butylbenzene	ND		2800	1000	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Tetrachloroethene	ND		2800	370	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Toluene	ND		2800	740	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
trans-1,2-Dichloroethene	ND		2800	650	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (3-4)**

**Lab Sample ID: 480-146502-10**

**Date Collected: 12/06/18 11:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 79.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		2800	270	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Trichloroethene	ND		2800	770	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Trichlorofluoromethane	ND		2800	1300	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Vinyl chloride	ND		2800	920	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
<b>Xylenes, Total</b>	<b>2600</b>	<b>J</b>	5500	1500	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
cis-1,3-Dichloropropene	ND		2800	660	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Styrene	ND		2800	660	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
tert-Butylbenzene	ND		2800	770	ug/Kg	☼	12/11/18 14:21	12/14/18 01:13	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	84		53 - 146				12/11/18 14:21	12/14/18 01:13	20
4-Bromofluorobenzene (Surr)	110		49 - 148				12/11/18 14:21	12/14/18 01:13	20
Toluene-d8 (Surr)	88		50 - 149				12/11/18 14:21	12/14/18 01:13	20
Dibromofluoromethane (Surr)	88		60 - 140				12/11/18 14:21	12/14/18 01:13	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Anthracene	ND		1100	260	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
<b>Benzo[a]anthracene</b>	<b>190</b>	<b>J</b>	1100	110	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Benzo[a]pyrene	ND		1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Benzo[b]fluoranthene	ND		1100	170	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Benzo[g,h,i]perylene	ND		1100	110	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Benzo[k]fluoranthene	ND		1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Chrysene	ND		1100	240	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
<b>Fluoranthene</b>	<b>340</b>	<b>J</b>	1100	110	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Fluorene	ND		1100	120	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Indeno[1,2,3-cd]pyrene	ND		1100	130	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Naphthalene	ND		1100	140	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
<b>Phenanthrene</b>	<b>230</b>	<b>J</b>	1100	160	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
<b>Pyrene</b>	<b>290</b>	<b>J</b>	1100	120	ug/Kg	☼	12/11/18 15:09	12/13/18 20:58	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	88		60 - 120				12/11/18 15:09	12/13/18 20:58	5
Nitrobenzene-d5 (Surr)	100		53 - 120				12/11/18 15:09	12/13/18 20:58	5
p-Terphenyl-d14 (Surr)	79		65 - 121				12/11/18 15:09	12/13/18 20:58	5

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>39.2</b>		2.5	0.51	mg/Kg	☼	12/13/18 09:13	12/14/18 01:25	1
<b>Barium</b>	<b>158</b>	<b>B</b>	0.64	0.14	mg/Kg	☼	12/13/18 09:13	12/14/18 01:25	1
<b>Cadmium</b>	<b>0.93</b>	<b>J</b>	1.3	0.19	mg/Kg	☼	12/13/18 09:13	12/14/18 10:40	5
<b>Chromium</b>	<b>31.7</b>		0.64	0.25	mg/Kg	☼	12/13/18 09:13	12/14/18 01:25	1
<b>Lead</b>	<b>63.0</b>	<b>B</b>	6.4	1.5	mg/Kg	☼	12/13/18 09:13	12/14/18 10:40	5
<b>Selenium</b>	<b>2.0</b>	<b>J</b>	5.1	0.51	mg/Kg	☼	12/13/18 09:13	12/14/18 01:25	1
Silver	ND		3.8	1.3	mg/Kg	☼	12/13/18 09:13	12/14/18 10:40	5

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (3-4)**

**Date Collected: 12/06/18 11:45**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-10**

**Matrix: Solid**

**Percent Solids: 79.9**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.024	0.0098	mg/Kg	☼	12/12/18 12:36	12/12/18 14:31	1

1

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# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (4-6)**

**Lab Sample ID: 480-146502-11**

**Date Collected: 12/06/18 11:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 79.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1400	390	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,1,2,2-Tetrachloroethane	ND		1400	230	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1400	700	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,1,2-Trichloroethane	ND		1400	290	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,1-Dichloroethane	ND		1400	430	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,1-Dichloroethene	ND		1400	480	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,2,4-Trichlorobenzene	ND		1400	530	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>1,2,4-Trimethylbenzene</b>	<b>7500</b>		1400	390	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,2-Dibromo-3-Chloropropane	ND		1400	700	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,2-Dichlorobenzene	ND		1400	360	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,2-Dichloroethane	ND		1400	570	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,2-Dichloropropane	ND		1400	230	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>1,3,5-Trimethylbenzene</b>	<b>3300</b>		1400	420	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,3-Dichlorobenzene	ND		1400	370	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,4-Dichlorobenzene	ND		1400	200	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
2-Butanone (MEK)	ND		7000	4200	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
2-Hexanone	ND		7000	2900	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
4-Isopropyltoluene	ND		1400	470	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
4-Methyl-2-pentanone (MIBK)	ND		7000	450	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Acetone	ND		7000	5700	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Benzene	ND		1400	270	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Bromoform	ND		1400	700	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Bromomethane	ND		1400	310	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Carbon disulfide	ND		1400	640	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Carbon tetrachloride	ND		1400	360	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Chlorobenzene	ND		1400	180	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Dibromochloromethane	ND		1400	680	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Chloroethane	ND		1400	290	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Chloroform	ND		1400	960	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Chloromethane	ND		1400	330	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
cis-1,2-Dichloroethene	ND		1400	390	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>Cyclohexane</b>	<b>8500</b>		1400	310	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Bromodichloromethane	ND		1400	280	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Dichlorodifluoromethane	ND		1400	610	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>Ethylbenzene</b>	<b>3800</b>		1400	410	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
1,2-Dibromoethane	ND		1400	240	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>Isopropylbenzene</b>	<b>2400</b>		1400	210	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>Methyl acetate</b>	<b>1900 J</b>		7000	670	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Methyl tert-butyl ether	ND		1400	530	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>Methylcyclohexane</b>	<b>53000</b>		1400	650	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Methylene Chloride	ND		1400	280	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>m,p-Xylene</b>	<b>28000</b>		2800	770	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>n-Butylbenzene</b>	<b>410 J</b>		1400	410	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>N-Propylbenzene</b>	<b>2900</b>		1400	370	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
o-Xylene	ND		1400	180	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
sec-Butylbenzene	ND		1400	510	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Tetrachloroethene	ND		1400	190	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Toluene	ND		1400	370	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
trans-1,2-Dichloroethene	ND		1400	330	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (4-6)**

**Lab Sample ID: 480-146502-11**

**Date Collected: 12/06/18 11:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 79.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1400	140	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Trichloroethene	ND		1400	390	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Trichlorofluoromethane	ND		1400	660	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Vinyl chloride	ND		1400	470	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
<b>Xylenes, Total</b>	<b>28000</b>		2800	770	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
cis-1,3-Dichloropropene	ND		1400	330	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Styrene	ND		1400	340	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
tert-Butylbenzene	ND		1400	390	ug/Kg	☼	12/11/18 14:21	12/14/18 01:40	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	89		53 - 146				12/11/18 14:21	12/14/18 01:40	10
4-Bromofluorobenzene (Surr)	111		49 - 148				12/11/18 14:21	12/14/18 01:40	10
Toluene-d8 (Surr)	91		50 - 149				12/11/18 14:21	12/14/18 01:40	10
Dibromofluoromethane (Surr)	87		60 - 140				12/11/18 14:21	12/14/18 01:40	10

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (9-12)**

**Lab Sample ID: 480-146502-12**

**Date Collected: 12/06/18 11:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	52	3.8	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,1,2,2-Tetrachloroethane	ND	vs	52	8.4	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	52	12	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,1,2-Trichloroethane	ND	vs	52	6.8	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,1-Dichloroethane	ND	vs	52	6.4	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,1-Dichloroethene	ND	vs	52	6.4	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,2,4-Trichlorobenzene	ND	vs	52	3.2	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>1,2,4-Trimethylbenzene</b>	<b>120</b>	<b>vs</b>	52	10	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,2-Dibromo-3-Chloropropane	ND	vs	52	26	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,2-Dichlorobenzene	ND	vs	52	4.1	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,2-Dichloroethane	ND	vs	52	2.6	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,2-Dichloropropane	ND	vs	52	26	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>1,3,5-Trimethylbenzene</b>	<b>66</b>	<b>vs</b>	52	3.4	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,3-Dichlorobenzene	ND	vs	52	2.7	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,4-Dichlorobenzene	ND	vs	52	7.3	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
2-Butanone (MEK)	ND	vs	260	19	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
2-Hexanone	ND	vs	260	26	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>4-Isopropyltoluene</b>	<b>15</b>	<b>J vs</b>	52	4.2	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
4-Methyl-2-pentanone (MIBK)	ND	vs	260	17	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>Acetone</b>	<b>49</b>	<b>J vs</b>	260	44	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Benzene	ND	vs	52	2.6	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Bromoform	ND	vs	52	26	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Bromomethane	ND	vs	52	4.7	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Carbon disulfide	ND	vs	52	26	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Carbon tetrachloride	ND	vs	52	5.0	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Chlorobenzene	ND	vs	52	6.9	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Dibromochloromethane	ND	vs	52	6.7	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Chloroethane	ND	vs	52	12	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Chloroform	ND	vs	52	3.2	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Chloromethane	ND	vs	52	3.1	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
cis-1,2-Dichloroethene	ND	vs	52	6.7	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>Cyclohexane</b>	<b>210</b>	<b>vs</b>	52	7.3	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Bromodichloromethane	ND	vs	52	7.0	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Dichlorodifluoromethane	ND	vs	52	4.3	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>Ethylbenzene</b>	<b>8.9</b>	<b>J vs</b>	52	3.6	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
1,2-Dibromoethane	ND	vs	52	6.7	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>Isopropylbenzene</b>	<b>72</b>	<b>vs</b>	52	7.9	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Methyl acetate	ND	vs	260	31	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Methyl tert-butyl ether	ND	vs	52	5.1	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>Methylcyclohexane</b>	<b>1100</b>	<b>vs</b>	52	7.9	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Methylene Chloride	ND	vs	52	24	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>m,p-Xylene</b>	<b>85</b>	<b>J vs</b>	100	8.8	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
n-Butylbenzene	ND	vs	52	4.5	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>N-Propylbenzene</b>	<b>94</b>	<b>vs</b>	52	4.2	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
o-Xylene	ND	vs	52	6.8	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>sec-Butylbenzene</b>	<b>22</b>	<b>J vs</b>	52	4.5	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Tetrachloroethene	ND	vs	52	7.0	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Toluene	ND	vs	52	3.9	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
trans-1,2-Dichloroethene	ND	vs	52	5.4	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1

TestAmerica Buffalo



# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (9-12)**

**Lab Sample ID: 480-146502-12**

**Date Collected: 12/06/18 11:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 84.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	vs	52	23	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Trichloroethene	ND	vs	52	11	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Trichlorofluoromethane	ND	vs	52	4.9	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Vinyl chloride	ND	vs	52	6.4	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
<b>Xylenes, Total</b>	<b>85</b>	<b>J vs</b>	100	8.8	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
cis-1,3-Dichloropropene	ND	vs	52	7.5	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Styrene	ND	vs	52	2.6	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
tert-Butylbenzene	ND	vs	52	5.4	ug/Kg	☼	12/10/18 22:57	12/11/18 08:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		64 - 126				12/10/18 22:57	12/11/18 08:12	1
4-Bromofluorobenzene (Surr)	91		72 - 126				12/10/18 22:57	12/11/18 08:12	1
Toluene-d8 (Surr)	90		71 - 125				12/10/18 22:57	12/11/18 08:12	1
Dibromofluoromethane (Surr)	103		60 - 140				12/10/18 22:57	12/11/18 08:12	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-17 (2-4)**

**Lab Sample ID: 480-146502-13**

**Date Collected: 12/06/18 01:33**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 88.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1900	280	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Acenaphthylene	ND		1900	240	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Anthracene	ND		1900	460	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Benzo[a]anthracene	ND		1900	190	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Benzo[a]pyrene	ND		1900	280	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Benzo[b]fluoranthene	ND		1900	300	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Benzo[g,h,i]perylene	ND		1900	200	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Benzo[k]fluoranthene	ND		1900	240	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Chrysene	ND		1900	420	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Dibenz(a,h)anthracene	ND		1900	330	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
<b>Fluoranthene</b>	<b>320</b>	<b>J</b>	1900	200	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Fluorene	ND		1900	220	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Indeno[1,2,3-cd]pyrene	ND		1900	230	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Naphthalene	ND		1900	240	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
<b>Phenanthrene</b>	<b>1800</b>	<b>J</b>	1900	280	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
<b>Pyrene</b>	<b>2700</b>		1900	220	ug/Kg	☼	12/11/18 15:09	12/13/18 21:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	93		60 - 120				12/11/18 15:09	12/13/18 21:24	1
Nitrobenzene-d5 (Surr)	77		53 - 120				12/11/18 15:09	12/13/18 21:24	1
p-Terphenyl-d14 (Surr)	90		65 - 121				12/11/18 15:09	12/13/18 21:24	1

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>5.4</b>		2.2	0.44	mg/Kg	☼	12/13/18 09:13	12/14/18 01:29	1
<b>Barium</b>	<b>353</b>	<b>B</b>	0.55	0.12	mg/Kg	☼	12/13/18 09:13	12/14/18 01:29	1
<b>Cadmium</b>	<b>0.71</b>		0.22	0.033	mg/Kg	☼	12/13/18 09:13	12/14/18 01:29	1
<b>Chromium</b>	<b>14.8</b>		0.55	0.22	mg/Kg	☼	12/13/18 09:13	12/14/18 01:29	1
<b>Lead</b>	<b>49.9</b>	<b>B</b>	1.1	0.26	mg/Kg	☼	12/13/18 09:13	12/14/18 01:29	1
<b>Selenium</b>	<b>1.8</b>	<b>J</b>	4.4	0.44	mg/Kg	☼	12/13/18 09:13	12/14/18 01:29	1
Silver	ND		0.66	0.22	mg/Kg	☼	12/13/18 09:13	12/14/18 01:29	1

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.017</b>	<b>J</b>	0.023	0.0094	mg/Kg	☼	12/12/18 12:36	12/12/18 14:32	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-17 (4-6)**

**Lab Sample ID: 480-146502-14**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 86.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	25	1.8	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,1,2,2-Tetrachloroethane	ND	vs	25	4.1	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	25	5.8	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,1,2-Trichloroethane	ND	vs	25	3.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,1-Dichloroethane	ND	vs	25	3.1	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,1-Dichloroethene	ND	vs	25	3.1	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,2,4-Trichlorobenzene	ND	vs	25	1.5	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>1,2,4-Trimethylbenzene</b>	<b>11</b>	<b>J vs</b>	25	4.9	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,2-Dibromo-3-Chloropropane	ND	vs	25	13	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,2-Dichlorobenzene	ND	vs	25	2.0	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,2-Dichloroethane	ND	vs	25	1.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,2-Dichloropropane	ND	vs	25	13	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>1,3,5-Trimethylbenzene</b>	<b>4.6</b>	<b>J vs</b>	25	1.6	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,3-Dichlorobenzene	ND	vs	25	1.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,4-Dichlorobenzene	ND	vs	25	3.5	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
2-Butanone (MEK)	ND	vs	130	9.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
2-Hexanone	ND	vs	130	13	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>4-Isopropyltoluene</b>	<b>3.5</b>	<b>J vs</b>	25	2.0	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
4-Methyl-2-pentanone (MIBK)	ND	vs	130	8.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>Acetone</b>	<b>22</b>	<b>J vs</b>	130	21	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Benzene	ND	vs	25	1.2	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Bromoform	ND	vs	25	13	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Bromomethane	ND	vs	25	2.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Carbon disulfide	ND	vs	25	13	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Carbon tetrachloride	ND	vs	25	2.5	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Chlorobenzene	ND	vs	25	3.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Dibromochloromethane	ND	vs	25	3.2	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Chloroethane	ND	vs	25	5.7	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Chloroform	ND	vs	25	1.6	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Chloromethane	ND	vs	25	1.5	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
cis-1,2-Dichloroethene	ND	vs	25	3.2	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>Cyclohexane</b>	<b>5.4</b>	<b>J vs</b>	25	3.5	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Bromodichloromethane	ND	vs	25	3.4	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Dichlorodifluoromethane	ND	vs	25	2.1	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>Ethylbenzene</b>	<b>9.5</b>	<b>J vs</b>	25	1.7	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
1,2-Dibromoethane	ND	vs	25	3.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Isopropylbenzene	ND	vs	25	3.8	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Methyl acetate	ND	vs	130	15	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Methyl tert-butyl ether	ND	vs	25	2.5	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>Methylcyclohexane</b>	<b>26</b>	<b>vs</b>	25	3.9	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Methylene Chloride	ND	vs	25	12	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>m,p-Xylene</b>	<b>39</b>	<b>J vs</b>	51	4.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
n-Butylbenzene	ND	vs	25	2.2	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>N-Propylbenzene</b>	<b>2.9</b>	<b>J vs</b>	25	2.0	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>o-Xylene</b>	<b>17</b>	<b>J vs</b>	25	3.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
sec-Butylbenzene	ND	vs	25	2.2	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Tetrachloroethene	ND	vs	25	3.4	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Toluene	ND	vs	25	1.9	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
trans-1,2-Dichloroethene	ND	vs	25	2.6	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-17 (4-6)**

**Lab Sample ID: 480-146502-14**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 86.6**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	vs	25	11	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Trichloroethene	ND	vs	25	5.6	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Trichlorofluoromethane	ND	vs	25	2.4	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Vinyl chloride	ND	vs	25	3.1	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
<b>Xylenes, Total</b>	<b>56</b>	<b>vs</b>	51	4.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
cis-1,3-Dichloropropene	ND	vs	25	3.6	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Styrene	ND	vs	25	1.3	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
tert-Butylbenzene	ND	vs	25	2.6	ug/Kg	☼	12/11/18 08:51	12/11/18 13:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 126				12/11/18 08:51	12/11/18 13:14	1
4-Bromofluorobenzene (Surr)	99		72 - 126				12/11/18 08:51	12/11/18 13:14	1
Toluene-d8 (Surr)	101		71 - 125				12/11/18 08:51	12/11/18 13:14	1
Dibromofluoromethane (Surr)	103		60 - 140				12/11/18 08:51	12/11/18 13:14	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-19 (3-4)**

**Lab Sample ID: 480-146502-15**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 76.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		16000	2400	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Acenaphthylene	ND		16000	2100	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Anthracene	ND		16000	4100	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Benzo[a]anthracene	ND		16000	1600	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Benzo[a]pyrene	ND		16000	2400	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Benzo[b]fluoranthene	ND		16000	2600	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Benzo[g,h,i]perylene	ND		16000	1700	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Benzo[k]fluoranthene	ND		16000	2100	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Chrysene	ND		16000	3700	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Dibenz(a,h)anthracene	ND		16000	2900	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
<b>Fluoranthene</b>	<b>2400</b>	<b>J</b>	16000	1700	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Fluorene	ND		16000	1900	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Indeno[1,2,3-cd]pyrene	ND		16000	2000	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Naphthalene	ND		16000	2100	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Phenanthrene	ND		16000	2400	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Pyrene	ND		16000	1900	ug/Kg	☼	12/11/18 15:09	12/14/18 13:58	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	62		60 - 120				12/11/18 15:09	12/14/18 13:58	5
Nitrobenzene-d5 (Surr)	0	X	53 - 120				12/11/18 15:09	12/14/18 13:58	5
p-Terphenyl-d14 (Surr)	0	X	65 - 121				12/11/18 15:09	12/14/18 13:58	5

## Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Arsenic</b>	<b>12.2</b>		2.7	0.54	mg/Kg	☼	12/13/18 09:13	12/14/18 01:33	1
<b>Barium</b>	<b>80.0</b>	<b>B</b>	0.67	0.15	mg/Kg	☼	12/13/18 09:13	12/14/18 01:33	1
<b>Cadmium</b>	<b>0.30</b>	<b>J</b>	1.3	0.20	mg/Kg	☼	12/13/18 09:13	12/14/18 10:44	5
<b>Chromium</b>	<b>37.1</b>		0.67	0.27	mg/Kg	☼	12/13/18 09:13	12/14/18 01:33	1
<b>Lead</b>	<b>73.4</b>	<b>B</b>	6.7	1.6	mg/Kg	☼	12/13/18 09:13	12/14/18 10:44	5
<b>Selenium</b>	<b>1.3</b>	<b>J</b>	5.4	0.54	mg/Kg	☼	12/13/18 09:13	12/14/18 01:33	1
Silver	ND		4.0	1.3	mg/Kg	☼	12/13/18 09:13	12/14/18 10:44	5

## Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
<b>Mercury</b>	<b>0.036</b>		0.026	0.011	mg/Kg	☼	12/12/18 12:36	12/12/18 14:33	1

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-19 (4-6)**

**Lab Sample ID: 480-146502-16**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 82.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1300	370	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,1,2,2-Tetrachloroethane	ND		1300	220	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1300	660	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,1,2-Trichloroethane	ND		1300	280	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,1-Dichloroethane	ND		1300	410	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,1-Dichloroethene	ND		1300	460	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,2,4-Trichlorobenzene	ND		1300	500	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
<b>1,2,4-Trimethylbenzene</b>	<b>660</b>	<b>J</b>	1300	370	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,2-Dibromo-3-Chloropropane	ND		1300	660	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,2-Dichlorobenzene	ND		1300	340	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,2-Dichloroethane	ND		1300	540	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,2-Dichloropropane	ND		1300	210	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,3,5-Trimethylbenzene	ND		1300	400	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,3-Dichlorobenzene	ND		1300	350	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,4-Dichlorobenzene	ND		1300	190	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
2-Butanone (MEK)	ND		6600	3900	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
2-Hexanone	ND		6600	2700	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
4-Isopropyltoluene	ND		1300	450	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
4-Methyl-2-pentanone (MIBK)	ND		6600	420	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Acetone	ND		6600	5400	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Benzene	ND		1300	250	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Bromoform	ND		1300	660	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Bromomethane	ND		1300	290	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Carbon disulfide	ND		1300	600	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Carbon tetrachloride	ND		1300	340	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Chlorobenzene	ND		1300	170	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Dibromochloromethane	ND		1300	640	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Chloroethane	ND		1300	280	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Chloroform	ND		1300	910	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Chloromethane	ND		1300	320	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
cis-1,2-Dichloroethene	ND		1300	370	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
<b>Cyclohexane</b>	<b>5300</b>		1300	290	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Bromodichloromethane	ND		1300	260	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Dichlorodifluoromethane	ND		1300	580	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Ethylbenzene	ND		1300	390	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
1,2-Dibromoethane	ND		1300	230	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
<b>Isopropylbenzene</b>	<b>970</b>	<b>J</b>	1300	200	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Methyl acetate	ND		6600	630	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Methyl tert-butyl ether	ND		1300	500	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
<b>Methylcyclohexane</b>	<b>36000</b>		1300	620	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Methylene Chloride	ND		1300	260	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
m,p-Xylene	ND		2600	730	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
n-Butylbenzene	ND		1300	390	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
<b>N-Propylbenzene</b>	<b>930</b>	<b>J</b>	1300	350	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
o-Xylene	ND		1300	170	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
sec-Butylbenzene	ND		1300	490	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Tetrachloroethene	ND		1300	180	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Toluene	ND		1300	350	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
trans-1,2-Dichloroethene	ND		1300	310	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10

TestAmerica Buffalo

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-19 (4-6)**

**Lab Sample ID: 480-146502-16**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 82.2**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1300	130	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Trichloroethene	ND		1300	370	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Trichlorofluoromethane	ND		1300	620	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Vinyl chloride	ND		1300	440	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Xylenes, Total	ND		2600	730	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
cis-1,3-Dichloropropene	ND		1300	320	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Styrene	ND		1300	320	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
tert-Butylbenzene	ND		1300	370	ug/Kg	☼	12/11/18 14:21	12/14/18 02:08	10
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	86		53 - 146				12/11/18 14:21	12/14/18 02:08	10
4-Bromofluorobenzene (Surr)	113		49 - 148				12/11/18 14:21	12/14/18 02:08	10
Toluene-d8 (Surr)	91		50 - 149				12/11/18 14:21	12/14/18 02:08	10
Dibromofluoromethane (Surr)	91		60 - 140				12/11/18 14:21	12/14/18 02:08	10

# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-19 (10-11)**

**Lab Sample ID: 480-146502-17**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1100	290	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,1,2,2-Tetrachloroethane	ND		1100	170	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1100	530	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,1,2-Trichloroethane	ND		1100	220	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,1-Dichloroethane	ND		1100	330	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,1-Dichloroethene	ND		1100	370	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,2,4-Trichlorobenzene	ND		1100	400	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,2,4-Trimethylbenzene	ND		1100	300	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,2-Dibromo-3-Chloropropane	ND		1100	530	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,2-Dichlorobenzene	ND		1100	270	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,2-Dichloroethane	ND		1100	440	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,2-Dichloropropane	ND		1100	170	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,3,5-Trimethylbenzene	ND		1100	320	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,3-Dichlorobenzene	ND		1100	280	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,4-Dichlorobenzene	ND		1100	150	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
2-Butanone (MEK)	ND		5300	3200	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
2-Hexanone	ND		5300	2200	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
4-Isopropyltoluene	ND		1100	360	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
4-Methyl-2-pentanone (MIBK)	ND		5300	340	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Acetone	ND		5300	4400	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Benzene	ND		1100	200	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Bromoform	ND		1100	530	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Bromomethane	ND		1100	230	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Carbon disulfide	ND		1100	480	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Carbon tetrachloride	ND		1100	270	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Chlorobenzene	ND		1100	140	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Dibromochloromethane	ND		1100	520	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Chloroethane	ND		1100	220	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Chloroform	ND		1100	730	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Chloromethane	ND		1100	250	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
cis-1,2-Dichloroethene	ND		1100	290	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Cyclohexane	ND		1100	240	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Bromodichloromethane	ND		1100	210	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Dichlorodifluoromethane	ND		1100	460	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Ethylbenzene	ND		1100	310	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
1,2-Dibromoethane	ND		1100	190	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
<b>Isopropylbenzene</b>	<b>190</b>	<b>J</b>	1100	160	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Methyl acetate	ND		5300	510	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Methyl tert-butyl ether	ND		1100	400	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
<b>Methylcyclohexane</b>	<b>15000</b>		1100	500	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Methylene Chloride	ND		1100	210	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
m,p-Xylene	ND		2100	590	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
n-Butylbenzene	ND		1100	310	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
N-Propylbenzene	ND		1100	280	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
o-Xylene	ND		1100	140	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
sec-Butylbenzene	ND		1100	390	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Tetrachloroethene	ND		1100	140	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Toluene	ND		1100	290	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
trans-1,2-Dichloroethene	ND		1100	250	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8

TestAmerica Buffalo



# Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-19 (10-11)**

**Lab Sample ID: 480-146502-17**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 82.0**

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		1100	100	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Trichloroethene	ND		1100	300	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Trichlorofluoromethane	ND		1100	500	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Vinyl chloride	ND		1100	360	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Xylenes, Total	ND		2100	590	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
cis-1,3-Dichloropropene	ND		1100	250	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Styrene	ND		1100	260	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
tert-Butylbenzene	ND		1100	300	ug/Kg	☼	12/11/18 14:21	12/14/18 02:35	8
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	85		53 - 146				12/11/18 14:21	12/14/18 02:35	8
4-Bromofluorobenzene (Surr)	116		49 - 148				12/11/18 14:21	12/14/18 02:35	8
Toluene-d8 (Surr)	92		50 - 149				12/11/18 14:21	12/14/18 02:35	8
Dibromofluoromethane (Surr)	85		60 - 140				12/11/18 14:21	12/14/18 02:35	8

# Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (53-146)	BFB (49-148)	TOL (50-149)	DBFM (60-140)
480-146502-7	SB-13 (2-4)	86	112	91	86
480-146502-10	SB-15 (3-4)	84	110	88	88
480-146502-11	SB-15 (4-6)	89	111	91	87
480-146502-16	SB-19 (4-6)	86	113	91	91
480-146502-17	SB-19 (10-11)	85	116	92	85
LCS 480-450229/1-A	Lab Control Sample	83	113	94	89
MB 480-450229/2-A	Method Blank	87	109	89	87

### Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (64-126)	BFB (72-126)	TOL (71-125)	DBFM (60-140)
480-146502-6	SB-11 (2.5-3.5)	236 X	88	127 X	106
480-146502-12	SB-15 (9-12)	112	91	90	103
480-146502-14	SB-17 (4-6)	105	99	101	103
LCS 480-449915/1-A	Lab Control Sample	108	106	102	111
LCS 480-450059/23-A	Lab Control Sample	106	107	103	110
LCS 480-450136/1-A	Lab Control Sample	103	105	102	108
MB 480-449915/2-A	Method Blank	107	105	102	108
MB 480-450059/2-A	Method Blank	106	106	103	107
MB 480-450136/2-A	Method Blank	105	104	102	108

### Surrogate Legend

DCA = 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

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (60-120)	NBZ (53-120)	TPHd14 (65-121)
480-146502-1	SB-1 (3-4)	96	91	97
480-146502-2	SB-2 (3-5)	86	79	101
480-146502-3	SB-5 (1-3)	84	82	96
480-146502-4	SB-6 (0-3)	80	73	86
480-146502-5	SB-8 (2-4)	102	105	107
480-146502-6	SB-11 (2.5-3.5)	78	67	100
480-146502-7	SB-13 (2-4)	87	81	99
480-146502-8	SB-9 (2-4)	96	99	108

TestAmerica Buffalo

# Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

Matrix: Solid

Prep Type: Total/NA

### Percent Surrogate Recovery (Acceptance Limits)

Lab Sample ID	Client Sample ID	FBP	NBZ	TPHd14
		(60-120)	(53-120)	(65-121)
480-146502-9	SB-14 (2-4)	0 X	0 X	0 X
480-146502-10	SB-15 (3-4)	88	100	79
480-146502-13	SB-17 (2-4)	93	77	90
480-146502-15	SB-19 (3-4)	62	0 X	0 X
LCS 480-450241/2-A	Lab Control Sample	88	86	96
MB 480-450241/1-A	Method Blank	85	86	101

### Surrogate Legend

FBP = 2-Fluorobiphenyl

NBZ = Nitrobenzene-d5 (Surr)

TPHd14 = p-Terphenyl-d14 (Surr)

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: MB 480-449915/2-A**

**Matrix: Solid**

**Analysis Batch: 449888**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 449915**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
2-Hexanone	ND		25	2.5	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Acetone	ND		25	4.2	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Benzene	ND		5.0	0.25	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Bromoform	ND		5.0	2.5	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Bromomethane	ND		5.0	0.45	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Chloroethane	ND		5.0	1.1	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Chloroform	ND		5.0	0.31	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Chloromethane	ND		5.0	0.30	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Cyclohexane	ND		5.0	0.70	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Methyl acetate	ND		25	3.0	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
m,p-Xylene	ND		10	0.84	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
o-Xylene	ND		5.0	0.65	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Toluene	ND		5.0	0.38	ug/Kg		12/10/18 10:25	12/10/18 11:15	1

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: MB 480-449915/2-A**  
**Matrix: Solid**  
**Analysis Batch: 449888**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 449915**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Trichloroethene	ND		5.0	1.1	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Xylenes, Total	ND		10	0.84	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
Styrene	ND		5.0	0.25	ug/Kg		12/10/18 10:25	12/10/18 11:15	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		12/10/18 10:25	12/10/18 11:15	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	107		64 - 126	12/10/18 10:25	12/10/18 11:15	1
4-Bromofluorobenzene (Surr)	105		72 - 126	12/10/18 10:25	12/10/18 11:15	1
Toluene-d8 (Surr)	102		71 - 125	12/10/18 10:25	12/10/18 11:15	1
Dibromofluoromethane (Surr)	108		60 - 140	12/10/18 10:25	12/10/18 11:15	1

**Lab Sample ID: LCS 480-449915/1-A**  
**Matrix: Solid**  
**Analysis Batch: 449888**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 449915**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	50.0	43.4		ug/Kg		87	77 - 121
1,1,1,2-Tetrachloroethane	50.0	45.8		ug/Kg		92	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	40.8		ug/Kg		82	60 - 140
1,1,2-Trichloroethane	50.0	46.4		ug/Kg		93	78 - 122
1,1-Dichloroethane	50.0	43.8		ug/Kg		88	73 - 126
1,1-Dichloroethene	50.0	41.6		ug/Kg		83	59 - 125
1,2,4-Trichlorobenzene	50.0	41.8		ug/Kg		84	64 - 120
1,2,4-Trimethylbenzene	50.0	39.6		ug/Kg		79	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	43.5		ug/Kg		87	63 - 124
1,2-Dichlorobenzene	50.0	42.0		ug/Kg		84	75 - 120
1,2-Dichloroethane	50.0	48.1		ug/Kg		96	77 - 122
1,2-Dichloropropane	50.0	43.9		ug/Kg		88	75 - 124
1,3,5-Trimethylbenzene	50.0	39.5		ug/Kg		79	74 - 120
1,3-Dichlorobenzene	50.0	41.2		ug/Kg		82	74 - 120
1,4-Dichlorobenzene	50.0	41.6		ug/Kg		83	73 - 120
2-Butanone (MEK)	250	243		ug/Kg		97	70 - 134
2-Hexanone	250	231		ug/Kg		92	59 - 130
4-Isopropyltoluene	50.0	39.1		ug/Kg		78	74 - 120
4-Methyl-2-pentanone (MIBK)	250	223		ug/Kg		89	65 - 133
Acetone	250	235		ug/Kg		94	61 - 137
Benzene	50.0	44.5		ug/Kg		89	79 - 127
Bromoform	50.0	49.0		ug/Kg		98	68 - 126
Bromomethane	50.0	43.8		ug/Kg		88	37 - 149
Carbon disulfide	50.0	36.2		ug/Kg		72	64 - 131
Carbon tetrachloride	50.0	41.9		ug/Kg		84	75 - 135
Chlorobenzene	50.0	43.5		ug/Kg		87	76 - 124

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: LCS 480-449915/1-A**  
**Matrix: Solid**  
**Analysis Batch: 449888**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 449915**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	50.0	48.8		ug/Kg		98	76 - 125
Chloroethane	50.0	44.5		ug/Kg		89	69 - 135
Chloroform	50.0	46.4		ug/Kg		93	80 - 120
Chloromethane	50.0	39.8		ug/Kg		80	63 - 127
cis-1,2-Dichloroethene	50.0	45.6		ug/Kg		91	81 - 120
Cyclohexane	50.0	36.0		ug/Kg		72	65 - 120
Bromodichloromethane	50.0	47.1		ug/Kg		94	80 - 122
Dichlorodifluoromethane	50.0	39.9		ug/Kg		80	57 - 142
Ethylbenzene	50.0	41.3		ug/Kg		83	80 - 120
1,2-Dibromoethane	50.0	48.0		ug/Kg		96	78 - 120
Isopropylbenzene	50.0	38.7		ug/Kg		77	72 - 120
Methyl acetate	100	94.9		ug/Kg		95	55 - 136
Methyl tert-butyl ether	50.0	47.5		ug/Kg		95	63 - 125
Methylcyclohexane	50.0	38.1		ug/Kg		76	60 - 140
Methylene Chloride	50.0	46.6		ug/Kg		93	61 - 127
m,p-Xylene	50.0	40.8		ug/Kg		82	70 - 130
Naphthalene	50.0	43.0		ug/Kg		86	38 - 137
n-Butylbenzene	50.0	38.7		ug/Kg		77	70 - 120
N-Propylbenzene	50.0	38.9		ug/Kg		78	70 - 130
o-Xylene	50.0	40.7		ug/Kg		81	70 - 130
sec-Butylbenzene	50.0	38.6		ug/Kg		77	74 - 120
Tetrachloroethene	50.0	41.2		ug/Kg		82	74 - 122
Toluene	50.0	41.6		ug/Kg		83	74 - 128
trans-1,2-Dichloroethene	50.0	43.6		ug/Kg		87	78 - 126
trans-1,3-Dichloropropene	50.0	44.5		ug/Kg		89	73 - 123
Trichloroethene	50.0	43.2		ug/Kg		86	77 - 129
Trichlorofluoromethane	50.0	49.7		ug/Kg		99	65 - 146
Vinyl chloride	50.0	41.3		ug/Kg		83	61 - 133
cis-1,3-Dichloropropene	50.0	44.8		ug/Kg		90	80 - 120
Styrene	50.0	40.7		ug/Kg		81	80 - 120
tert-Butylbenzene	50.0	39.0		ug/Kg		78	73 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	108		64 - 126
4-Bromofluorobenzene (Surr)	106		72 - 126
Toluene-d8 (Surr)	102		71 - 125
Dibromofluoromethane (Surr)	111		60 - 140

**Lab Sample ID: MB 480-450059/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450052**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450059**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		12/10/18 22:57	12/11/18 00:44	1

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: MB 480-450059/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450052**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450059**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,2,4-Trichlorobenzene	0.403	J	5.0	0.30	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
2-Hexanone	ND		25	2.5	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Acetone	ND		25	4.2	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Benzene	ND		5.0	0.25	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Bromoform	ND		5.0	2.5	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Bromomethane	ND		5.0	0.45	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Chloroethane	ND		5.0	1.1	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Chloroform	ND		5.0	0.31	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Chloromethane	ND		5.0	0.30	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Cyclohexane	ND		5.0	0.70	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Methyl acetate	ND		25	3.0	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
m,p-Xylene	ND		10	0.84	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
o-Xylene	ND		5.0	0.65	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Toluene	ND		5.0	0.38	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Trichloroethene	ND		5.0	1.1	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		12/10/18 22:57	12/11/18 00:44	1

TestAmerica Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: MB 480-450059/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450052**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450059**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		10	0.84	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
Styrene	ND		5.0	0.25	ug/Kg		12/10/18 22:57	12/11/18 00:44	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		12/10/18 22:57	12/11/18 00:44	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	106		64 - 126	12/10/18 22:57	12/11/18 00:44	1
4-Bromofluorobenzene (Surr)	106		72 - 126	12/10/18 22:57	12/11/18 00:44	1
Toluene-d8 (Surr)	103		71 - 125	12/10/18 22:57	12/11/18 00:44	1
Dibromofluoromethane (Surr)	107		60 - 140	12/10/18 22:57	12/11/18 00:44	1

**Lab Sample ID: LCS 480-450059/23-A**  
**Matrix: Solid**  
**Analysis Batch: 450052**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 450059**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	43.9		ug/Kg		88	77 - 121
1,1,2,2-Tetrachloroethane	50.0	42.2		ug/Kg		84	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.2		ug/Kg		92	60 - 140
1,1,2-Trichloroethane	50.0	44.8		ug/Kg		90	78 - 122
1,1-Dichloroethane	50.0	44.1		ug/Kg		88	73 - 126
1,1-Dichloroethene	50.0	46.2		ug/Kg		92	59 - 125
1,2,4-Trichlorobenzene	50.0	44.6		ug/Kg		89	64 - 120
1,2,4-Trimethylbenzene	50.0	41.0		ug/Kg		82	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	38.0		ug/Kg		76	63 - 124
1,2-Dichlorobenzene	50.0	43.1		ug/Kg		86	75 - 120
1,2-Dichloroethane	50.0	44.6		ug/Kg		89	77 - 122
1,2-Dichloropropane	50.0	43.2		ug/Kg		86	75 - 124
1,3,5-Trimethylbenzene	50.0	41.3		ug/Kg		83	74 - 120
1,3-Dichlorobenzene	50.0	43.3		ug/Kg		87	74 - 120
1,4-Dichlorobenzene	50.0	43.4		ug/Kg		87	73 - 120
2-Butanone (MEK)	250	232		ug/Kg		93	70 - 134
2-Hexanone	250	220		ug/Kg		88	59 - 130
4-Isopropyltoluene	50.0	41.2		ug/Kg		82	74 - 120
4-Methyl-2-pentanone (MIBK)	250	205		ug/Kg		82	65 - 133
Acetone	250	253		ug/Kg		101	61 - 137
Benzene	50.0	45.5		ug/Kg		91	79 - 127
Bromoform	50.0	44.8		ug/Kg		90	68 - 126
Bromomethane	50.0	47.9		ug/Kg		96	37 - 149
Carbon disulfide	50.0	39.2		ug/Kg		78	64 - 131
Carbon tetrachloride	50.0	42.0		ug/Kg		84	75 - 135
Chlorobenzene	50.0	45.3		ug/Kg		91	76 - 124
Dibromochloromethane	50.0	45.3		ug/Kg		91	76 - 125
Chloroethane	50.0	47.2		ug/Kg		94	69 - 135
Chloroform	50.0	45.2		ug/Kg		90	80 - 120
Chloromethane	50.0	40.8		ug/Kg		82	63 - 127
cis-1,2-Dichloroethene	50.0	47.2		ug/Kg		94	81 - 120

TestAmerica Buffalo



# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: LCS 480-450059/23-A**  
**Matrix: Solid**  
**Analysis Batch: 450052**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 450059**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	50.0	38.6		ug/Kg		77	65 - 120
Bromodichloromethane	50.0	44.5		ug/Kg		89	80 - 122
Dichlorodifluoromethane	50.0	41.6		ug/Kg		83	57 - 142
Ethylbenzene	50.0	44.0		ug/Kg		88	80 - 120
1,2-Dibromoethane	50.0	46.9		ug/Kg		94	78 - 120
Isopropylbenzene	50.0	40.8		ug/Kg		82	72 - 120
Methyl acetate	100	87.2		ug/Kg		87	55 - 136
Methyl tert-butyl ether	50.0	46.0		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	41.6		ug/Kg		83	60 - 140
Methylene Chloride	50.0	46.7		ug/Kg		93	61 - 127
m,p-Xylene	50.0	43.5		ug/Kg		87	70 - 130
Naphthalene	50.0	43.3		ug/Kg		87	38 - 137
n-Butylbenzene	50.0	41.0		ug/Kg		82	70 - 120
N-Propylbenzene	50.0	40.8		ug/Kg		82	70 - 130
o-Xylene	50.0	43.6		ug/Kg		87	70 - 130
sec-Butylbenzene	50.0	40.8		ug/Kg		82	74 - 120
Tetrachloroethene	50.0	44.8		ug/Kg		90	74 - 122
Toluene	50.0	43.7		ug/Kg		87	74 - 128
trans-1,2-Dichloroethene	50.0	46.8		ug/Kg		94	78 - 126
trans-1,3-Dichloropropene	50.0	42.7		ug/Kg		85	73 - 123
Trichloroethene	50.0	46.1		ug/Kg		92	77 - 129
Trichlorofluoromethane	50.0	47.6		ug/Kg		95	65 - 146
Vinyl chloride	50.0	43.2		ug/Kg		86	61 - 133
cis-1,3-Dichloropropene	50.0	44.0		ug/Kg		88	80 - 120
Styrene	50.0	43.4		ug/Kg		87	80 - 120
tert-Butylbenzene	50.0	41.4		ug/Kg		83	73 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106		64 - 126
4-Bromofluorobenzene (Surr)	107		72 - 126
Toluene-d8 (Surr)	103		71 - 125
Dibromofluoromethane (Surr)	110		60 - 140

**Lab Sample ID: MB 480-450136/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450117**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450136**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		12/11/18 08:51	12/11/18 12:41	1

TestAmerica Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: MB 480-450136/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450117**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450136**

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
2-Hexanone	ND		25	2.5	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Acetone	ND		25	4.2	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Benzene	ND		5.0	0.25	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Bromoform	ND		5.0	2.5	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Bromomethane	ND		5.0	0.45	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Chloroethane	ND		5.0	1.1	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Chloroform	ND		5.0	0.31	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Chloromethane	ND		5.0	0.30	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Cyclohexane	ND		5.0	0.70	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Methyl acetate	ND		25	3.0	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
m,p-Xylene	ND		10	0.84	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
o-Xylene	ND		5.0	0.65	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Toluene	ND		5.0	0.38	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Trichloroethene	ND		5.0	1.1	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Xylenes, Total	ND		10	0.84	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
Styrene	ND		5.0	0.25	ug/Kg		12/11/18 08:51	12/11/18 12:41	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		12/11/18 08:51	12/11/18 12:41	1

TestAmerica Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: MB 480-450136/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450117**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450136**

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	105		64 - 126	12/11/18 08:51	12/11/18 12:41	1
4-Bromofluorobenzene (Surr)	104		72 - 126	12/11/18 08:51	12/11/18 12:41	1
Toluene-d8 (Surr)	102		71 - 125	12/11/18 08:51	12/11/18 12:41	1
Dibromofluoromethane (Surr)	108		60 - 140	12/11/18 08:51	12/11/18 12:41	1

**Lab Sample ID: LCS 480-450136/1-A**  
**Matrix: Solid**  
**Analysis Batch: 450117**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 450136**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	48.5		ug/Kg		97	77 - 121
1,1,1,2-Tetrachloroethane	50.0	48.9		ug/Kg		98	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	51.3		ug/Kg		103	60 - 140
1,1,2-Trichloroethane	50.0	51.5		ug/Kg		103	78 - 122
1,1-Dichloroethane	50.0	49.6		ug/Kg		99	73 - 126
1,1-Dichloroethene	50.0	50.8		ug/Kg		102	59 - 125
1,2,4-Trichlorobenzene	50.0	49.3		ug/Kg		99	64 - 120
1,2,4-Trimethylbenzene	50.0	46.5		ug/Kg		93	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	45.4		ug/Kg		91	63 - 124
1,2-Dichlorobenzene	50.0	48.8		ug/Kg		98	75 - 120
1,2-Dichloroethane	50.0	50.7		ug/Kg		101	77 - 122
1,2-Dichloropropane	50.0	50.4		ug/Kg		101	75 - 124
1,3,5-Trimethylbenzene	50.0	46.8		ug/Kg		94	74 - 120
1,3-Dichlorobenzene	50.0	48.4		ug/Kg		97	74 - 120
1,4-Dichlorobenzene	50.0	48.7		ug/Kg		97	73 - 120
2-Butanone (MEK)	250	267		ug/Kg		107	70 - 134
2-Hexanone	250	248		ug/Kg		99	59 - 130
4-Isopropyltoluene	50.0	46.4		ug/Kg		93	74 - 120
4-Methyl-2-pentanone (MIBK)	250	237		ug/Kg		95	65 - 133
Acetone	250	272		ug/Kg		109	61 - 137
Benzene	50.0	51.8		ug/Kg		104	79 - 127
Bromoform	50.0	50.6		ug/Kg		101	68 - 126
Bromomethane	50.0	40.6		ug/Kg		81	37 - 149
Carbon disulfide	50.0	46.1		ug/Kg		92	64 - 131
Carbon tetrachloride	50.0	47.1		ug/Kg		94	75 - 135
Chlorobenzene	50.0	50.8		ug/Kg		102	76 - 124
Dibromochloromethane	50.0	52.1		ug/Kg		104	76 - 125
Chloroethane	50.0	40.2		ug/Kg		80	69 - 135
Chloroform	50.0	51.1		ug/Kg		102	80 - 120
Chloromethane	50.0	41.4		ug/Kg		83	63 - 127
cis-1,2-Dichloroethene	50.0	52.5		ug/Kg		105	81 - 120
Cyclohexane	50.0	45.9		ug/Kg		92	65 - 120
Bromodichloromethane	50.0	50.9		ug/Kg		102	80 - 122
Dichlorodifluoromethane	50.0	42.0		ug/Kg		84	57 - 142
Ethylbenzene	50.0	48.5		ug/Kg		97	80 - 120
1,2-Dibromoethane	50.0	53.2		ug/Kg		106	78 - 120
Isopropylbenzene	50.0	46.2		ug/Kg		92	72 - 120

TestAmerica Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: LCS 480-450136/1-A**  
**Matrix: Solid**  
**Analysis Batch: 450117**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 450136**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methyl acetate	100	104		ug/Kg		104	55 - 136
Methyl tert-butyl ether	50.0	52.5		ug/Kg		105	63 - 125
Methylcyclohexane	50.0	47.8		ug/Kg		96	60 - 140
Methylene Chloride	50.0	53.7		ug/Kg		107	61 - 127
m,p-Xylene	50.0	48.6		ug/Kg		97	70 - 130
Naphthalene	50.0	50.1		ug/Kg		100	38 - 137
n-Butylbenzene	50.0	45.9		ug/Kg		92	70 - 120
N-Propylbenzene	50.0	45.8		ug/Kg		92	70 - 130
o-Xylene	50.0	48.5		ug/Kg		97	70 - 130
sec-Butylbenzene	50.0	46.0		ug/Kg		92	74 - 120
Tetrachloroethene	50.0	49.1		ug/Kg		98	74 - 122
Toluene	50.0	48.8		ug/Kg		98	74 - 128
trans-1,2-Dichloroethene	50.0	52.2		ug/Kg		104	78 - 126
trans-1,3-Dichloropropene	50.0	47.9		ug/Kg		96	73 - 123
Trichloroethene	50.0	51.4		ug/Kg		103	77 - 129
Trichlorofluoromethane	50.0	43.0		ug/Kg		86	65 - 146
Vinyl chloride	50.0	42.8		ug/Kg		86	61 - 133
cis-1,3-Dichloropropene	50.0	50.3		ug/Kg		101	80 - 120
Styrene	50.0	48.1		ug/Kg		96	80 - 120
tert-Butylbenzene	50.0	46.4		ug/Kg		93	73 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	103		64 - 126
4-Bromofluorobenzene (Surr)	105		72 - 126
Toluene-d8 (Surr)	102		71 - 125
Dibromofluoromethane (Surr)	108		60 - 140

**Lab Sample ID: MB 480-450229/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450795**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450229**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,1-Dichloroethane	ND		100	31	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,1-Dichloroethene	ND		100	35	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,2-Dichloroethane	ND		100	41	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,2-Dichloropropane	ND		100	16	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
2-Butanone (MEK)	ND		500	300	ug/Kg		12/11/18 14:21	12/13/18 22:13	1

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: MB 480-450229/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450795**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450229**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	ND		500	210	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
4-Isopropyltoluene	ND		100	34	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Acetone	ND		500	410	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Benzene	ND		100	19	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Bromoform	ND		100	50	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Bromomethane	ND		100	22	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Carbon disulfide	ND		100	46	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Carbon tetrachloride	ND		100	26	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Chlorobenzene	ND		100	13	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Dibromochloromethane	ND		100	48	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Chloroethane	ND		100	21	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Chloroform	ND		100	69	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Chloromethane	ND		100	24	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Cyclohexane	ND		100	22	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Bromodichloromethane	ND		100	20	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Ethylbenzene	ND		100	29	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
1,2-Dibromoethane	ND		100	18	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Isopropylbenzene	ND		100	15	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Methyl acetate	ND		500	48	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Methylcyclohexane	ND		100	47	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Methylene Chloride	ND		100	20	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
m,p-Xylene	ND		200	55	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
n-Butylbenzene	ND		100	29	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
N-Propylbenzene	ND		100	26	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
o-Xylene	ND		100	13	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
sec-Butylbenzene	ND		100	37	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Tetrachloroethene	ND		100	13	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Toluene	ND		100	27	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Trichloroethene	ND		100	28	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Trichlorofluoromethane	ND		100	47	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Vinyl chloride	ND		100	34	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Xylenes, Total	ND		200	55	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
Styrene	ND		100	24	ug/Kg		12/11/18 14:21	12/13/18 22:13	1
tert-Butylbenzene	ND		100	28	ug/Kg		12/11/18 14:21	12/13/18 22:13	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	87		53 - 146	12/11/18 14:21	12/13/18 22:13	1
4-Bromofluorobenzene (Surr)	109		49 - 148	12/11/18 14:21	12/13/18 22:13	1
Toluene-d8 (Surr)	89		50 - 149	12/11/18 14:21	12/13/18 22:13	1
Dibromofluoromethane (Surr)	87		60 - 140	12/11/18 14:21	12/13/18 22:13	1

TestAmerica Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: LCS 480-450229/1-A**

**Matrix: Solid**

**Analysis Batch: 450795**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 450229**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
1,1,1-Trichloroethane	2500	2640		ug/Kg		106	68 - 130
1,1,1,2-Tetrachloroethane	2500	2280		ug/Kg		91	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2710		ug/Kg		108	10 - 179
1,1,2-Trichloroethane	2500	2500		ug/Kg		100	80 - 120
1,1-Dichloroethane	2500	2670		ug/Kg		107	78 - 121
1,1-Dichloroethene	2500	2680		ug/Kg		107	48 - 133
1,2,4-Trichlorobenzene	2500	2570		ug/Kg		103	70 - 140
1,2,4-Trimethylbenzene	2500	2720		ug/Kg		109	77 - 127
1,2-Dibromo-3-Chloropropane	2500	2190		ug/Kg		88	56 - 122
1,2-Dichlorobenzene	2500	2680		ug/Kg		107	78 - 125
1,2-Dichloroethane	2500	2560		ug/Kg		102	74 - 127
1,2-Dichloropropane	2500	2560		ug/Kg		103	80 - 120
1,3,5-Trimethylbenzene	2500	2750		ug/Kg		110	79 - 120
1,3-Dichlorobenzene	2500	2650		ug/Kg		106	80 - 120
1,4-Dichlorobenzene	2500	2660		ug/Kg		106	80 - 120
2-Butanone (MEK)	12500	12100		ug/Kg		97	54 - 149
2-Hexanone	12500	12900		ug/Kg		103	59 - 127
4-Isopropyltoluene	2500	2880		ug/Kg		115	80 - 120
4-Methyl-2-pentanone (MIBK)	12500	12500		ug/Kg		100	74 - 120
Acetone	12500	14800		ug/Kg		119	47 - 141
Benzene	2500	2520		ug/Kg		101	77 - 125
Bromoform	2500	2500		ug/Kg		100	48 - 125
Bromomethane	2500	2180		ug/Kg		87	39 - 149
Carbon disulfide	2500	2210		ug/Kg		88	40 - 136
Carbon tetrachloride	2500	2620		ug/Kg		105	54 - 135
Chlorobenzene	2500	2620		ug/Kg		105	76 - 126
Dibromochloromethane	2500	2630		ug/Kg		105	64 - 120
Chloroethane	2500	3050		ug/Kg		122	23 - 150
Chloroform	2500	2600		ug/Kg		104	78 - 120
Chloromethane	2500	2250		ug/Kg		90	61 - 124
cis-1,2-Dichloroethene	2500	2500		ug/Kg		100	79 - 124
Cyclohexane	2500	2830		ug/Kg		113	49 - 129
Bromodichloromethane	2500	2510		ug/Kg		100	71 - 121
Dichlorodifluoromethane	2500	2160		ug/Kg		86	10 - 150
Ethylbenzene	2500	2660		ug/Kg		107	78 - 124
1,2-Dibromoethane	2500	2550		ug/Kg		102	80 - 120
Isopropylbenzene	2500	2730		ug/Kg		109	76 - 120
Methyl acetate	5000	4550		ug/Kg		91	71 - 123
Methyl tert-butyl ether	2500	2390		ug/Kg		96	67 - 137
Methylcyclohexane	2500	2860		ug/Kg		114	50 - 130
Methylene Chloride	2500	2350		ug/Kg		94	75 - 118
m,p-Xylene	2500	2790		ug/Kg		112	77 - 125
Naphthalene	2500	2410		ug/Kg		96	65 - 142
n-Butylbenzene	2500	2900		ug/Kg		116	80 - 120
N-Propylbenzene	2500	2710		ug/Kg		109	76 - 120
o-Xylene	2500	2610		ug/Kg		105	80 - 124
sec-Butylbenzene	2500	2800		ug/Kg		112	79 - 120

TestAmerica Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: LCS 480-450229/1-A**  
**Matrix: Solid**  
**Analysis Batch: 450795**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 450229**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Tetrachloroethene	2500	2800		ug/Kg		112	73 - 133
Toluene	2500	2650		ug/Kg		106	75 - 124
trans-1,2-Dichloroethene	2500	2510		ug/Kg		101	74 - 129
trans-1,3-Dichloropropene	2500	2570		ug/Kg		103	73 - 120
Trichloroethene	2500	2510		ug/Kg		101	75 - 131
Trichlorofluoromethane	2500	2980		ug/Kg		119	29 - 158
Vinyl chloride	2500	2390		ug/Kg		96	59 - 124
cis-1,3-Dichloropropene	2500	2420		ug/Kg		97	75 - 121
Styrene	2500	2660		ug/Kg		106	80 - 120
tert-Butylbenzene	2500	2860		ug/Kg		114	78 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	83		53 - 146
4-Bromofluorobenzene (Surr)	113		49 - 148
Toluene-d8 (Surr)	94		50 - 149
Dibromofluoromethane (Surr)	89		60 - 140

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

**Lab Sample ID: MB 480-450241/1-A**  
**Matrix: Solid**  
**Analysis Batch: 450628**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450241**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Acenaphthylene	ND		170	22	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Anthracene	ND		170	42	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Benzo[a]anthracene	ND		170	17	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Benzo[a]pyrene	ND		170	25	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Chrysene	ND		170	38	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Fluoranthene	ND		170	18	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Fluorene	ND		170	20	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Naphthalene	ND		170	22	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Phenanthrene	ND		170	25	ug/Kg		12/11/18 15:09	12/13/18 15:00	1
Pyrene	ND		170	20	ug/Kg		12/11/18 15:09	12/13/18 15:00	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	85		60 - 120	12/11/18 15:09	12/13/18 15:00	1
Nitrobenzene-d5 (Surr)	86		53 - 120	12/11/18 15:09	12/13/18 15:00	1
p-Terphenyl-d14 (Surr)	101		65 - 121	12/11/18 15:09	12/13/18 15:00	1

TestAmerica Buffalo

# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: LCS 480-450241/2-A**

**Matrix: Solid**

**Analysis Batch: 450628**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 450241**

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Acenaphthene	1660	1470		ug/Kg		89	62 - 120
Acenaphthylene	1660	1450		ug/Kg		87	58 - 121
Anthracene	1660	1570		ug/Kg		95	62 - 120
Benzo[a]anthracene	1660	1580		ug/Kg		95	65 - 120
Benzo[a]pyrene	1660	1670		ug/Kg		101	64 - 120
Benzo[b]fluoranthene	1660	1630		ug/Kg		98	64 - 120
Benzo[g,h,i]perylene	1660	1660		ug/Kg		100	45 - 145
Benzo[k]fluoranthene	1660	1690		ug/Kg		102	65 - 120
Chrysene	1660	1570		ug/Kg		94	64 - 120
Dibenz(a,h)anthracene	1660	1680		ug/Kg		101	54 - 132
Fluoranthene	1660	1670		ug/Kg		100	62 - 120
Fluorene	1660	1500		ug/Kg		90	63 - 120
Indeno[1,2,3-cd]pyrene	1660	1680		ug/Kg		101	56 - 134
Naphthalene	1660	1330		ug/Kg		80	55 - 120
Phenanthrene	1660	1560		ug/Kg		94	60 - 120
Pyrene	1660	1600		ug/Kg		96	61 - 133

Surrogate	LCS %Recovery	LCS Qualifier	Limits
2-Fluorobiphenyl	88		60 - 120
Nitrobenzene-d5 (Surr)	86		53 - 120
p-Terphenyl-d14 (Surr)	96		65 - 121

## Method: 6010C - Metals (ICP)

**Lab Sample ID: MB 480-450436/1-A**

**Matrix: Solid**

**Analysis Batch: 450845**

**Client Sample ID: Method Blank**

**Prep Type: Total/NA**

**Prep Batch: 450436**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.40	mg/Kg		12/13/18 09:13	12/13/18 23:19	1
Barium	0.214	J	0.50	0.11	mg/Kg		12/13/18 09:13	12/13/18 23:19	1
Cadmium	ND		0.20	0.030	mg/Kg		12/13/18 09:13	12/13/18 23:19	1
Chromium	ND		0.50	0.20	mg/Kg		12/13/18 09:13	12/13/18 23:19	1
Lead	0.547	J	0.99	0.24	mg/Kg		12/13/18 09:13	12/13/18 23:19	1
Selenium	ND		4.0	0.40	mg/Kg		12/13/18 09:13	12/13/18 23:19	1
Silver	ND		0.60	0.20	mg/Kg		12/13/18 09:13	12/13/18 23:19	1

**Lab Sample ID: LCSSRM 480-450436/2-A**

**Matrix: Solid**

**Analysis Batch: 450845**

**Client Sample ID: Lab Control Sample**

**Prep Type: Total/NA**

**Prep Batch: 450436**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	Limits
Arsenic	171	141.7		mg/Kg		82.8	66.1 - 122. 2
Barium	272	217.0		mg/Kg		79.8	71.7 - 119. 5
Cadmium	225	173.3		mg/Kg		77.0	70.2 - 117. 3

TestAmerica Buffalo



# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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

**Lab Sample ID: LCSSRM 480-450436/2-A**  
**Matrix: Solid**  
**Analysis Batch: 450845**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 450436**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Chromium	144	118.9		mg/Kg		82.6	66.1 - 122.9
Lead	111	113.9		mg/Kg		102.6	71.0 - 128.8
Selenium	206	168.8		mg/Kg		81.9	63.6 - 122.3
Silver	45.5	38.50		mg/Kg		84.6	66.2 - 124.2

## Method: 7471B - Mercury (CVAA)

**Lab Sample ID: MB 480-450453/1-A**  
**Matrix: Solid**  
**Analysis Batch: 450507**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450453**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0078	mg/Kg		12/12/18 12:36	12/12/18 14:00	1

**Lab Sample ID: LCSSRM 480-450453/2-A ^10**  
**Matrix: Solid**  
**Analysis Batch: 450507**

**Client Sample ID: Lab Control Sample**  
**Prep Type: Total/NA**  
**Prep Batch: 450453**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	12.46		mg/Kg		103.8	57.3 - 133.3

**Lab Sample ID: 480-146502-2 MS**  
**Matrix: Solid**  
**Analysis Batch: 450507**

**Client Sample ID: SB-2 (3-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 450453**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	23.1	F2	0.431	10.29	4	mg/Kg	☼	-2964	80 - 120

**Lab Sample ID: 480-146502-2 MSD**  
**Matrix: Solid**  
**Analysis Batch: 450507**

**Client Sample ID: SB-2 (3-5)**  
**Prep Type: Total/NA**  
**Prep Batch: 450453**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Mercury	23.1	F2	0.426	18.99	4 F2	mg/Kg	☼	-959	80 - 120	59	20

## Method: 9012B - Cyanide, Total and/or Amenable

**Lab Sample ID: MB 480-450929/1-A**  
**Matrix: Solid**  
**Analysis Batch: 450977**

**Client Sample ID: Method Blank**  
**Prep Type: Total/NA**  
**Prep Batch: 450929**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cyanide, Total	ND		0.85	0.41	mg/Kg		12/14/18 11:30	12/14/18 14:20	1

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# QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Method: 9012B - Cyanide, Total and/or Amenable (Continued)

Lab Sample ID: LCS 480-450929/2-A  
Matrix: Solid  
Analysis Batch: 450977

Client Sample ID: Lab Control Sample  
Prep Type: Total/NA  
Prep Batch: 450929

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Cyanide, Total	39.3	40.95		mg/Kg		104	29 - 122

- 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 - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## GC/MS VOA

### Analysis Batch: 449888

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	8260C	449915
MB 480-449915/2-A	Method Blank	Total/NA	Solid	8260C	449915
LCS 480-449915/1-A	Lab Control Sample	Total/NA	Solid	8260C	449915

### Prep Batch: 449915

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	5035A_L	
MB 480-449915/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-449915/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

### Analysis Batch: 450052

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-12	SB-15 (9-12)	Total/NA	Solid	8260C	450059
MB 480-450059/2-A	Method Blank	Total/NA	Solid	8260C	450059
LCS 480-450059/23-A	Lab Control Sample	Total/NA	Solid	8260C	450059

### Prep Batch: 450059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-12	SB-15 (9-12)	Total/NA	Solid	5035A_L	
MB 480-450059/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-450059/23-A	Lab Control Sample	Total/NA	Solid	5035A_L	

### Analysis Batch: 450117

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-14	SB-17 (4-6)	Total/NA	Solid	8260C	450136
MB 480-450136/2-A	Method Blank	Total/NA	Solid	8260C	450136
LCS 480-450136/1-A	Lab Control Sample	Total/NA	Solid	8260C	450136

### Prep Batch: 450136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-14	SB-17 (4-6)	Total/NA	Solid	5035A_L	
MB 480-450136/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-450136/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

### Prep Batch: 450229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-7	SB-13 (2-4)	Total/NA	Solid	5035A_H	
480-146502-10	SB-15 (3-4)	Total/NA	Solid	5035A_H	
480-146502-11	SB-15 (4-6)	Total/NA	Solid	5035A_H	
480-146502-16	SB-19 (4-6)	Total/NA	Solid	5035A_H	
480-146502-17	SB-19 (10-11)	Total/NA	Solid	5035A_H	
MB 480-450229/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-450229/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	

### Analysis Batch: 450795

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-7	SB-13 (2-4)	Total/NA	Solid	8260C	450229
480-146502-10	SB-15 (3-4)	Total/NA	Solid	8260C	450229
480-146502-11	SB-15 (4-6)	Total/NA	Solid	8260C	450229
480-146502-16	SB-19 (4-6)	Total/NA	Solid	8260C	450229
480-146502-17	SB-19 (10-11)	Total/NA	Solid	8260C	450229

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# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## GC/MS VOA (Continued)

### Analysis Batch: 450795 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-450229/2-A	Method Blank	Total/NA	Solid	8260C	450229
LCS 480-450229/1-A	Lab Control Sample	Total/NA	Solid	8260C	450229

## GC/MS Semi VOA

### Prep Batch: 450241

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-1	SB-1 (3-4)	Total/NA	Solid	3550C	
480-146502-2	SB-2 (3-5)	Total/NA	Solid	3550C	
480-146502-3	SB-5 (1-3)	Total/NA	Solid	3550C	
480-146502-4	SB-6 (0-3)	Total/NA	Solid	3550C	
480-146502-5	SB-8 (2-4)	Total/NA	Solid	3550C	
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	3550C	
480-146502-7	SB-13 (2-4)	Total/NA	Solid	3550C	
480-146502-8	SB-9 (2-4)	Total/NA	Solid	3550C	
480-146502-9	SB-14 (2-4)	Total/NA	Solid	3550C	
480-146502-10	SB-15 (3-4)	Total/NA	Solid	3550C	
480-146502-13	SB-17 (2-4)	Total/NA	Solid	3550C	
480-146502-15	SB-19 (3-4)	Total/NA	Solid	3550C	
MB 480-450241/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-450241/2-A	Lab Control Sample	Total/NA	Solid	3550C	

### Analysis Batch: 450628

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-1	SB-1 (3-4)	Total/NA	Solid	8270D	450241
480-146502-2	SB-2 (3-5)	Total/NA	Solid	8270D	450241
480-146502-3	SB-5 (1-3)	Total/NA	Solid	8270D	450241
480-146502-4	SB-6 (0-3)	Total/NA	Solid	8270D	450241
480-146502-5	SB-8 (2-4)	Total/NA	Solid	8270D	450241
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	8270D	450241
480-146502-7	SB-13 (2-4)	Total/NA	Solid	8270D	450241
480-146502-8	SB-9 (2-4)	Total/NA	Solid	8270D	450241
480-146502-9	SB-14 (2-4)	Total/NA	Solid	8270D	450241
480-146502-10	SB-15 (3-4)	Total/NA	Solid	8270D	450241
480-146502-13	SB-17 (2-4)	Total/NA	Solid	8270D	450241
MB 480-450241/1-A	Method Blank	Total/NA	Solid	8270D	450241
LCS 480-450241/2-A	Lab Control Sample	Total/NA	Solid	8270D	450241

### Analysis Batch: 450895

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-15	SB-19 (3-4)	Total/NA	Solid	8270D	450241

## Metals

### Prep Batch: 450436

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-1	SB-1 (3-4)	Total/NA	Solid	3050B	
480-146502-2	SB-2 (3-5)	Total/NA	Solid	3050B	
480-146502-3	SB-5 (1-3)	Total/NA	Solid	3050B	
480-146502-4	SB-6 (0-3)	Total/NA	Solid	3050B	

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# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Metals (Continued)

### Prep Batch: 450436 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-5	SB-8 (2-4)	Total/NA	Solid	3050B	
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	3050B	
480-146502-7	SB-13 (2-4)	Total/NA	Solid	3050B	
480-146502-8	SB-9 (2-4)	Total/NA	Solid	3050B	
480-146502-9	SB-14 (2-4)	Total/NA	Solid	3050B	
480-146502-10	SB-15 (3-4)	Total/NA	Solid	3050B	
480-146502-13	SB-17 (2-4)	Total/NA	Solid	3050B	
480-146502-15	SB-19 (3-4)	Total/NA	Solid	3050B	
MB 480-450436/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-450436/2-A	Lab Control Sample	Total/NA	Solid	3050B	

### Prep Batch: 450453

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-1	SB-1 (3-4)	Total/NA	Solid	7471B	
480-146502-2	SB-2 (3-5)	Total/NA	Solid	7471B	
480-146502-3	SB-5 (1-3)	Total/NA	Solid	7471B	
480-146502-4	SB-6 (0-3)	Total/NA	Solid	7471B	
480-146502-5	SB-8 (2-4)	Total/NA	Solid	7471B	
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	7471B	
480-146502-7	SB-13 (2-4)	Total/NA	Solid	7471B	
480-146502-8	SB-9 (2-4)	Total/NA	Solid	7471B	
480-146502-9	SB-14 (2-4)	Total/NA	Solid	7471B	
480-146502-10	SB-15 (3-4)	Total/NA	Solid	7471B	
480-146502-13	SB-17 (2-4)	Total/NA	Solid	7471B	
480-146502-15	SB-19 (3-4)	Total/NA	Solid	7471B	
MB 480-450453/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-450453/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	
480-146502-2 MS	SB-2 (3-5)	Total/NA	Solid	7471B	
480-146502-2 MSD	SB-2 (3-5)	Total/NA	Solid	7471B	

### Analysis Batch: 450507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-1	SB-1 (3-4)	Total/NA	Solid	7471B	450453
480-146502-2	SB-2 (3-5)	Total/NA	Solid	7471B	450453
480-146502-3	SB-5 (1-3)	Total/NA	Solid	7471B	450453
480-146502-4	SB-6 (0-3)	Total/NA	Solid	7471B	450453
480-146502-5	SB-8 (2-4)	Total/NA	Solid	7471B	450453
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	7471B	450453
480-146502-7	SB-13 (2-4)	Total/NA	Solid	7471B	450453
480-146502-8	SB-9 (2-4)	Total/NA	Solid	7471B	450453
480-146502-9	SB-14 (2-4)	Total/NA	Solid	7471B	450453
480-146502-10	SB-15 (3-4)	Total/NA	Solid	7471B	450453
480-146502-13	SB-17 (2-4)	Total/NA	Solid	7471B	450453
480-146502-15	SB-19 (3-4)	Total/NA	Solid	7471B	450453
MB 480-450453/1-A	Method Blank	Total/NA	Solid	7471B	450453
LCSSRM 480-450453/2-A ^1	Lab Control Sample	Total/NA	Solid	7471B	450453
480-146502-2 MS	SB-2 (3-5)	Total/NA	Solid	7471B	450453
480-146502-2 MSD	SB-2 (3-5)	Total/NA	Solid	7471B	450453

# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Metals (Continued)

### Analysis Batch: 450845

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-1	SB-1 (3-4)	Total/NA	Solid	6010C	450436
480-146502-2	SB-2 (3-5)	Total/NA	Solid	6010C	450436
480-146502-3	SB-5 (1-3)	Total/NA	Solid	6010C	450436
480-146502-4	SB-6 (0-3)	Total/NA	Solid	6010C	450436
480-146502-5	SB-8 (2-4)	Total/NA	Solid	6010C	450436
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	6010C	450436
480-146502-7	SB-13 (2-4)	Total/NA	Solid	6010C	450436
480-146502-8	SB-9 (2-4)	Total/NA	Solid	6010C	450436
480-146502-9	SB-14 (2-4)	Total/NA	Solid	6010C	450436
480-146502-10	SB-15 (3-4)	Total/NA	Solid	6010C	450436
480-146502-13	SB-17 (2-4)	Total/NA	Solid	6010C	450436
480-146502-15	SB-19 (3-4)	Total/NA	Solid	6010C	450436
MB 480-450436/1-A	Method Blank	Total/NA	Solid	6010C	450436
LCS SRM 480-450436/2-A	Lab Control Sample	Total/NA	Solid	6010C	450436

### Analysis Batch: 450918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-2	SB-2 (3-5)	Total/NA	Solid	6010C	450436
480-146502-9	SB-14 (2-4)	Total/NA	Solid	6010C	450436
480-146502-10	SB-15 (3-4)	Total/NA	Solid	6010C	450436
480-146502-15	SB-19 (3-4)	Total/NA	Solid	6010C	450436

### Analysis Batch: 450984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-3	SB-5 (1-3)	Total/NA	Solid	6010C	450436

## General Chemistry

### Analysis Batch: 450007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-11	SB-15 (4-6)	Total/NA	Solid	Moisture	
480-146502-12	SB-15 (9-12)	Total/NA	Solid	Moisture	
480-146502-14	SB-17 (4-6)	Total/NA	Solid	Moisture	
480-146502-16	SB-19 (4-6)	Total/NA	Solid	Moisture	
480-146502-17	SB-19 (10-11)	Total/NA	Solid	Moisture	

### Analysis Batch: 450715

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-1	SB-1 (3-4)	Total/NA	Solid	Moisture	
480-146502-2	SB-2 (3-5)	Total/NA	Solid	Moisture	
480-146502-3	SB-5 (1-3)	Total/NA	Solid	Moisture	
480-146502-4	SB-6 (0-3)	Total/NA	Solid	Moisture	
480-146502-5	SB-8 (2-4)	Total/NA	Solid	Moisture	
480-146502-6	SB-11 (2.5-3.5)	Total/NA	Solid	Moisture	
480-146502-7	SB-13 (2-4)	Total/NA	Solid	Moisture	
480-146502-8	SB-9 (2-4)	Total/NA	Solid	Moisture	
480-146502-9	SB-14 (2-4)	Total/NA	Solid	Moisture	
480-146502-10	SB-15 (3-4)	Total/NA	Solid	Moisture	
480-146502-13	SB-17 (2-4)	Total/NA	Solid	Moisture	
480-146502-15	SB-19 (3-4)	Total/NA	Solid	Moisture	

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# QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## General Chemistry (Continued)

### Prep Batch: 450929

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-5	SB-8 (2-4)	Total/NA	Solid	9012B	
MB 480-450929/1-A	Method Blank	Total/NA	Solid	9012B	
LCS 480-450929/2-A	Lab Control Sample	Total/NA	Solid	9012B	
LCSSRM 480-450929/3-A ^2	Lab Control Sample	Total/NA	Solid	9012B	

### Analysis Batch: 450977

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-146502-5	SB-8 (2-4)	Total/NA	Solid	9012B	450929
MB 480-450929/1-A	Method Blank	Total/NA	Solid	9012B	450929
LCS 480-450929/2-A	Lab Control Sample	Total/NA	Solid	9012B	450929
LCSSRM 480-450929/3-A ^2	Lab Control Sample	Total/NA	Solid	9012B	450929

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-1 (3-4)**

**Date Collected: 12/05/18 09:40**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-1**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-1 (3-4)**

**Date Collected: 12/05/18 09:40**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-1**

**Matrix: Solid**

**Percent Solids: 93.1**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		5	450628	12/13/18 17:07	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 00:23	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:03	BMB	TAL BUF

**Client Sample ID: SB-2 (3-5)**

**Date Collected: 12/05/18 10:00**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-2**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-2 (3-5)**

**Date Collected: 12/05/18 10:00**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-2**

**Matrix: Solid**

**Percent Solids: 76.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		20	450628	12/13/18 17:32	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 00:38	AMH	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		5	450918	12/14/18 10:33	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		250	450507	12/12/18 14:41	BMB	TAL BUF

**Client Sample ID: SB-5 (1-3)**

**Date Collected: 12/05/18 11:00**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-3**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF



# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-5 (1-3)**

**Date Collected: 12/05/18 11:00**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-3**

**Matrix: Solid**

**Percent Solids: 79.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		5	450628	12/13/18 17:58	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 00:42	AMH	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		5	450984	12/14/18 14:57	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:19	BMB	TAL BUF

**Client Sample ID: SB-6 (0-3)**

**Date Collected: 12/05/18 11:40**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-4**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-6 (0-3)**

**Date Collected: 12/05/18 11:40**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-4**

**Matrix: Solid**

**Percent Solids: 75.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		5	450628	12/13/18 18:24	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 00:46	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:20	BMB	TAL BUF

**Client Sample ID: SB-8 (2-4)**

**Date Collected: 12/05/18 12:45**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-5**

**Matrix: Solid**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-8 (2-4)**

**Date Collected: 12/05/18 12:45**

**Date Received: 12/07/18 17:15**

**Lab Sample ID: 480-146502-5**

**Matrix: Solid**

**Percent Solids: 65.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		1	450628	12/13/18 18:50	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF

TestAmerica Buffalo

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-8 (2-4)**

**Lab Sample ID: 480-146502-5**

**Date Collected: 12/05/18 12:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 65.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1	450845	12/14/18 00:50	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:22	BMB	TAL BUF
Total/NA	Prep	9012B			450929	12/14/18 11:30	CLT	TAL BUF
Total/NA	Analysis	9012B		1	450977	12/14/18 14:47	CAP	TAL BUF

**Client Sample ID: SB-11 (2.5-3.5)**

**Lab Sample ID: 480-146502-6**

**Date Collected: 12/05/18 15:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-11 (2.5-3.5)**

**Lab Sample ID: 480-146502-6**

**Date Collected: 12/05/18 15:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 73.7**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			449915	12/10/18 10:25	CDC	TAL BUF
Total/NA	Analysis	8260C		1	449888	12/10/18 14:15	AEM	TAL BUF
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		20	450628	12/13/18 19:15	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 00:54	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:26	BMB	TAL BUF

**Client Sample ID: SB-13 (2-4)**

**Lab Sample ID: 480-146502-7**

**Date Collected: 12/06/18 10:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-13 (2-4)**

**Lab Sample ID: 480-146502-7**

**Date Collected: 12/06/18 10:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 71.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			450229	12/11/18 14:21	OMI	TAL BUF
Total/NA	Analysis	8260C		2	450795	12/14/18 00:46	LCH	TAL BUF
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		20	450628	12/13/18 19:41	RJS	TAL BUF

TestAmerica Buffalo

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 00:58	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:27	BMB	TAL BUF

**Client Sample ID: SB-9 (2-4)**

**Lab Sample ID: 480-146502-8**

**Date Collected: 12/05/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-9 (2-4)**

**Lab Sample ID: 480-146502-8**

**Date Collected: 12/05/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 67.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		1	450628	12/13/18 20:07	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 01:02	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:28	BMB	TAL BUF

**Client Sample ID: SB-14 (2-4)**

**Lab Sample ID: 480-146502-9**

**Date Collected: 12/06/18 11:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-14 (2-4)**

**Lab Sample ID: 480-146502-9**

**Date Collected: 12/06/18 11:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 84.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		20	450628	12/13/18 20:33	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 01:06	AMH	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		5	450918	12/14/18 10:36	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:29	BMB	TAL BUF

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (3-4)**

**Lab Sample ID: 480-146502-10**

Date Collected: 12/06/18 11:45

Matrix: Solid

Date Received: 12/07/18 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-15 (3-4)**

**Lab Sample ID: 480-146502-10**

Date Collected: 12/06/18 11:45

Matrix: Solid

Date Received: 12/07/18 17:15

Percent Solids: 79.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			450229	12/11/18 14:21	OMI	TAL BUF
Total/NA	Analysis	8260C		20	450795	12/14/18 01:13	LCH	TAL BUF
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		5	450628	12/13/18 20:58	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 01:25	AMH	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		5	450918	12/14/18 10:40	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:31	BMB	TAL BUF

**Client Sample ID: SB-15 (4-6)**

**Lab Sample ID: 480-146502-11**

Date Collected: 12/06/18 11:45

Matrix: Solid

Date Received: 12/07/18 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450007	12/10/18 15:17	CDC	TAL BUF

**Client Sample ID: SB-15 (4-6)**

**Lab Sample ID: 480-146502-11**

Date Collected: 12/06/18 11:45

Matrix: Solid

Date Received: 12/07/18 17:15

Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			450229	12/11/18 14:21	OMI	TAL BUF
Total/NA	Analysis	8260C		10	450795	12/14/18 01:40	LCH	TAL BUF

**Client Sample ID: SB-15 (9-12)**

**Lab Sample ID: 480-146502-12**

Date Collected: 12/06/18 11:45

Matrix: Solid

Date Received: 12/07/18 17:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450007	12/10/18 15:17	CDC	TAL BUF

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-15 (9-12)**

**Lab Sample ID: 480-146502-12**

**Date Collected: 12/06/18 11:45**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 84.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			450059	12/10/18 22:57	AEM	TAL BUF
Total/NA	Analysis	8260C		1	450052	12/11/18 08:12	CDC	TAL BUF

**Client Sample ID: SB-17 (2-4)**

**Lab Sample ID: 480-146502-13**

**Date Collected: 12/06/18 01:33**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-17 (2-4)**

**Lab Sample ID: 480-146502-13**

**Date Collected: 12/06/18 01:33**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 88.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		1	450628	12/13/18 21:24	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 01:29	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:32	BMB	TAL BUF

**Client Sample ID: SB-17 (4-6)**

**Lab Sample ID: 480-146502-14**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450007	12/10/18 15:17	CDC	TAL BUF

**Client Sample ID: SB-17 (4-6)**

**Lab Sample ID: 480-146502-14**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 86.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			450136	12/11/18 08:51	CDC	TAL BUF
Total/NA	Analysis	8260C		1	450117	12/11/18 13:14	AEM	TAL BUF

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
 Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-19 (3-4)**

**Lab Sample ID: 480-146502-15**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450715	12/13/18 14:19	CMK	TAL BUF

**Client Sample ID: SB-19 (3-4)**

**Lab Sample ID: 480-146502-15**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 76.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			450241	12/11/18 15:09	SGD	TAL BUF
Total/NA	Analysis	8270D		5	450895	12/14/18 13:58	RJS	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		1	450845	12/14/18 01:33	AMH	TAL BUF
Total/NA	Prep	3050B			450436	12/13/18 09:13	JMP	TAL BUF
Total/NA	Analysis	6010C		5	450918	12/14/18 10:44	AMH	TAL BUF
Total/NA	Prep	7471B			450453	12/12/18 12:36	BMB	TAL BUF
Total/NA	Analysis	7471B		1	450507	12/12/18 14:33	BMB	TAL BUF

**Client Sample ID: SB-19 (4-6)**

**Lab Sample ID: 480-146502-16**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450007	12/10/18 15:17	CDC	TAL BUF

**Client Sample ID: SB-19 (4-6)**

**Lab Sample ID: 480-146502-16**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 82.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			450229	12/11/18 14:21	OMI	TAL BUF
Total/NA	Analysis	8260C		10	450795	12/14/18 02:08	LCH	TAL BUF

**Client Sample ID: SB-19 (10-11)**

**Lab Sample ID: 480-146502-17**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	450007	12/10/18 15:17	CDC	TAL BUF

# Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

**Client Sample ID: SB-19 (10-11)**

**Lab Sample ID: 480-146502-17**

**Date Collected: 12/06/18 14:00**

**Matrix: Solid**

**Date Received: 12/07/18 17:15**

**Percent Solids: 82.0**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			450229	12/11/18 14:21	OMI	TAL BUF
Total/NA	Analysis	8260C		8	450795	12/14/18 02:35	LCH	TAL BUF

**Laboratory References:**

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

- 1
- 2
- 3
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- 14
- 15

# Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

## Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-19

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

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 - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

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
9012B	Cyanide, Total and/or Amenable	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF
9012B	Cyanide, Total and/or Amenable, Distillation	SW846	TAL BUF

#### Protocol References:

EPA = US Environmental Protection Agency

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

#### Laboratory References:

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

# Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC  
Project/Site: Benchmark - 250 Lake Ave. site

TestAmerica Job ID: 480-146502-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-146502-1	SB-1 (3-4)	Solid	12/05/18 09:40	12/07/18 17:15
480-146502-2	SB-2 (3-5)	Solid	12/05/18 10:00	12/07/18 17:15
480-146502-3	SB-5 (1-3)	Solid	12/05/18 11:00	12/07/18 17:15
480-146502-4	SB-6 (0-3)	Solid	12/05/18 11:40	12/07/18 17:15
480-146502-5	SB-8 (2-4)	Solid	12/05/18 12:45	12/07/18 17:15
480-146502-6	SB-11 (2.5-3.5)	Solid	12/05/18 15:00	12/07/18 17:15
480-146502-7	SB-13 (2-4)	Solid	12/06/18 10:00	12/07/18 17:15
480-146502-8	SB-9 (2-4)	Solid	12/05/18 14:00	12/07/18 17:15
480-146502-9	SB-14 (2-4)	Solid	12/06/18 11:00	12/07/18 17:15
480-146502-10	SB-15 (3-4)	Solid	12/06/18 11:45	12/07/18 17:15
480-146502-11	SB-15 (4-6)	Solid	12/06/18 11:45	12/07/18 17:15
480-146502-12	SB-15 (9-12)	Solid	12/06/18 11:45	12/07/18 17:15
480-146502-13	SB-17 (2-4)	Solid	12/06/18 01:33	12/07/18 17:15
480-146502-14	SB-17 (4-6)	Solid	12/06/18 14:00	12/07/18 17:15
480-146502-15	SB-19 (3-4)	Solid	12/06/18 14:00	12/07/18 17:15
480-146502-16	SB-19 (4-6)	Solid	12/06/18 14:00	12/07/18 17:15
480-146502-17	SB-19 (10-11)	Solid	12/06/18 14:00	12/07/18 17:15

**Chain of Custody Record**

<b>Client Information</b>		Lab PM: Fischer, Brian J		Carrier Tracking No(s):		COC No: 480-122259-28049.2	
Client Contact: Bryan Mayback		E-Mail: brian.fischer@testamericainc.com		Phone: 716-856-0599		Page: Page 2 of 2	
Company: Benchmark Env. Eng. & Science, PLLC		Address: 2558 Hamburg Turnpike		City: Lackawanna		State, Zip: NY, 14218	
Phone: 716-856-0599		PO #: D472-018-001		TAT Requested (days): Standard		Preservation Codes:	
Email: bmayback@turnkeyllc.com		Project #: 48019310		SSOW#:		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Project Name: Benchmark - 250 Lake Ave. site		Site:		Due Date Requested:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecylaldrate U - Acetone V - MCAA W - PH 4-5 Z	
<b>Sample Identification</b>		<b>Sample Date</b>		<b>Sample Time</b>		<b>Sample Type (C=Comp, G=grab)</b>	
SB-1 (3-4)		12/5/18		9:40		G	
SB-2 (3-5)		12/5/18		1000		Solid	
SB-5 (1-3)		12/5/18		1100		Solid	
SB-6 (0-3)		12/5/18		1140		Solid	
SB-8 (2-4)		12/5/18		12:45		Solid	
SB-11 (2.5-3.5)		12/5/18		1500		Solid	
SB-13 (2-4)		12/6/18		1000		Solid	
SB-9 (2-4)		12/5/18		1400		Solid	
SB-14 (2-4)		12/6/18		1100		Solid	
SB-15 (3-4)		12/6/18		11:45		Solid	
SB-15 (4-6)		12/6/18		11:45		Solid	
<b>Possible Hazard Identification</b>		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant	
Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Poison B		<input checked="" type="checkbox"/> Unknown		<input type="checkbox"/> Radiological	
<b>Empty Kit Relinquished by:</b>		Date:		Time:		Method of Shipment:	
Relinquished by: Paul Bell		12/16/18		1700		Company: BMTK	
Relinquished by: Rebecca Gray		12/18/18		1715		Company: TAL	
Relinquished by:		Date:		Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		312 #1 ICE		Cooler Temperature(s) °C and Other Remarks:	



### Chain of Custody Record

Client Information		Lab PM:		Carrier Tracking No(s):	
Company: <b>Benchmark Env. Eng. &amp; Science, PLLC</b> Address: <b>2558 Hamburg Turnpike</b> City: <b>Lackawanna</b> State/Zip: <b>NY, 14218</b> Phone: <b>716-856-0599</b> Email: <b>bmayback@turnkeyllc.com</b>		Fischer, Brian J E-Mail: <b>brian.fischer@testamericainc.com</b>		COC No: <b>480-122259-28049.1</b> Page: <b>Page 1 of 2</b> Job #:	
Due Date Requested:		Analysis Requested		Preservation Codes:	
TAT Requested (days): <b>Standard</b> PO #: <b>0472-018-001</b> WO #:		Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> N <input checked="" type="checkbox"/> N 8260C - (MOD) TCL list OLM04.2 + CP-5(1-Stars)		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Sample Identification		Sample Date		Sample Time	
SB-15 (9-12) SB-17 (2-4) SB-17 (4-6) SB-19 (3-4) SB-19 (4-6) SB-19 (10-11)		12/16/18 ↓ ↓ ↓ ↓ ↓		11:45 1330 1330 1400 1400 1400	
Sample Type (C=Comp, G=grab)		Sample Matrix (Water, Solid, On-surface, Air)		Field Filtered Sample (Yes or No)	
6 ↓ ↓ ↓ ↓ ↓		Solid Solid Solid Solid Solid Solid Solid Solid Solid Solid		X X X X X X X X X X	
Sample Disposal		Special Instructions/Note:		Total Number of Containers	
Return To Client <input type="checkbox"/> Archive For _____ Months Disposal By Lab <input checked="" type="checkbox"/>		Special Instructions/Note:		1 1 1 1 1 1	
Possible Hazard Identification		Deliverable Requested:		Empty Kit Relinquished by:	
Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/>		I, II, III, IV, Other (specify)		Date: _____ Method of Shipment: _____	
Relinquished by:		Date/Time:		Company:	
[Signature]		12/16/18 1700		[Signature]	
Relinquished by:		Date/Time:		Company:	
[Signature]		12/17/18 1715		[Signature]	
Relinquished by:		Date/Time:		Company:	
[Signature]		12/17/18 1715		[Signature]	
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	
Δ Yes Δ No		912 # (ICP)		9.2 # (ICP)	



## Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-146502-1

**Login Number: 146502**

**List Source: TestAmerica Buffalo**

**List Number: 1**

**Creator: Kinecki, Kenneth P**

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
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	