Phase II Environmental Investigation Report

Ganson Street Parcels
Northern Property – 389 and 395 Ganson Street
Southern Property – 305, 323, 339 Ganson Street
Buffalo, New York

March 2019

B0476-018-001

Prepared For:

Buffalo Riverworks, LLC

Prepared By:

BENCHMARK
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PHASE II ENVIRONMENTAL INVESTIGATION REPORT

GANSON STREET PARCELS

NORTHERN PROPERTY - 389 AND 395 GANSON STREET

SOUTHERN PROPERTY - 305, 323, 339 GANSON STREET

BUFFALO, NEW YORK

March 2019 B0476-018-001

Prepared for:

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Buffalo, New York

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BUFFALO, 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 Buffalo Riverworks, LLC at the following properties located in the City of Buffalo, Erie County, New York (Site):

Parcel Address	Size (acres)	Tax ID No.	Current Use
NORTHERN PROPERTY			
389 Ganson Street[1]	1.99	122.09-2-1.11	Cement storage and processing facility (St. Mary's Cement)
395 Ganson Street	1.11	122.09-2-1.2	Vacant grain elevator/silo structure with a former garage area.
SOUTHERN PROPERTY			
305 Ganson Street	0.84	122.09-2-9	Asphalt parking lot
323 Ganson Street	0.65	122.09-2-10	One single story brick building currently utilized as a workshop and storage area and an asphalt parking lot.
339 Ganson Street	1.30	122.09-2-2.111	One vacant grain elevator/silo building with portions utilized as a recreational facility and miscellaneous storage for Buffalo Riverworks.

The Site is located in a highly developed commercial and industrial area of the City of Buffalo (see Figure 1). The Site, consisting of the five parcels detailed above, totals approximately 5.9 acres (3.1 acre northern property, 2.8 acre southern property) and is supplied with and has access to municipal sanitary sewer, electric, natural-gas, and public water.

As further detailed below, Benchmark completed a Phase I Environmental Site Assessment (ESA) for the Site.

[1] As further detailed herein, a Phase II Environmental Study by others was used as the basis for subsurface environmental conditions at this parcel.

1.2 Previous Studies

Benchmark completed two separate Phase I ESAs for the Northern and Southern Properties dated January 2019. The following provides a summary of historic Site uses and recognized environmental conditions (RECs) identified through Benchmark's review of historic sources including Sanborn maps, city directories, regulatory documents and municipal records.

NORTHERN PROPERTY SUMMARY

Approximate Years	Reported or Suspected Use	Owner/Occupant
1889 to present	Industrial. The Site has historically been used as a lumber yard, a linseed oil factory/storage facility and a grain milling, storage, and processing operation. In addition, the Site historically included a coal and oil building, a machine shop, railroad tracks and a boat dock/slip (Kellogg Slip/Pratt and Wadham Slip) that was backfilled with fill materials from unknown origins. Current operations include cement storage and processing, warehousing and an office. The Site has an extensive tank history. Historic Sanborn maps indicate the presence of process tanks such as multiple bulk linseed oil and other oil storage tanks. Municipal records indicate one 1,000-gallon gasoline underground storage tank (UST) installed in 1955, one 4,000-gallon diesel fuel UST installed in 1959 and one 4,000-gallon diesel fuel UST removed in 1965. Proper tank removal documentation is unavailable.	Previous owners/occupants: Spencer Kellogg, N.Y.C.R.R. Co., A.M. McLeod, Buffalo Leasing Inc., Geo. J. Meyer Malt & Grain Corp., Division of Triangle Trans., F&M Schaefer Brewing Co., St. Mary's, Esso, Buffalo Leasing Division of Triangle Trans. Co. Current Owner/occupant: - 389 Ganson Street: St. Mary's Cement Inc (US) - 395 Ganson Street: Ketry RE LLC

The following provides a summary of a previous Subsurface Investigation completed at the northern property at the 389 Ganson Street parcel:

"Subsurface Investigation, St. Mary's Cement Inc., 389 Ganson Street, Buffalo, New York, completed by GZA GeoEnvironmental of New York (GZA)," dated November 8, 2013. The work was completed under Spill No. 1216319 assigned to the Site in February 2013 when an "oil sheen" was observed between depths of 10 to 14 feet below ground surface (fbgs) during a geotechnical investigation by others. The purpose of GZA's investigation was to further assess subsurface conditions the "oil sheen" area.

GZA completed four soil borings (SP-1 through SP-4) to depths ranging between 3.5 fbgs and 20 fbgs. One boring was converted into a temporary one-inch diameter monitoring well. According to GZA, shallow equipment refusal (i.e., 1.5 fbgs to 2 fbgs), possibly due to

former building foundation materials, was encountered at ten boring attempts within the study area.

According to GZA, fill material consisting of sand and gravel mixed with varying amounts of brick, slag and wood fragments was observed at each boring to depths estimated between 3.5 fbgs and 8 fbgs. Groundwater was noted ranging between 8.5 fbgs and 12 fbgs.

Two soil samples and one groundwater sample were submitted to the laboratory for analytical testing. Specifically, soil/fill samples from SP-2 (16 fbgs to 20 fbgs) and SP-4 (12 fbgs to 16 fbgs) were analyzed for New York State Department of Environmental Conservation (NYSDEC) Commissioner Policy-51 (CP-51) volatile organic compounds (VOCs) and base-neutral semi-volatile organic compounds (SVOCs). The soil/fill sample from SP-2 was also analyzed for petroleum hydrocarbons. The groundwater sample from SP-2 was analyzed for CP-51 VOCs base-neutral SVOCs and petroleum hydrocarbons. Analytical results indicate the presence of base-neutral SVOCs, including polycyclic aromatic hydrocarbons (PAHs), at concentrations exceeding Part 375 Unrestricted Use Soil Cleanup Objectives (USCO), Commercial SCOs (CSCOs) and/or Industrial SCOs (ISCOs) in the soil/fill sample from SP-2. In addition, a petroleum hydrocarbon (petroleum fingerprint is characteristic of lube oil) concentration of 3,090,000 micrograms per kilogram (ug/kg) was identified in the soil/fill from SP-2. No VOCs or base-neutral SVOCs were identified in the groundwater sample collected from SP-2. A petroleum hydrocarbon concentration of 685 micrograms per liter (ug/L) was identified in the groundwater sample from SP-2.

GZA concluded that the petroleum contamination identified is likely attributed to urban fill materials from an off-site source. GZA recommended that the information be provided to the NYSDEC for their review and comments.

Although remedial work was not completed, Spill No. 1216319 was reclassified as "inactive" by the NYSDEC on November 13, 2013.

Benchmark's investigation revealed the following RECs in connection with the northern property:

- The long history of on-Site industrial operations (i.e., lumber yard, grain silos/elevators and grain milling/malting) with various associated equipment/materials, railroad tracks, process tanks, a coal/oil building, a machine shop and the reasonably anticipated historic use and storage of hazardous/regulated materials.

- A previous Phase II Environmental Investigation by others on a portion of the Site documented the presence of petroleum-impacted soil/fill on-Site.
- The Site has an extensive petroleum UST history; sufficient tank closure documentation is unavailable.
- Fill materials due to the potential for impacts, especially as a former dry dock/boat slip that covered a large portion of the Site was filled in with fill materials from unknown origins.
- Railroad tracks due to the potential for impacts.

SOUTHERN PROPERTY SUMMARY

Approximate Years	Reported or Suspected Use	Owner/Occupant
At least 1889 through 1935	The Site was a portion of a lumber yard with a planing mill and engine room in at least 1889 and a portion of a warehouse, dry dock and ship yard operation with a boat slip, railroad tracks and former commercial/industrial buildings from at least 1889 through approx. 1935.	C.T. Wilson's Lumber Yard, R. Mills Dry Docks and Ship Yard, Commercial Transportation Co., and Buffalo Drydock Co.
At least 1935 to current	Industrial and commercial. The Site/existing buildings were a portion of the greater Co Operative GLF Mills Inc. with grain elevators, car pullers/motor houses, engine/motor rooms, railroad tracks. The former dry dock/boat slip was filled in sometime prior to 1981. The larger existing building was formerly used as a grain elevator (abandoned between 1968 and 1972) and remains vacant. The smaller existing building was formerly used as a firehouse and is currently used as a workshop and storage facility. In addition, historic on-Site operations included vehicle washing/pressure washing operations from at least 1998 through at least 2001.	Previous owners/operators include Merchant and Shippers, Spencer Kellogg Sons Co., J.W. Cowper, 339 Ganson Group LLC, 8112 Group Inc., Ontario Specialty Contracting Inc. Current owner/operator: Ketry RE LLC and Ontario Specialty Contracting.

Benchmark's investigation revealed the following RECs in connection with the southern property:

- The long history of on-Site industrial operations including a lumber yard, a dry dock/ship yard, grain silos/elevators and grain milling/malting with various associated equipment/materials, a floor drain, railroad tracks and the reasonably anticipated historic use and storage of hazardous/regulated materials. In addition, historic operations included vehicle wash/pressure wash operations and the 1995 spill incident associated with the Site suggests vehicle repair with oil changes, etc.
- The capped suspect fill port as such is suspected by Benchmark to be associated with an UST.
- The miscellaneous piping noted at the Site as the nature of the pipes is unknown.

- Fill materials due to the potential for impacts, especially as a former dry dock/boat slip was filled in with fill materials from unknown origins.
- Railroad tracks due to the potential for impacts.

In consideration of the RECs detailed above, this Phase II was completed to assess subsurface soil/fill and groundwater conditions at the Site.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 Soil Boring Investigation

On February 27, 2019 and February 28, 2019, Benchmark's subcontractor, TREC Environmental, Inc. (TREC), mobilized a direct-push drill rig (Geoprobe) equipped with a two-inch diameter, 48-inch long macro-core sampler to the Site to assess subsurface conditions on exterior portions of the Site. Figure 2 shows nine soil borings (NP SB-1 through NP SB-9) completed on the Northern Property (395 Ganson Street and proximate to 389 Ganson Street) and Figure 3 shows nine additional soil borings designated as SP SB-1 through SP SB-9 completed at the Southern Property (305, 323, 339 Ganson Street)

The physical characteristics of all soil borings were classified using the ASTM D2488 Visual-Manual Procedure Description. Soil/fill from each soil boring was screened via headspace screening using a MiniRae 2000 Photoionization Detector (PID). Visual and/or olfactory observations, if any, were noted. All field observations, including lithology, depths, PID scan results, etc., at each investigation location are summarized on the soil boring logs included in Appendix A. Photographs taken during the work are included in Appendix B.

A total of eleven soil/fill samples were selected for laboratory analysis for Target Compound List (TCL) plus CP-51 VOCs, PAHs, Resource Conservation and Recovery Act (RCRA) metals, and/or polychlorinated biphenyls (PCBs). The soil samples collected as part of the investigation were transported under chain-of custody command for analysis to TestAmerica Laboratories, Inc. (TestAmerica) in Amherst, New York. Samples were collected in laboratory provided sample jars and cooled to 4 C° prior to transport.

2.2 Groundwater Sampling

One soil boring at the northern property (NP SB-3W) and one additional boring at the southern property (SP SB-2W) were converted into temporary one-inch diameter monitoring wells. The temporary wells were installed using one-inch diameter Schedule 40 PVC well screen and riser. Groundwater grab samples were collected from the temporary wells using a dedicated and disposable 0.5" polyethylene bailer subsequent to purging a minimum of three well volumes from each well. The temporary wells were manually decommissioned (pulled) following groundwater sampling activities. The resulting open annulus was backfilled with Site soils.

Two groundwater samples were placed in pre-cleaned laboratory provided sample bottles, cooled to 4 °C in the field, and transported under chain-of-custody to TestAmerica for analysis of TCL plus CP-51 VOCs.

3.0 INVESTIGATION FINDINGS

3.1 Site Geology/Hydrogeology

The overburden geology observed during the soil boring investigation is generally described as non-native black granular fill materials of varying thickness across the Site at depths ranging between 2 fbgs and 13 fbgs overlying native soils consisting of sandy lean clay to a depth of at least 28 fbgs (see the Soil Boring Logs provided in Appendix A). Fill materials encountered during this investigation consisted of gravel or clay with sand and/or black granular material mixed with cinders, brick, coal, concrete, and/or glass. A minimal amount of slag was noted intermingled with fill material at certain borings (SP SB-3, SP SB-4, SP SB-5, SP SP-6, NP SB-2, and NP SB-3).

Groundwater was encountered during the drilling work at all soil borings at varying depths generally ranging between 3 fbgs to 9 fbgs.

Groundwater flow is likely to the east toward the Buffalo River. 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 description of the field observations during the soil boring investigations are presented below:

Investigation Location ID	Environmental Concern Assessed	Highest PID reading (parts per million, ppm) and depth (fbgs)	Other Observations
Northern Property			
NP SB-1	Former building and railroad tracks.	0	Fill to 5 fbgs.
NP SB-2	Existing railroad tracks.	0	Fill to 9 fbgs.
NP SB-3	Former boat slip that was backfilled with unknown materials.	89.7 ppm at 24 fbgs	Fill to 13 fbgs. Black staining and petroleum-like odors from 10 to 28 fbgs.
NP SB-4		0	Fill to 4 fbgs.
NP SB-5		0	Fill to 5 fbgs. Non-descript odor from 1 to 5 fbgs.

Investigation Location ID	Environmental Concern Assessed	Highest PID reading (parts per million, ppm) and depth (fbgs)	Other Observations
NP SB-6	Former diesel fuel UST and existing railroad tracks.	0	Fill to 3 fbgs.
NP SB-7	Suspect concrete pad and existing railroad tracks, proximate to former UST areas.	0	Fill to 2 fbgs.
NP SB-8	Former gasoline UST and pump island locations, existing railroad tracks.	0	Fill to 5 fbgs.
NP SB-9	West of vacant silo building and garage.	0	Fill to 5 fbgs.
Southern Property			
SP SB-1	West of vacant grain silos and railroad track areas.	0	Fill to 5.5 fbgs.
SP SB-2	Eastern down-gradient end of the Site.	0	Fill to 6.5 fbgs.
SP SB-3	Existing railroad tracks.	0	Fill to 4 fbgs.
SP SB-4		0	Fill to 5 fbgs.
SP SB-5	Former dry dock that was backfilled with unknown materials.	0	Fill to 8 fbgs.
SP SB-6	Former joiner shop/general site conditions.	0	Fill to 5 fbgs.
SP SB-7	Former planing mill, engine house, and railroad tracks.	0	Fill to 3 fbgs.
SP SB-8	Former building and railroad tracks.	0	Fill to 5 fbgs.
SP SB-9	Suspect remote fill port for presumed UST (unknown location).	2.3 ppm, 2-5 fbgs	Fill to 2 fbgs. Slight petroleum-like odors.

3.3 Soil Analytical Results

Table 1 presents a summary of the laboratory analytical results. For comparative purposes, Table 1 includes CP-51 Soil Cleanup Levels (SCLs), 6NYCRR Part 375 USCOs, CSCOs, and ISCOs. Appendix C contains a copy of the laboratory analytical data package.

PAHs were identified at concentrations exceeding CP-51 SCLs, USCOs, CSCOs and/or ISCOs in six soil/fill samples collected across the Site at SP SB-2, SP SB-3, SP SB-4, SP SB-5, SP SB-9 and NP SB-5.

Arsenic exceeded its ISCO at NP SB-4 and NP SB-9. Arsenic exceeded its USCO at NP SB-3. Additional metals (i.e., chromium, lead and/or mercury) exceeded their respective USCOs in all soil/fill samples except SP SB-9.

To a lesser extent, VOCs (1,4-dichlorobenzene, chlorobenzene, methylene chloride and total xylenes) were identified at concentrations exceeding CP-51 SCLs and USCOs at

NP SB-3 in the former boat slip area where field observations indicated black staining and petroleum-like odors.

PCBs were not identified at a concentration above laboratory detection limits in the soil/fill samples collected across the Site.

3.4 Groundwater Analytical Results

Groundwater sample results are summarized on Table 2 with comparison to Class GA Groundwater Quality Standards (GWQS) per NYSDEC Technical and Operational Guidance Series (TOGS 1.1.1). A copy of the complete laboratory analytical data package is included in Appendix C.

As summarized on Table 2, VOCs were either not detected above laboratory detection limits or concentrations were significantly below their respective Class GA GWQS.

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 5.9 acre Site (3.1 acre northern property and 2.8 acre southern property) has a long commercial and industrial history with operations including lumber yards, a ship yard, grain silos/elevators, grain milling/malting, a linseed oil factory, a machine shop, and a coal and oil building. Various equipment/materials, railroad tracks, process tanks and petroleum USTs were identified in connection with former operations. In addition, boat dock/slips located on-Site were previously backfilled and brought to grade with fill materials from unknown origins.
- The highest PID reading identified during the work (89.7 ppm) was identified at NP SB-3 in a former boat dock/slip area. Black staining and petroleum-like odors were identified at NP SB-3. As further detailed below, low level VOC exceedances were identified in soil/fill at NP SB-3. No analytical VOC concerns were identified in groundwater NP SB-3. The second highest PID reading (2.3 ppm) was identified proximate to a suspect fill port for a presumed UST (unknown location/disposition) at SP SB-9; slight petroleum-like odors were also noted.
- A previous geotechnical investigation by others on the northern property (at 389 Ganson Street) in February 2013 identified a subsurface "oil sheen" and a subsequent Phase II, also by others, in November 2013 under Spill No. 1216319 identified petroleum-impacted fill material with SVOCs (including PAHs) yielding concentrations above USCOs, CSCOs and/or ISCOs. Petroleum fingerprint results reportedly indicate that the contamination identified is characteristic of lube oil. Although remedial work was not completed, Spill No. 1216319 was reclassified as "inactive" by the NYSDEC on November 13, 2013.
- Benchmarks investigation identified non-native black granular fill materials consisting of cinders, brick, coal, concrete, and/or glass of varying thickness across the Site at depths ranging between 2 fbgs and 13 fbgs. A minimal amount of slag was noted intermingled with fill material at certain borings (SP SB-3, SP SB-4, SP SB-5, SP SP-6, NP SB-2, and NP SB-3).
- 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, VOCs were identified in soil/fill at concentrations exceeding CP-51 SCLs and USCOs at NP SB-3.
- VOC concentrations in groundwater samples were either not detected above laboratory detection limits or were at concentrations below GWQS.
- We understand that the property is being considered for redevelopment for commercial purposes. Based on the findings detailed above with concentrations in

soil/fill exceeding the intended commercial end-use, the Site is a potential candidate for the New York Brownfield Cleanup Program (BCP). Regardless of whether the BCP is pursued, impacted fill present on-Site will require exposure control, remediation and/or proper soil management either prior to or during the redevelopment project.

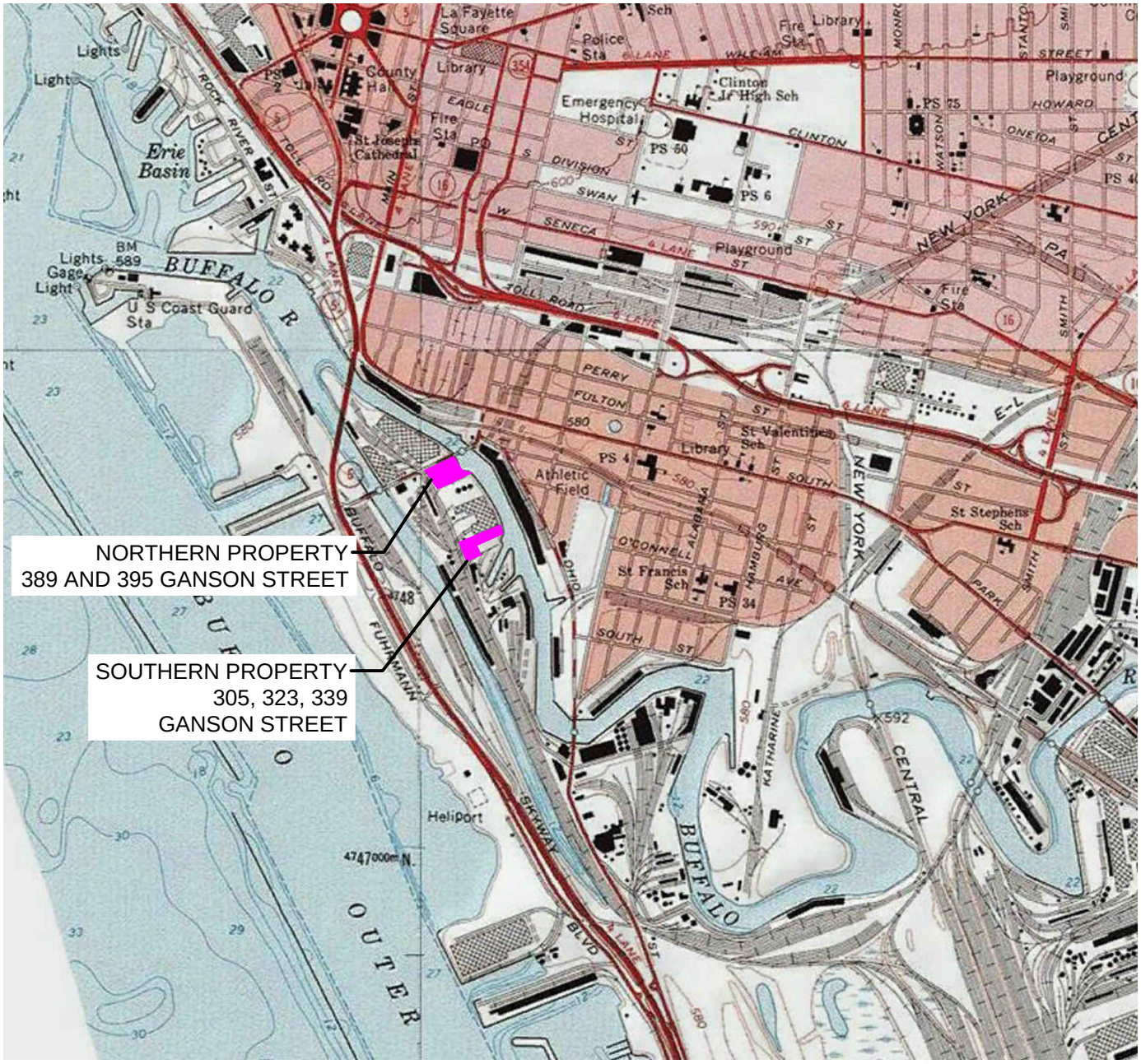
5.0 LIMITATIONS

This report has been prepared for the exclusive use of Buffalo Riverworks, 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 Buffalo Riverworks, 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

F:\CAD\Benchmark\Buffalo Riverworks\Phase II\Figure 1 - Site Location and Vicinity Map.dwg

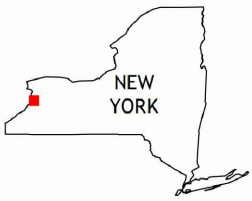
FIGURE 1



N

2000' 0' 2000' 4000'

SCALE: 1 INCH = 2000 FEET
SCALE IN FEET
(approximate)



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DATE: MARCH 2019

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SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION REPORT
GANSON STREET PARCELS
NORTHERN PROPERTY - 389 AND 395 GANSON STREET
SOUTHERN PROPERTY - 305, 323, 339 GANSON STREET
BUFFALO, NEW YORK
PREPARED FOR
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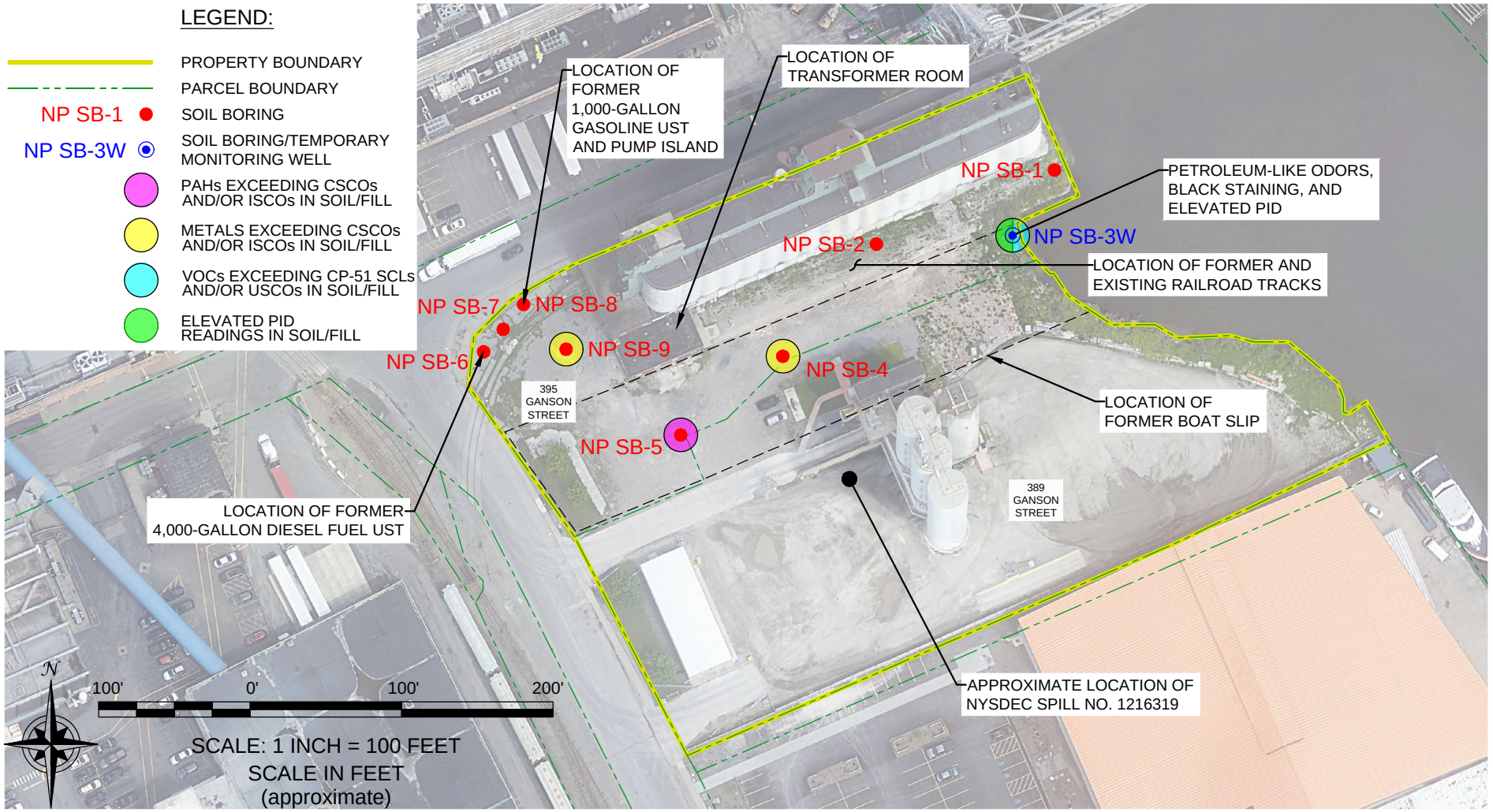
F:\CAD\Benchmark\Buffalo Riverworks\Phase II\Figure 2 - Investigation Locations and Areas of Concern (395).dwg



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INVESTIGATION LOCATIONS AND AREAS OF CONCERN NORTHERN PROPERTY

PHASE II ENVIRONMENTAL INVESTIGATION REPORT
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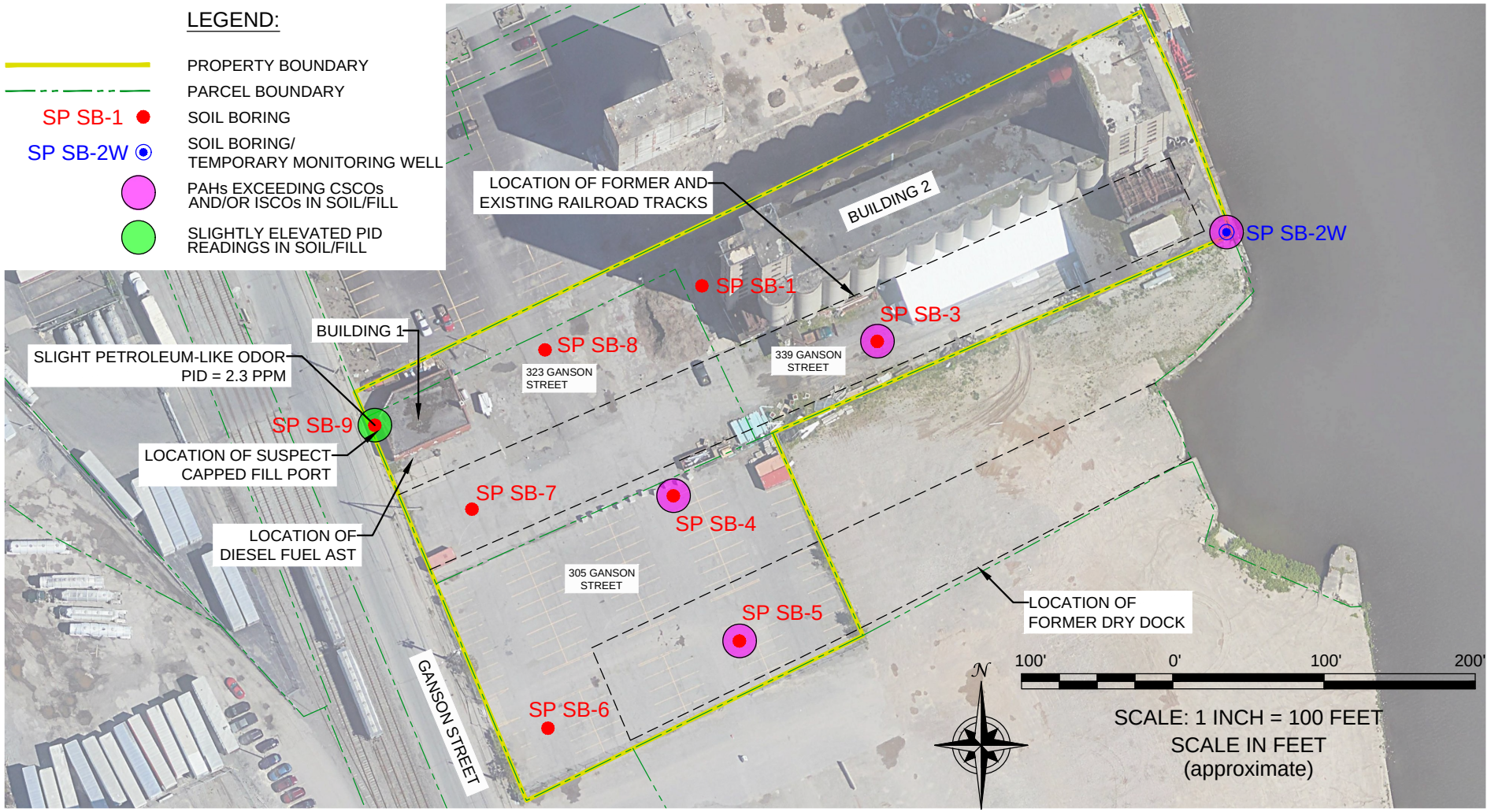
BUFFALO RIVERWORKS LLC

FIGURE 2

F:\CAD\Benchmark\Buffalo Riverworks\Phase II\Figure 3 - Investigation Locations and Areas of Concern (305-339).dwg



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INVESTIGATION LOCATIONS AND AREAS OF CONCERN
SOUTHERN PROPERTY

PHASE II ENVIRONMENTAL INVESTIGATION REPORT
GANSON STREET PARCELS
NORTHERN PROPERTY - 389 AND 395 GANSON STREET
SOUTHERN PROPERTY - 305, 323, 339 GANSON STREET
BUFFALO, NEW YORK
PREPARED FOR
BUFFALO RIVERWORKS LLC

FIGURE 3

TABLES

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC

TABLE 1

SUMMARY OF SUBSURFACE SOIL/FILL SAMPLE ANALYTICAL RESULTS

PHASE II ENVIRONMENTAL INVESTIGATION REPORT

NORTHERN PROPERTY 389 AND 395 GANSON STREET
SOUTHERN PROPERTY 305, 323, 339 GANSON STREET
BUFFALO, NEW YORK

PARAMETER[1]	CP-51 SCLs [2]	Unrestricted Use SCOs [3]	Commercial Use SCOs [3]	Industrial Use SCOs [3]	Sample Location (Depth - ft)										
					NP SB-3 (8-12')	NP SB-3 (16-20')	NP SB-4 (1-3')	NP SB-5 (3-5')	NP SB-9 (3-5')	SP SB-2 (3-5')	SP SB-3 (2-4')	SP SB-4 (1-3')	SP SB-5 (3-5')	SP SB-8 (3-5')	SP SB-9 (3-5')
					389 AND 395 GANSON STREET (NORTHERN PROPERTY)					305, 323, 339 GANSON STREET (SOUTHERN PROPERTY)					
					2/28/2019					2/27/2019					
Volatile Organic Compounds (VOCs) - mg/Kg [4]															
1,2,4-Trimethylbenzene	**3.6**	**3.6**	**190**	**380**	0.088 J	0.91 J	--	--	--	--	--	--	--	--	0.0017 J F1 vs
1,3-Dichlorobenzene	**2.4**	**2.4**	**280**	**560**	ND	0.47 J	--	--	--	--	--	--	--	--	ND
1,4-Dichlorobenzene	**1.8**	**1.8**	**130**	**250**	ND	**3.8**	--	--	--	--	--	--	--	--	ND
2-Butanone (MEK)	**--**	**0.12**	**500**	**1000**	ND	ND	--	--	--	--	--	--	--	--	0.0044 J F1 vs
Acetone	**--**	**0.05**	**500**	**1000**	ND	ND	--	--	--	--	--	--	--	--	0.02 J vs
Benzene	**0.06**	**0.06**	**44**	**89**	ND	ND	--	--	--	--	--	--	--	--	0.00041 J vs
Chlorobenzene	**--**	**1.1**	**500**	**1000**	0.23 J	**2.2**	--	--	--	--	--	--	--	--	ND
Chloroform		**0.37**	**350**	**700**	ND	ND	--	--	--	--	--	--	--	--	0.00049 J B vs
Cyclohexane	**--**	**--**	**--**	**--**	ND	0.49 J	--	--	--	--	--	--	--	--	ND
Isopropylbenzene (Cumene)	**2.3**	**--**	**--**	**--**	ND	0.57 J	--	--	--	--	--	--	--	--	0.0076 F1 vs
Methylcyclohexane	**--**	**--**	**--**	**--**	ND	2	--	--	--	--	--	--	--	--	ND
Methylene chloride	**--**	**0.05**	**500**	**1000**	**0.11 J B**	**0.45 J B**	--	--	--	--	--	--	--	--	0.0095 B vs
n-Butylbenzene	**12**	**12**	**500**	**1000**	ND	1.3 J	--	--	--	--	--	--	--	--	ND
n-Propylbenzene	**3.9**	**3.9**	**500**	**1000**	ND	ND	--	--	--	--	--	--	--	--	0.0034 J F1 vs
sec-Butylbenzene	**11**	**11**	**500**	**1000**	ND	0.75 J	--	--	--	--	--	--	--	--	0.0059 J F1 vs
tert-Butylbenzene	**5.9**	**5.9**	**500**	**1000**	ND	ND	--	--	--	--	--	--	--	--	0.0023 J F1 vs
Total Xylenes	**0.26**	**0.26**	**500**	**1000**	0.073 J	**0.89 J**	--	--	--	--	--	--	--	--	0.0016 J F1 vs
Polycyclic Aromatic Hydrocarbons (PAHs) - mg/Kg [4]															
Acenaphthene	**20**	**20**	**500**	**1000**	0.99	--	ND	6.2 J	ND	0.26 J	3.5	ND	ND	ND	ND
Anthracene	**100**	**100**	**500**	**1000**	1	--	ND	11	ND	0.69 J	7.5	ND	ND	ND	ND
Benzo(a)anthracene	**1**	**1**	**5.6**	**11**	0.89	--	ND	**14**	0.21 J	**2.4**	**9.9**	**1.2 J**	**2.3 J**	ND	0.44 J
Benzo(a)pyrene	**1**	**1**	**1**	**1.1**	0.68	--	ND	**12**	0.18 J	**2**	**8.2**	**1.2 J**	**2 J**	ND	ND
Benzo(b)fluoranthene	**1**	**1**	**5.6**	**11**	0.83	--	ND	**15**	0.24 J	**2.8**	**9.4**	**1.8 J**	**2.8 J**	0.77 J	0.94 J
Benzo(ghi)perylene	**100**	**100**	**500**	**1000**	0.35 J	--	ND	6.8 J	0.15 J	1.4	4.7	1.2 J	1.5 J	0.53 J	0.62 J
Benzo(k)fluoranthene	**0.8**	**0.8**	**56**	**110**	0.27 J	--	ND	**5.5 J**	ND	**1.1**	**4.5**	ND	**1.6 J**	ND	ND
Chrysene	**1**	**1**	**56**	**110**	0.76	--	ND	**13**	ND	**2.5**	**8.9**	**1.6 J**	**2.7 J**	ND	ND
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	**1.1**	ND	--	ND	ND	ND	ND	**1.2**	ND	ND	ND	ND
Fluoranthene	**100**	**100**	**500**	**1000**	2.3	--	ND	37	0.37 J	4.8	20	2.8 J	5.6	1.2 J	1.7 J
Fluorene	**30**	**30**	**500**	**1000**	1.6	--	ND	14	ND	0.19 J	3.5	ND	ND	ND	ND
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	**11**	0.35 J	--	ND	**7.2 J**	ND	**1.1**	**4.3**	**1 J**	**1.3 J**	ND	**0.54 J**
Naphthalene	**12**	**12**	**500**	**1000**	0.12 J	--	ND	9.5 J	ND	ND	0.59 J	ND	ND	ND	ND
Phenanthrene	**100**	**100**	**500**	**1000**	2.8	--	ND	48	0.39 J	3	21	1.3 J	4	ND	ND
Pyrene	**100**	**100**	**500**	**1000**	1.7	--	ND	26	0.32 J	4	17	2.4 J	4.5	1.1 J	1.3 J
Total PAHs	**--**	**--**	**--**	**--**	14.64 J	--	0	225.2 J	1.86 J	26.24 J	124.19 J	14.5 J	28.3 J	3.6 J	5.54 J
Metals - mg/Kg															
Arsenic	**--**	**13**	**16**	**16**	**15.1**	--	**17**	5.6	**16.5**	7.7 F1	6.8	8.7	6.3	6.9	3.6
Barium	**--**	**350**	**400**	**10000**	96.1	--	137	92.4	240	177	130	191	173	102	116
Cadmium	**--**	**2.5**	**9.3**	**60**	0.74	--	0.49	0.37	0.52	0.56 F1	0.42	0.42	0.43	0.57	0.22 J
Chromium	**--**	**30**	**1500**	**6800**	**49.5**	--	10.3	14.7	22.5	12 F2	26.3	27.2	15.6	**30.2**	7
Lead	**--**	**63**	**1000**	**3900**	**130**	--	**137**	57.9	**175**	**568 F2**	**151**	**143**	**162**	**424**	44.1
Mercury	**--**	**0.18**	**2.8**	**5.7**	**2.4**	--	**0.25**	0.12	**1.8**	**0.65 F1**	**0.2**	0.097	**0.25**	**0.47**	0.041
Selenium	**--**	**3.9**	**1500**	**6800**	ND	--	0.97 J	ND	ND	1.3 J F1	ND	2 J	0.59 J	0.97 J	0.93 J
Silver	**--**	**2**	**1500**	**6800**	ND	--	ND	ND	0.76	ND	--	ND	ND	ND	ND
Polychlorinated biphenyls (PCBs) - mg/Kg															
Total PCBs	**--**	**0.1**	**1**	**25**	ND	ND	ND	ND	--	ND	--	--	ND	--	--

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
2. Values per NYSDEC CP-51 Soil Cleanup Levels (SCLs) for petroleum impacted sites.
3. Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs).
4. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to 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.
F1 = MS and/or MSD recovery is outside acceptance limits.
F2 = MS/MSD RPD exceeds control limits.
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.
B = Compound was found in blank and sample.

Bold	= Result exceeds Unrestricted Use SCOs and/or CP-51 SCL.
Bold	= Result exceeds Commercial Use SCOs.
Bold	= Result exceeds Industrial use SCOs.

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TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
PHASE II ENVIRONMENTAL INVESTIGATION REPORT
NORTHERN PROPERTY 389 AND 395 GANSON STREET
SOUTHERN PROPERTY 305, 323, 339 GANSON STREET
BUFFALO, NEW YORK

PARAMETER[1]	GWQS[2]	Sample Location	
		SB-3W	SB-2W
		389 AND 395 GANSON STREET (NORTHERN PROPERTY)	305, 323, 339 GANSON STREET (SOUTHERN PROPERTY)
		2/28/2019	2/27/2019
Volatile Organic Compounds (VOCs) - ug/L			
Acetone	**50**	4 J	39
Carbon disulfide	**--**	0.27 J	0.46 J
Cyclohexane	**--**	0.21 J	ND
Methylene Chloride	**5**	ND	1.2 J
Methylcyclohexane	**--**	0.42 J	ND

Notes:
1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC Division of Water Ambient Water Quality Standards and Guidance Values and Groundwater Effluent Limitations - Class GA (TOGS 1.1.1)

Definitions:
ND = Parameter not detected above laboratory detection limit.
J = Estimted Value - Below calibration range.

APPENDIX A

SOIL BORING LOGS

Project No: B0476-018-001

Borehole Number: NP SB-1

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 0.0	Ground Surface ***Fill - Gravel and Sand*** Brown to grey, moist, mostly angular gravel, some fine sand, no odor.			79%		0.0 0.0 0.0 0.0		
5.0	-5.0 5.0	***Native - Lean Clay*** Reddish brown, moist to wet at 7 fbgs, mostly medium plastic fines, trace fine sand, some sub-angular gravel, medium density, mediu toughness, no odor.			77%		0.0 0.0 0.0 0.0		*Water level*
	-8.0 8.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-2

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 50 – 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Fill - Gravel and Sand*** Brown, moist, mostly agular gravel, some fine sand, trace slag and red brick, no odor.					0.0		
	-1.5 / 1.5	***Fill - Reworked Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand, some slag chunks, some angular gravel, medium density, medium toughness, no odor.			81%		0.0		
	-3.5 / 3.5	***Fill - Fine Sand with Concrete and Brick*** Light brown, moist, mostly fine sand, large broken concrete chunks and red brick, no odor.					0.0		
	-4.5 / 4.5	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines, some red brick, trace cinders, no odor.					0.0		
5.0					38%		0.0		Water level
	-6.5 / 6.5	***Fill - Fine Sand and Gravel*** Black to brown, moist to wet at 7 fbgs, mostly fine sand, some sub-angular gravel, no odor.					0.0		
	-9.0 / 9.0	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium density, medium toughness, no odor.					0.0		
10.0					58%		0.0		
	-12.0 / 12.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-3

Project: Phase II

A.K.A.: NP SB-3W

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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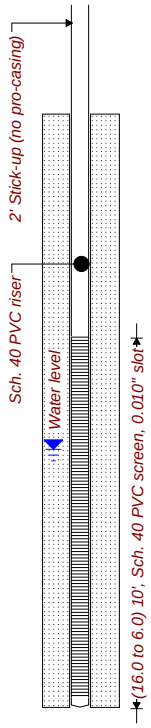
Buffalo, NY 14218
(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 50 – 100)	Lab Sample	Well Completion Details or Remarks
-3.0									
	0.0	Ground Surface							
	0.0	***Fill - Gravel with Sand*** Brown, moist, mostly angular gravel, some fine sand, some red brick, no odor.					0.0		
	-2.0						0.0		
2.0	2.0	***Fill - Black Granular*** Black, moist to wet at 9 fbgs, mostly medium grained granular fines and sand, some red brick, trace slag and cinders, petroleum-like odor from 10 to 13 fbgs, slight sheen where wet.			71%		0.0		
							0.0		
							0.0		
					27%		0.0		
7.0							0.0		
							0.0		
							1.7		
					73%		2.2	Sample Location	
							44.1		
12.0							45.7		
	-13.0						57.8		
	13.0	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium density, soft, petroleum-like odor, black staining.			67%		47.1		
							17.4		
							33.4		
17.0							44.1		
							43.2		
					58%		28.5	Sample Location	
							24.2		
							30.1		
22.0							44.6		
					67%		35.8		
							89.7		
							45.6		
					77%		35.8		
27.0							21.8		
	-28.0						35.4		
	28.0	End of Borehole							



Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up: 2'
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-4

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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Buffalo, NY 14218
(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Fill - Gravel and Sand*** Brown to grey, mostly angular gravel, some fine sand, no odor.					0.0		
	-0.5 / 0.5								
	-1.0 / 1.0	***Fill - Red Brick***							
		Fill - Reworked Lean Clay Reddish brown, moist, mostly medium plastic fines, trace fine sand, some small to large gravel, medium density, medium toughness, no odor.			88%		0.0	Sample location	
	-2.0 / 2.0	Black granular lens from 2 to 2.5 fbgs.					0.0		
							0.0		Water level
	-4.0 / 4.0	***Fill - Gravel*** Brown, wet, mostly angular gravel, some medium plastic fines, no odor.					0.0		
5.0	-5.0 / 5.0	***Native - Lean Clay*** Reddish brown, wet, mostly medium plastic fines, trace fine sand, some sub-rounded gravel, medium density, medium toughness, no odor.			50%		0.0		
							0.0		
							0.0		
							0.0		
							0.0		
10.0					60%		0.0		
							0.0		
	-12.0 / 12.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-5

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Fill - Gravel and Sand*** Brown to grey, mostly angular gravel, some fine sand, some red brick, no odor.					0.0		
	-1.0 / 1.0	***Fill - Black Granular*** Black, moist to wet at 4 fbgs, mostly medium grained granular fines, some medium plastic fines, non-descript odor.			100%		0.0		
							0.0		
							0.0	Sample location	Water level
5.0	-5.0 / 5.0	***Native - Lean Clay with Gravel*** Brown, wet, mostly medium plastic fines, some sub-angular gravel, soft, no odor.			92%		0.0		
							0.0		
							0.0		
							0.0		
10.0					48%		0.0		
							0.0		
	-12.0 / 12.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-6

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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Buffalo, NY 14218
(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
0.0	0.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines, some red brick and cinders, no odor.					0.0		
					69%		0.0		
	-3.0 3.0	***Native - Fine Sand*** Dark brown, moist, mostly fine sand, trace medium plastic fines, no odor.					0.0		
							0.0		
5.0	-5.0 5.0	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fone sand, medium density, soft, no odor.					0.0		
					79%		0.0		
							0.0		
	-8.0 8.0	End of Borehole					0.0		

Water level

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-7

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0 -0.3	***Topsoil***							
	0.3	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines, some medium plastic fines, no odor.					0.0		
	-2.0 2.0	***Native - Sandy Lean Clay*** Reddish brown, moist to wet at 3 fbgs, mostly medium plastic fines, some fine sand, medium density, medium toughness, no odor.			69%		0.0		Water level
5.0							0.0		
					27%		0.0		
							0.0		
							0.0		
10.0					71%		0.0		
							0.0		
	-12.0 12.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-8

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface							
		Asphalt and Concrete					0.0		
	-2.0 / 2.0	***Fill - Sandy Lean Clay*** Black, moist to wet at 4.5 fbgs, mostly medium plastic fines, some medium grained granular fines and sand, some red brick, trace coal and cinders, no odor.			75%		0.0		
							0.0		
							0.0		
5.0	-5.0 / 5.0	***Native - Sandy Lean Clay*** Brown, wet, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.			69%		0.0		
							0.0		
							0.0		
	-8.0 / 8.0	End of Borehole					0.0		

Water level

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: NP SB-9

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 395 Ganson Street

Checked By: BWM

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Buffalo, NY 14218
(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt and Concrete***					0.0		
	-1.0 1.0	***Fill - Poorly Graded Sand*** Brown, moist, mostly fine sand, trace medium plastic fines, no odor			75%		0.0		
	-3.0 3.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines, some medium plastic fines, some red brick, coal and cinders, no odor.					0.0		
5.0	-5.0 5.0	***Native - Sandy Lean Clay*** Reddish brown to grey, wet, mostly medium plastic fines, some fine sand, medium density, medium toughness, no odor.			69%		0.0	Sample location	*Water level*
							0.0		
							0.0		
	-8.0 8.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-1

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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Buffalo, NY 14218
(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt***					0.0		
	-0.5 / 0.5	***Fill - Gravel and Sand***							
	-1.0 / 1.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines and sand, some medium plastic fines, some red brick, trace coal and cinders, no odor.			83%		0.0		
							0.0		
							0.0		
5.0							0.0		
	-5.5 / 5.5	***Native - Lean Clay*** Reddish brown, wet, mostly medium plastic fines, trace fine sand, medium toughness, medium density, no odor.			94%		0.0		Water level
	-6.5 / 6.5	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.					0.0		
							0.0		
10.0					50%		0.0		
							0.0		
	-12.0 / 12.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-2

Project: Phase II

A.K.A.: SP SB-2W

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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Buffalo, NY 14218
(716) 856-0599

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 – 50 – 100)	Lab Sample	Well Completion Details or Remarks
-3.0									
	0.0	Ground Surface							
	0.0	***Fill - Gravel with Sand*** Brown, moist, mostly angular gravel, some fine sand, some red brick, no odor.			83%		0.0 0.0 0.0 0.0	Sample Location	2' Stick-up (no pro-casing)
2.0									Sch. 40 PVC riser
	-4.5 4.5	***Fill - Reworked Lean Clay*** Reddish brown, moist, mostly medium plastic fines, trace fine sand, some coal, trace red brick,medium density, medium toughness, no odor.			90%		0.0 0.0		Water level
	-6.5 6.5	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium density, medium toughness, no odor.					0.0		(8.0 to 3.0) 5', Sch. 40 PVC screen, 0.010" slot
7.0									
	-8.0 8.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up: 2'
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-3

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Fill - Gravel and Sand***					0.0		
	-1.0 1.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines and sand, some medium plastic fines, some red brick, trace slag, coal and cinders, no odor.			75%		0.0	Sample location	
							0.0		
							0.0		
	-4.0 4.0	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.					0.0		
5.0					40%		0.0		
							0.0		
							0.0		
	-8.0 8.0	End of Borehole					0.0		

Water level

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-4

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt***					0.0		
	-0.5 / 0.5	***Fill - Gravel and Sand*** Brown to grey, mostly angular gravel, some fine sand, some glass, trace slag and cinders, no odor.							
	-1.0 / 1.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines and sand, some medium plastic fines, some red brick, trace slag, coal and cinders, no odor.			75%		0.0	Sample location	
							0.0		
							0.0		
5.0	-5.0 / 5.0	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.			65%		0.0		Water level
							0.0		
							0.0		
	-8.0 / 8.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-5

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt***					0.0		
	-1.0 / 1.0	***Fill - Gravel and Sand*** Brown to grey, mostly angular gravel, some fine sand, trace slag, no odor.			77%		0.0		
	-3.0 / 3.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines and sand, some medium plastic fines, some red brick, trace slag, coal and cinders, no odor.					0.0		
	-4.0 / 4.0	***Fill - Gravel*** Brown to grey, mostly angular gravel, some fine sand, no odor.					0.0	Sample location	
5.0							0.0		Water level
	-6.0 / 6.0	***Fill - Poorly Graded Sand*** Dark brown, wet, mostly fine sand trace medium plastic fines, some red brick, no odor.			44%		0.0		
	-8.0 / 8.0	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.					0.0		
10.0					56%		0.0		
							0.0		
	-12.0 / 12.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-6

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface							
		Fill - Gravel and Sand Brown to grey, mostly angular gravel, some fine sand, some glass, trace slag and cinders, no odor.					0.0		
	-2.0 / 2.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines and sand, some medium plastic fines, some red brick, trace coal and cinders, no odor.			75%		0.0 0.0 0.0		
5.0	-5.0 / 5.0	***Native - Sandy Lean Clay*** Dark brown, wet, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.			65%		0.0 0.0 0.0 0.0		*Water level*
	-8.0 / 8.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-7

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Asphalt***					0.0		
	-1.0 / 1.0	***Fill - Black Granular*** Black, moist, mostly medium grained granular fines and sand, some medium plastic fines, some red brick, trace coal and cinders, no odor.			75%		0.0		
	-3.0 / 3.0	***Native - Sandy Lean Clay*** Reddish brown to brown, moist to wet at 4 fbgs, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.					0.0		Water level
5.0					69%		0.0		
							0.0		
							0.0		
	-8.0 / 8.0	End of Borehole					0.0		

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-8

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0 / 0.0	Ground Surface							
		Asphalt					0.0		
	-1.0 / 1.0	***Fill - Sandy Lean Clay*** Black, moist to wet at 4.5 fbgs, mostly medium plastic fines, some medium grained granular fines and sand, some red brick, trace coal and cinders, no odor.			75%		0.0		
							0.0		
							0.0	Sample location	
5.0	-5.0 / 5.0	***Native - Sandy Lean Clay*** Brown, wet, mostly medium plastic fines, some fine sand, medium toughness, medium density, no odor.			69%		0.0		
							0.0		
							0.0		
	-8.0 / 8.0	End of Borehole					0.0		

Water level

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

Project No: B0476-018-001

Borehole Number: SP SB-9

Project: Phase II

A.K.A.:

Client: Buffalo Riverworks LLC

Logged By: CMS

Site Location: 305, 323, 339 Ganson Street

Checked By: BWM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (%)	Symbol	PID VOCs ppm (0 / 50 / 100)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
	0.0	***Fill - Topsoil and Granular Fines*** Black, moist, mostly organic topsoil, some medium grained granular fines and sand, no odor.					0.0		
	-2.0 / 2.0	***Native - Lean Clay*** Dark brown, moist, mostly medium plastic fines, trace fine sand, medium density. medium toughness, some black staining, petroleum-like odor.			63%		2.3		
							2.3	Sample location	
							2.3		
5.0	-5.0 / 5.0	***Native - Lean Clay*** Brown, wet, mostly medium plastic fines, trace fine sand, medium density. medium toughness, no odor.			60%		2.3		Water level
							0.0		
							0.0		
							0.0		
							0.0		
10.0					88%		0.0		
							0.0		
							0.0		
	-12.0 / 12.0	End of Borehole							

Drilled By: Trec Environmental
Drill Rig Type: 54LT
Drill Method: Direct Push
Comments:
Drill Date(s): 2/27/2019

Hole Size: 2"
Stick-up:
Datum:

Sheet: 1 of 1

APPENDIX B

PHOTO LOG

SITE PHOTOGRAPHS
SOUTHERN PROPERTY

Photo 1:

Photo 2:

Photo 3:

Photo 4:

Photo 1: View of soil/fill encountered at SP SB-2.

Photo 2: View of soil/fill encountered at SP SB-3.

Photo 3: View of the location of SP SB-4 – facing northeast

Photo 4: View of soil/fill encountered at SP SB-4.

Ganson Street Parcels **Northern Property – 389 and 395 Ganson Street** **Southern Property 305, 323, 339 Ganson Street** Photo Date: February 27 and February 28, 2019	BENCHMARK

SITE PHOTOGRAPHS
SOUTHERN PROPERTY

Photo 5:

Photo 6:

Photo 7:

Photo 8:

Photo 5: View of the location of SP SB-5 – facing southwest

Photo 6: View of soil/fill encountered at SP SB-5.

Photo 7: View of the location of SP SB-8 – facing east

Photo 8: View of the soil/fill encountered at SP SB-8.

Ganson Street Parcels **Northern Property – 389 and 395 Ganson Street** **Southern Property 305, 323, 339 Ganson Street** Photo Date: February 27 and February 28, 2019	BENCHMARK

SITE PHOTOGRAPHS
NORTHERN PROPERTY

Photo 9:

Photo 10:

Photo 11:

Photo 12:

Photo 9: View of the location of NP SB-3 – facing east

Photo 10: View of typical soils with black staining and odors encountered at NP SB-3.

Photo 11: View of the location of NP SB-4 – facing west

Photo 12: View of soil/fill encountered at NP SB-4.

SITE PHOTOGRAPHS
NORTHERN PROPERTY

Photo 13:

Photo 14:

Photo 15:

Photo 13: View of soil/fill encountered at NP SB-5.

Photo 14: View of the location of NP SB-9 – facing southeast

Photo 15: View of soil/fill encountered at NP SB-9

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: 480-149711-1
Client Project/Site: Benchmark - 395 Ganson St.

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

Attn: Bryan Mayback

Joseph V. Giacomazza

Authorized for release by:
3/11/2019 11:28:59 AM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

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

Table of Contents

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.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

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

GC Semi VOA

Qualifier	Qualifier Description
X	Surrogate is outside control limits

Metals

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.

Glossary

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

Job ID: 480-149711-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-149711-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2019 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
Method(s) 8260C: The following samples were analyzed using medium level soil analysis and diluted due to the nature of the sample matrix: SB-3 (8-12) (480-149711-1) and SB-3 (16-20) (480-149711-2). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The method blank for batch 461670 contained Methylene Chloride above the reporting limit (RL). This compound is considered a common laboratory contaminant. The associated samples were not re-extracted and/or re-analyzed because the concentration of the common lab contaminant in the samples was below the reporting limit (RL). The following samples are impacted: SB-3 (8-12) (480-149711-1) and SB-3 (16-20) (480-149711-2)

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

GC/MS Semi VOA
Method(s) 8270D: The following samples were diluted due to color and, viscosity: SB-4 (1-3) (480-149711-3), SB-5 (3-5) (480-149711-4) and SB-9 (3-5) (480-149711-5). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples were diluted due to the nature of the sample matrix: SB-4 (1-3) (480-149711-3) and SB-5 (3-5) (480-149711-4). 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 samples required a dilution due to the nature of the sample matrix: SB-4 (1-3) (480-149711-3) and SB-5 (3-5) (480-149711-4). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

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

GC Semi VOA
Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-461785/5) that had recoveries for the surrogate Decachlorobiphenyl that were below acceptance limits: SB-3 (8-12) (480-149711-1), SB-3 (16-20) (480-149711-2), SB-4 (1-3) (480-149711-3) and SB-5 (3-5) (480-149711-4). The secondary surrogate Tetrachloro-m-xylene is within limits. Therefore, the data has been reported.

Method(s) 8082A: Surrogate recovery for the following samples were outside control limits: SB-3 (8-12) (480-149711-1), SB-3 (16-20) (480-149711-2), SB-4 (1-3) (480-149711-3) and SB-5 (3-5) (480-149711-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

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

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

Organic Prep
Method(s) 3550C: Due to the matrix, the following samples could not be concentrated to the final method required volume: SB-4 (1-3) (480-149711-3) and SB-5 (3-5) (480-149711-4). 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 - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-3 (8-12) — Lab Sample ID: 480-149711-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	88	J	310	85	ug/Kg	2	☼	8260C	Total/NA
Chlorobenzene	230	J	310	40	ug/Kg	2	☼	8260C	Total/NA
Methylene Chloride	110	J B	310	61	ug/Kg	2	☼	8260C	Total/NA
o-Xylene	73	J	310	40	ug/Kg	2	☼	8260C	Total/NA
Acenaphthene	990		630	93	ug/Kg	1	☼	8270D	Total/NA
Anthracene	1000		630	160	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]anthracene	890		630	63	ug/Kg	1	☼	8270D	Total/NA
Benzo[a]pyrene	680		630	93	ug/Kg	1	☼	8270D	Total/NA
Benzo[b]fluoranthene	830		630	100	ug/Kg	1	☼	8270D	Total/NA
Benzo[g,h,i]perylene	350	J	630	67	ug/Kg	1	☼	8270D	Total/NA
Benzo[k]fluoranthene	270	J	630	82	ug/Kg	1	☼	8270D	Total/NA
Chrysene	760		630	140	ug/Kg	1	☼	8270D	Total/NA
Fluoranthene	2300		630	67	ug/Kg	1	☼	8270D	Total/NA
Fluorene	1600		630	74	ug/Kg	1	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	350	J	630	78	ug/Kg	1	☼	8270D	Total/NA
Naphthalene	120	J	630	82	ug/Kg	1	☼	8270D	Total/NA
Pyrene	1700		630	74	ug/Kg	1	☼	8270D	Total/NA
Phenanthrene	2800		630	93	ug/Kg	1	☼	8270D	Total/NA
Arsenic	15.1		2.7	0.54	mg/Kg	1	☼	6010C	Total/NA
Barium	96.1		0.68	0.15	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.74		0.27	0.041	mg/Kg	1	☼	6010C	Total/NA
Chromium	49.5		0.68	0.27	mg/Kg	1	☼	6010C	Total/NA
Lead	130		1.4	0.33	mg/Kg	1	☼	6010C	Total/NA
Mercury	2.4		0.13	0.052	mg/Kg	5	☼	7471B	Total/NA

Client Sample ID: SB-3 (16-20) — Lab Sample ID: 480-149711-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	910	J	1200	340	ug/Kg	8	☼	8260C	Total/NA
1,3-Dichlorobenzene	470	J	1200	330	ug/Kg	8	☼	8260C	Total/NA
1,4-Dichlorobenzene	3800		1200	170	ug/Kg	8	☼	8260C	Total/NA
Chlorobenzene	2200		1200	160	ug/Kg	8	☼	8260C	Total/NA
Cyclohexane	490	J	1200	270	ug/Kg	8	☼	8260C	Total/NA
Isopropylbenzene	570	J	1200	180	ug/Kg	8	☼	8260C	Total/NA
Methylcyclohexane	2000		1200	580	ug/Kg	8	☼	8260C	Total/NA
Methylene Chloride	450	J B	1200	240	ug/Kg	8	☼	8260C	Total/NA
n-Butylbenzene	1300		1200	360	ug/Kg	8	☼	8260C	Total/NA
o-Xylene	890	J	1200	160	ug/Kg	8	☼	8260C	Total/NA
sec-Butylbenzene	750	J	1200	450	ug/Kg	8	☼	8260C	Total/NA
Xylenes, Total	890	J	2500	680	ug/Kg	8	☼	8260C	Total/NA

Client Sample ID: SB-4 (1-3) — Lab Sample ID: 480-149711-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	17.0		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	137		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.49		0.24	0.035	mg/Kg	1	☼	6010C	Total/NA
Chromium	10.3		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	137		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.97	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-4 (1-3) (Continued) — Lab Sample ID: 480-149711-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.25		0.023	0.0093	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-5 (3-5) — Lab Sample ID: 480-149711-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthylene	6200	J	10000	1300	ug/Kg	5	☼	8270D	Total/NA
Anthracene	11000		10000	2500	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	14000		10000	1000	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	12000		10000	1500	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	15000		10000	1600	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	6800	J	10000	1100	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	5500	J	10000	1300	ug/Kg	5	☼	8270D	Total/NA
Chrysene	13000		10000	2200	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	37000		10000	1100	ug/Kg	5	☼	8270D	Total/NA
Fluorene	14000		10000	1200	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	7200	J	10000	1200	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	9500	J	10000	1300	ug/Kg	5	☼	8270D	Total/NA
Pyrene	26000		10000	1200	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	48000		10000	1500	ug/Kg	5	☼	8270D	Total/NA
Arsenic	5.6		2.3	0.46	mg/Kg	1	☼	6010C	Total/NA
Barium	92.4		0.58	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.37		0.23	0.035	mg/Kg	1	☼	6010C	Total/NA
Chromium	14.7		0.58	0.23	mg/Kg	1	☼	6010C	Total/NA
Lead	57.9		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.12		0.024	0.0098	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-9 (3-5) — Lab Sample ID: 480-149711-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	210	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	180	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	240	J	1100	170	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	150	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	370	J	1100	110	ug/Kg	5	☼	8270D	Total/NA
Pyrene	320	J	1100	120	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	390	J	1100	160	ug/Kg	5	☼	8270D	Total/NA
Arsenic	16.5		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	240		0.62	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.52		0.25	0.037	mg/Kg	1	☼	6010C	Total/NA
Chromium	22.5		0.62	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	175		1.2	0.30	mg/Kg	1	☼	6010C	Total/NA
Silver	0.76		0.75	0.25	mg/Kg	1	☼	6010C	Total/NA
Mercury	1.8		0.025	0.010	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-3 (8-12)
Date Collected: 02/28/19 09:41
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-1
Matrix: Solid
Percent Solids: 73.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		310	85	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,1,2,2-Tetrachloroethane	ND		310	50	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		310	150	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,1,2-Trichloroethane	ND		310	64	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,1-Dichloroethane	ND		310	95	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,1-Dichloroethene	ND		310	110	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,2,4-Trichlorobenzene	ND		310	120	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,2,4-Trimethylbenzene	**88**	**J**	310	85	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,2-Dibromo-3-Chloropropane	ND		310	150	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,2-Dichlorobenzene	ND		310	78	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,2-Dichloroethane	ND		310	130	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,2-Dichloropropane	ND		310	50	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,3,5-Trimethylbenzene	ND		310	93	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,3-Dichlorobenzene	ND		310	82	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,4-Dichlorobenzene	ND		310	43	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
2-Butanone (MEK)	ND		1500	910	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
2-Hexanone	ND		1500	630	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
4-Isopropyltoluene	ND		310	100	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
4-Methyl-2-pentanone (MIBK)	ND		1500	98	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Acetone	ND		1500	1300	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Benzene	ND		310	58	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Bromoform	ND		310	150	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Bromomethane	ND		310	67	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Carbon disulfide	ND		310	140	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Carbon tetrachloride	ND		310	78	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Chlorobenzene	**230**	**J**	310	40	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Dibromochloromethane	ND		310	150	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Chloroethane	ND		310	64	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Chloroform	ND		310	210	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Chloromethane	ND		310	73	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
cis-1,2-Dichloroethene	ND		310	85	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Cyclohexane	ND		310	68	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Bromodichloromethane	ND		310	61	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Dichlorodifluoromethane	ND		310	130	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Ethylbenzene	ND		310	89	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
1,2-Dibromoethane	ND		310	54	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Isopropylbenzene	ND		310	46	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Methyl acetate	ND		1500	150	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Methyl tert-butyl ether	ND		310	120	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Methylcyclohexane	ND		310	140	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Methylene Chloride	**110**	**J B**	310	61	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
m,p-Xylene	ND		610	170	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
n-Butylbenzene	ND		310	89	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
N-Propylbenzene	ND		310	80	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
o-Xylene	**73**	**J**	310	40	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
sec-Butylbenzene	ND		310	110	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Tetrachloroethene	ND		310	41	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Toluene	ND		310	82	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
trans-1,2-Dichloroethene	ND		310	72	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-3 (8-12)
Date Collected: 02/28/19 09:41
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-1
Matrix: Solid
Percent Solids: 73.8

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		310	30	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Trichloroethene	ND		310	85	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Trichlorofluoromethane	ND		310	140	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Vinyl chloride	ND		310	100	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Xylenes, Total	ND		610	170	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
cis-1,3-Dichloropropene	ND		310	73	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
Styrene	ND		310	74	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2
tert-Butylbenzene	ND		310	85	ug/Kg	☼	03/05/19 12:58	03/06/19 03:32	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*100*		*53 - 146*	*03/05/19 12:58*	*03/06/19 03:32*	*2*
4-Bromofluorobenzene (Surr)	*99*		*49 - 148*	*03/05/19 12:58*	*03/06/19 03:32*	*2*
Toluene-d8 (Surr)	*103*		*50 - 149*	*03/05/19 12:58*	*03/06/19 03:32*	*2*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	**990**		630	93	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Acenaphthylene	ND		630	82	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Anthracene	**1000**		630	160	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Benzo[a]anthracene	**890**		630	63	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Benzo[a]pyrene	**680**		630	93	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Benzo[b]fluoranthene	**830**		630	100	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Benzo[g,h,i]perylene	**350**	**J**	630	67	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Benzo[k]fluoranthene	**270**	**J**	630	82	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Chrysene	**760**		630	140	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Dibenz(a,h)anthracene	ND		630	110	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Fluoranthene	**2300**		630	67	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Fluorene	**1600**		630	74	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Indeno[1,2,3-cd]pyrene	**350**	**J**	630	78	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Naphthalene	**120**	**J**	630	82	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Pyrene	**1700**		630	74	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1
Phenanthrene	**2800**		630	93	ug/Kg	☼	03/05/19 14:35	03/07/19 07:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*103*		*54 - 120*	*03/05/19 14:35*	*03/07/19 07:17*	*1*
2-Fluorobiphenyl	*93*		*60 - 120*	*03/05/19 14:35*	*03/07/19 07:17*	*1*
2-Fluorophenol (Surr)	*85*		*52 - 120*	*03/05/19 14:35*	*03/07/19 07:17*	*1*
Phenol-d5 (Surr)	*84*		*54 - 120*	*03/05/19 14:35*	*03/07/19 07:17*	*1*
p-Terphenyl-d14 (Surr)	*106*		*65 - 121*	*03/05/19 14:35*	*03/07/19 07:17*	*1*
Nitrobenzene-d5 (Surr)	*94*		*53 - 120*	*03/05/19 14:35*	*03/07/19 07:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.32	0.063	mg/Kg	☼	03/05/19 14:43	03/06/19 17:45	1
PCB-1221	ND		0.32	0.063	mg/Kg	☼	03/05/19 14:43	03/06/19 17:45	1
PCB-1232	ND		0.32	0.063	mg/Kg	☼	03/05/19 14:43	03/06/19 17:45	1
PCB-1242	ND		0.32	0.063	mg/Kg	☼	03/05/19 14:43	03/06/19 17:45	1
PCB-1248	ND		0.32	0.063	mg/Kg	☼	03/05/19 14:43	03/06/19 17:45	1
PCB-1254	ND		0.32	0.15	mg/Kg	☼	03/05/19 14:43	03/06/19 17:45	1
PCB-1260	ND		0.32	0.15	mg/Kg	☼	03/05/19 14:43	03/06/19 17:45	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-3 (8-12)
Date Collected: 02/28/19 09:41
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-1
Matrix: Solid
Percent Solids: 73.8

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Tetrachloro-m-xylene	63		60 - 154	03/05/19 14:43	03/06/19 17:45	1
DCB Decachlorobiphenyl	62	X	65 - 174	03/05/19 14:43	03/06/19 17:45	1

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**15.1**		2.7	0.54	mg/Kg	☼	03/06/19 10:49	03/07/19 13:37	1
Barium	**96.1**		0.68	0.15	mg/Kg	☼	03/06/19 10:49	03/07/19 13:37	1
Cadmium	**0.74**		0.27	0.041	mg/Kg	☼	03/06/19 10:49	03/07/19 13:37	1
Chromium	**49.5**		0.68	0.27	mg/Kg	☼	03/06/19 10:49	03/07/19 13:37	1
Lead	**130**		1.4	0.33	mg/Kg	☼	03/06/19 10:49	03/07/19 13:37	1
Selenium	ND		5.4	0.54	mg/Kg	☼	03/06/19 10:49	03/07/19 13:37	1
Silver	ND		0.82	0.27	mg/Kg	☼	03/06/19 10:49	03/07/19 13:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**2.4**		0.13	0.052	mg/Kg	☼	03/06/19 13:06	03/06/19 17:12	5

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-3 (16-20)
Date Collected: 02/28/19 09:42
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-2
Matrix: Solid
Percent Solids: 73.5

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1200	340	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,1,2,2-Tetrachloroethane	ND		1200	200	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1200	610	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,1,2-Trichloroethane	ND		1200	260	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,1-Dichloroethane	ND		1200	380	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,1-Dichloroethene	ND		1200	430	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,2,4-Trichlorobenzene	ND		1200	470	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,2,4-Trimethylbenzene	**910**	**J**	1200	340	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,2-Dibromo-3-Chloropropane	ND		1200	610	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,2-Dichlorobenzene	ND		1200	310	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,2-Dichloroethane	ND		1200	500	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,2-Dichloropropane	ND		1200	200	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,3,5-Trimethylbenzene	ND		1200	370	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,3-Dichlorobenzene	**470**	**J**	1200	330	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,4-Dichlorobenzene	**3800**		1200	170	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
2-Butanone (MEK)	ND		6100	3700	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
2-Hexanone	ND		6100	2500	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
4-Isopropyltoluene	ND		1200	410	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
4-Methyl-2-pentanone (MIBK)	ND		6100	390	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Acetone	ND		6100	5100	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Benzene	ND		1200	230	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Bromoform	ND		1200	610	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Bromomethane	ND		1200	270	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Carbon disulfide	ND		1200	560	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Carbon tetrachloride	ND		1200	310	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Chlorobenzene	**2200**		1200	160	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Dibromochloromethane	ND		1200	600	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Chloroethane	ND		1200	260	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Chloroform	ND		1200	840	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Chloromethane	ND		1200	290	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
cis-1,2-Dichloroethene	ND		1200	340	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Cyclohexane	**490**	**J**	1200	270	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Bromodichloromethane	ND		1200	250	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Dichlorodifluoromethane	ND		1200	540	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Ethylbenzene	ND		1200	360	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
1,2-Dibromoethane	ND		1200	220	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Isopropylbenzene	**570**	**J**	1200	180	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Methyl acetate	ND		6100	590	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Methyl tert-butyl ether	ND		1200	460	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Methylcyclohexane	**2000**		1200	580	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Methylene Chloride	**450**	**J B**	1200	240	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
m,p-Xylene	ND		2500	680	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
n-Butylbenzene	**1300**		1200	360	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
N-Propylbenzene	ND		1200	320	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
o-Xylene	**890**	**J**	1200	160	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
sec-Butylbenzene	**750**	**J**	1200	450	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Tetrachloroethene	ND		1200	170	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Toluene	ND		1200	330	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
trans-1,2-Dichloroethene	ND		1200	290	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-3 (16-20)
Date Collected: 02/28/19 09:42
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-2
Matrix: Solid
Percent Solids: 73.5

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		1200	120	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Trichloroethene	ND		1200	340	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Trichlorofluoromethane	ND		1200	580	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Vinyl chloride	ND		1200	410	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Xylenes, Total	**890**	**J**	2500	680	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
cis-1,3-Dichloropropene	ND		1200	290	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
Styrene	ND		1200	300	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8
tert-Butylbenzene	ND		1200	340	ug/Kg	☼	03/05/19 12:58	03/06/19 04:00	8

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*	*03/05/19 12:58*	*03/06/19 04:00*	*8*
4-Bromofluorobenzene (Surr)	*95*		*49 - 148*	*03/05/19 12:58*	*03/06/19 04:00*	*8*
Toluene-d8 (Surr)	*100*		*50 - 149*	*03/05/19 12:58*	*03/06/19 04:00*	*8*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.047	mg/Kg	☼	03/05/19 14:43	03/06/19 18:01	1
PCB-1221	ND		0.24	0.047	mg/Kg	☼	03/05/19 14:43	03/06/19 18:01	1
PCB-1232	ND		0.24	0.047	mg/Kg	☼	03/05/19 14:43	03/06/19 18:01	1
PCB-1242	ND		0.24	0.047	mg/Kg	☼	03/05/19 14:43	03/06/19 18:01	1
PCB-1248	ND		0.24	0.047	mg/Kg	☼	03/05/19 14:43	03/06/19 18:01	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	03/05/19 14:43	03/06/19 18:01	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	03/05/19 14:43	03/06/19 18:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*35*	*X*	*60 - 154*	*03/05/19 14:43*	*03/06/19 18:01*	*1*
DCB Decachlorobiphenyl	*33*	*X*	*65 - 174*	*03/05/19 14:43*	*03/06/19 18:01*	*1*

Client Sample ID: SB-4 (1-3)
Date Collected: 02/28/19 12:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-3
Matrix: Solid
Percent Solids: 83.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		20000	3000	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Acenaphthylene	ND		20000	2600	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Anthracene	ND		20000	5100	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Benzo[a]anthracene	ND		20000	2000	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Benzo[a]pyrene	ND		20000	3000	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Benzo[b]fluoranthene	ND		20000	3200	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Benzo[g,h,i]perylene	ND		20000	2200	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Benzo[k]fluoranthene	ND		20000	2600	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Chrysene	ND		20000	4600	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Dibenz(a,h)anthracene	ND		20000	3600	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Fluoranthene	ND		20000	2200	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Fluorene	ND		20000	2400	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Indeno[1,2,3-cd]pyrene	ND		20000	2500	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Naphthalene	ND		20000	2600	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Pyrene	ND		20000	2400	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10
Phenanthrene	ND		20000	3000	ug/Kg	☼	03/05/19 14:35	03/07/19 07:42	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*54 - 120*	*03/05/19 14:35*	*03/07/19 07:42*	*10*
2-Fluorobiphenyl	*101*		*60 - 120*	*03/05/19 14:35*	*03/07/19 07:42*	*10*
2-Fluorophenol (Surr)	*0*	*X*	*52 - 120*	*03/05/19 14:35*	*03/07/19 07:42*	*10*
Phenol-d5 (Surr)	*0*	*X*	*54 - 120*	*03/05/19 14:35*	*03/07/19 07:42*	*10*
p-Terphenyl-d14 (Surr)	*0*	*X*	*65 - 121*	*03/05/19 14:35*	*03/07/19 07:42*	*10*
Nitrobenzene-d5 (Surr)	*0*	*X*	*53 - 120*	*03/05/19 14:35*	*03/07/19 07:42*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.28	0.055	mg/Kg	☼	03/05/19 14:43	03/06/19 18:17	1
PCB-1221	ND		0.28	0.055	mg/Kg	☼	03/05/19 14:43	03/06/19 18:17	1
PCB-1232	ND		0.28	0.055	mg/Kg	☼	03/05/19 14:43	03/06/19 18:17	1
PCB-1242	ND		0.28	0.055	mg/Kg	☼	03/05/19 14:43	03/06/19 18:17	1
PCB-1248	ND		0.28	0.055	mg/Kg	☼	03/05/19 14:43	03/06/19 18:17	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	03/05/19 14:43	03/06/19 18:17	1
PCB-1260	ND		0.28	0.13	mg/Kg	☼	03/05/19 14:43	03/06/19 18:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*	*X*	*60 - 154*	*03/05/19 14:43*	*03/06/19 18:17*	*1*
DCB Decachlorobiphenyl	*53*	*X*	*65 - 174*	*03/05/19 14:43*	*03/06/19 18:17*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**17.0**		2.4	0.47	mg/Kg	☼	03/06/19 10:49	03/07/19 13:41	1
Barium	**137**		0.59	0.13	mg/Kg	☼	03/06/19 10:49	03/07/19 13:41	1
Cadmium	**0.49**		0.24	0.035	mg/Kg	☼	03/06/19 10:49	03/07/19 13:41	1
Chromium	**10.3**		0.59	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:41	1
Lead	**137**		1.2	0.28	mg/Kg	☼	03/06/19 10:49	03/07/19 13:41	1
Selenium	**0.97**	**J**	4.7	0.47	mg/Kg	☼	03/06/19 10:49	03/07/19 13:41	1
Silver	ND		0.71	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:41	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-4 (1-3)
Date Collected: 02/28/19 12:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-3
Matrix: Solid
Percent Solids: 83.0

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.023	0.0093	mg/Kg	☼	03/06/19 13:06	03/06/19 16:37	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-5 (3-5)
Date Collected: 02/28/19 13:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-4
Matrix: Solid
Percent Solids: 85.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		10000	1500	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Acenaphthylene	**6200**	**J**	10000	1300	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Anthracene	**11000**		10000	2500	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Benzo[a]anthracene	**14000**		10000	1000	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Benzo[a]pyrene	**12000**		10000	1500	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Benzo[b]fluoranthene	**15000**		10000	1600	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Benzo[g,h,i]perylene	**6800**	**J**	10000	1100	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Benzo[k]fluoranthene	**5500**	**J**	10000	1300	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Chrysene	**13000**		10000	2200	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Dibenz(a,h)anthracene	ND		10000	1800	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Fluoranthene	**37000**		10000	1100	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Fluorene	**14000**		10000	1200	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Indeno[1,2,3-cd]pyrene	**7200**	**J**	10000	1200	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Naphthalene	**9500**	**J**	10000	1300	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Pyrene	**26000**		10000	1200	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5
Phenanthrene	**48000**		10000	1500	ug/Kg	☼	03/05/19 14:35	03/07/19 08:07	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*54 - 120*	*03/05/19 14:35*	*03/07/19 08:07*	*5*
2-Fluorobiphenyl	*101*		*60 - 120*	*03/05/19 14:35*	*03/07/19 08:07*	*5*
2-Fluorophenol (Surr)	*78*		*52 - 120*	*03/05/19 14:35*	*03/07/19 08:07*	*5*
Phenol-d5 (Surr)	*80*		*54 - 120*	*03/05/19 14:35*	*03/07/19 08:07*	*5*
p-Terphenyl-d14 (Surr)	*108*		*65 - 121*	*03/05/19 14:35*	*03/07/19 08:07*	*5*
Nitrobenzene-d5 (Surr)	*84*		*53 - 120*	*03/05/19 14:35*	*03/07/19 08:07*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.24	0.048	mg/Kg	☼	03/05/19 14:43	03/06/19 18:33	1
PCB-1221	ND		0.24	0.048	mg/Kg	☼	03/05/19 14:43	03/06/19 18:33	1
PCB-1232	ND		0.24	0.048	mg/Kg	☼	03/05/19 14:43	03/06/19 18:33	1
PCB-1242	ND		0.24	0.048	mg/Kg	☼	03/05/19 14:43	03/06/19 18:33	1
PCB-1248	ND		0.24	0.048	mg/Kg	☼	03/05/19 14:43	03/06/19 18:33	1
PCB-1254	ND		0.24	0.11	mg/Kg	☼	03/05/19 14:43	03/06/19 18:33	1
PCB-1260	ND		0.24	0.11	mg/Kg	☼	03/05/19 14:43	03/06/19 18:33	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*60 - 154*	*03/05/19 14:43*	*03/06/19 18:33*	*1*
DCB Decachlorobiphenyl	*53*	*X*	*65 - 174*	*03/05/19 14:43*	*03/06/19 18:33*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**5.6**		2.3	0.46	mg/Kg	☼	03/06/19 10:49	03/07/19 13:45	1
Barium	**92.4**		0.58	0.13	mg/Kg	☼	03/06/19 10:49	03/07/19 13:45	1
Cadmium	**0.37**		0.23	0.035	mg/Kg	☼	03/06/19 10:49	03/07/19 13:45	1
Chromium	**14.7**		0.58	0.23	mg/Kg	☼	03/06/19 10:49	03/07/19 13:45	1
Lead	**57.9**		1.2	0.28	mg/Kg	☼	03/06/19 10:49	03/07/19 13:45	1
Selenium	ND		4.6	0.46	mg/Kg	☼	03/06/19 10:49	03/07/19 13:45	1
Silver	ND		0.69	0.23	mg/Kg	☼	03/06/19 10:49	03/07/19 13:45	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-5 (3-5)
Date Collected: 02/28/19 13:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-4
Matrix: Solid
Percent Solids: 85.1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.12		0.024	0.0098	mg/Kg	☼	03/06/19 13:06	03/06/19 16:38	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-9 (3-5)
Date Collected: 02/28/19 15:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-5
Matrix: Solid
Percent Solids: 78.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1100	160	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Anthracene	ND		1100	260	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Benzo[a]anthracene	**210**	**J**	1100	110	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Benzo[a]pyrene	**180**	**J**	1100	160	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Benzo[b]fluoranthene	**240**	**J**	1100	170	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Benzo[g,h,i]perylene	**150**	**J**	1100	110	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Benzo[k]fluoranthene	ND		1100	140	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Chrysene	ND		1100	240	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Dibenz(a,h)anthracene	ND		1100	190	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Fluoranthene	**370**	**J**	1100	110	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Fluorene	ND		1100	120	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Indeno[1,2,3-cd]pyrene	ND		1100	130	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Naphthalene	ND		1100	140	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Pyrene	**320**	**J**	1100	120	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5
Phenanthrene	**390**	**J**	1100	160	ug/Kg	☼	03/05/19 14:35	03/07/19 08:32	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*96*		*54 - 120*	*03/05/19 14:35*	*03/07/19 08:32*	*5*
2-Fluorobiphenyl	*96*		*60 - 120*	*03/05/19 14:35*	*03/07/19 08:32*	*5*
2-Fluorophenol (Surr)	*80*		*52 - 120*	*03/05/19 14:35*	*03/07/19 08:32*	*5*
Phenol-d5 (Surr)	*83*		*54 - 120*	*03/05/19 14:35*	*03/07/19 08:32*	*5*
p-Terphenyl-d14 (Surr)	*107*		*65 - 121*	*03/05/19 14:35*	*03/07/19 08:32*	*5*
Nitrobenzene-d5 (Surr)	*88*		*53 - 120*	*03/05/19 14:35*	*03/07/19 08:32*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**16.5**		2.5	0.50	mg/Kg	☼	03/06/19 10:49	03/07/19 13:49	1
Barium	**240**		0.62	0.14	mg/Kg	☼	03/06/19 10:49	03/07/19 13:49	1
Cadmium	**0.52**		0.25	0.037	mg/Kg	☼	03/06/19 10:49	03/07/19 13:49	1
Chromium	**22.5**		0.62	0.25	mg/Kg	☼	03/06/19 10:49	03/07/19 13:49	1
Lead	**175**		1.2	0.30	mg/Kg	☼	03/06/19 10:49	03/07/19 13:49	1
Selenium	ND		5.0	0.50	mg/Kg	☼	03/06/19 10:49	03/07/19 13:49	1
Silver	**0.76**		0.75	0.25	mg/Kg	☼	03/06/19 10:49	03/07/19 13:49	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**1.8**		0.025	0.010	mg/Kg	☼	03/06/19 13:06	03/06/19 16:40	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(53-146)	(49-148)	(50-149)
480-149711-1	SB-3 (8-12)	100	99	103
480-149711-2	SB-3 (16-20)	98	95	100
LCS 480-461604/1-A	Lab Control Sample	96	100	99
MB 480-461604/2-A	Method Blank	99	97	99

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	PHL	TPHd14	NBZ
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(54-120)	(65-121)	(53-120)
480-149711-1	SB-3 (8-12)	103	93	85	84	106	94
480-149711-3	SB-4 (1-3)	0 X	101	0 X	0 X	0 X	0 X
480-149711-4	SB-5 (3-5)	0 X	101	78	80	108	84
480-149711-5	SB-9 (3-5)	96	96	80	83	107	88
LCS 480-461631/2-A	Lab Control Sample	98	88	77	76	102	90
MB 480-461631/1-A	Method Blank	78	90	82	85	106	93

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(60-154)	(65-174)
480-149711-1	SB-3 (8-12)	63	62 X
480-149711-2	SB-3 (16-20)	35 X	33 X
480-149711-3	SB-4 (1-3)	57 X	53 X
480-149711-4	SB-5 (3-5)	64	53 X
LCS 480-461632/2-A	Lab Control Sample	92	91
MB 480-461632/1-A	Method Blank	83	81

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

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

Lab Sample ID: MB 480-461604/2-A
Matrix: Solid
Analysis Batch: 461670

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,1-Dichloroethane	ND		100	31	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,1-Dichloroethene	ND		100	35	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,2-Dichloroethane	ND		100	41	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,2-Dichloropropane	ND		100	16	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
2-Butanone (MEK)	ND		500	300	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
2-Hexanone	ND		500	210	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
4-Isopropyltoluene	ND		100	34	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Acetone	ND		500	410	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Benzene	ND		100	19	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Bromoform	ND		100	50	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Bromomethane	ND		100	22	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Carbon disulfide	ND		100	46	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Carbon tetrachloride	ND		100	26	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Chlorobenzene	ND		100	13	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Dibromochloromethane	ND		100	48	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Chloroethane	ND		100	21	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Chloroform	ND		100	69	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Chloromethane	ND		100	24	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Cyclohexane	ND		100	22	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Bromodichloromethane	ND		100	20	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Ethylbenzene	ND		100	29	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
1,2-Dibromoethane	ND		100	18	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Isopropylbenzene	ND		100	15	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Methyl acetate	ND		500	48	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Methylcyclohexane	ND		100	47	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Methylene Chloride	188		100	20	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
m,p-Xylene	ND		200	55	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
n-Butylbenzene	ND		100	29	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
N-Propylbenzene	ND		100	26	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
o-Xylene	ND		100	13	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
sec-Butylbenzene	ND		100	37	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Tetrachloroethene	ND		100	13	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Toluene	ND		100	27	ug/Kg		03/05/19 12:58	03/05/19 23:31	1

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

Lab Sample ID: MB 480-461604/2-A
Matrix: Solid
Analysis Batch: 461670

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461604

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Trichloroethene	ND		100	28	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Trichlorofluoromethane	ND		100	47	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Vinyl chloride	ND		100	34	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Xylenes, Total	ND		200	55	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
Styrene	ND		100	24	ug/Kg		03/05/19 12:58	03/05/19 23:31	1
tert-Butylbenzene	ND		100	28	ug/Kg		03/05/19 12:58	03/05/19 23:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*53 - 146*	*03/05/19 12:58*	*03/05/19 23:31*	*1*
4-Bromofluorobenzene (Surr)	*97*		*49 - 148*	*03/05/19 12:58*	*03/05/19 23:31*	*1*
Toluene-d8 (Surr)	*99*		*50 - 149*	*03/05/19 12:58*	*03/05/19 23:31*	*1*

Lab Sample ID: LCS 480-461604/1-A
Matrix: Solid
Analysis Batch: 461670

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461604

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2500	2650		ug/Kg		106	68 - 130
1,1,2,2-Tetrachloroethane	2500	2530		ug/Kg		101	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2750		ug/Kg		110	10 - 179
1,1,2-Trichloroethane	2500	2600		ug/Kg		104	80 - 120
1,1-Dichloroethane	2500	2600		ug/Kg		104	78 - 121
1,1-Dichloroethene	2500	2630		ug/Kg		105	48 - 133
1,2,4-Trichlorobenzene	2500	2780		ug/Kg		111	70 - 140
1,2,4-Trimethylbenzene	2500	2920		ug/Kg		117	77 - 127
1,2-Dibromo-3-Chloropropane	2500	2520		ug/Kg		101	56 - 122
1,2-Dichlorobenzene	2500	2670		ug/Kg		107	78 - 125
1,2-Dichloroethane	2500	2470		ug/Kg		99	74 - 127
1,2-Dichloropropane	2500	2640		ug/Kg		105	80 - 120
1,3,5-Trimethylbenzene	2500	2890		ug/Kg		116	79 - 120
1,3-Dichlorobenzene	2500	2700		ug/Kg		108	80 - 120
1,4-Dichlorobenzene	2500	2630		ug/Kg		105	80 - 120
2-Butanone (MEK)	12500	11900		ug/Kg		96	54 - 149
2-Hexanone	12500	11400		ug/Kg		91	59 - 127
4-Isopropyltoluene	2500	2940		ug/Kg		118	80 - 120
4-Methyl-2-pentanone (MIBK)	12500	12200		ug/Kg		98	74 - 120
Acetone	12500	11500		ug/Kg		92	47 - 141
Benzene	2500	2630		ug/Kg		105	77 - 125
Bromoform	2500	2560		ug/Kg		102	48 - 125
Bromomethane	2500	2080		ug/Kg		83	39 - 149
Carbon disulfide	2500	2510		ug/Kg		100	40 - 136
Carbon tetrachloride	2500	2670		ug/Kg		107	54 - 135
Chlorobenzene	2500	2630		ug/Kg		105	76 - 126
Dibromochloromethane	2500	2590		ug/Kg		104	64 - 120

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

Lab Sample ID: LCS 480-461604/1-A
Matrix: Solid
Analysis Batch: 461670

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461604

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	2500	1850		ug/Kg		74	23 - 150
Chloroform	2500	2480		ug/Kg		99	78 - 120
Chloromethane	2500	2400		ug/Kg		96	61 - 124
cis-1,2-Dichloroethene	2500	2510		ug/Kg		101	79 - 124
Cyclohexane	2500	2730		ug/Kg		109	49 - 129
Bromodichloromethane	2500	2530		ug/Kg		101	71 - 121
Dichlorodifluoromethane	2500	2380		ug/Kg		95	10 - 150
Ethylbenzene	2500	2660		ug/Kg		106	78 - 124
1,2-Dibromoethane	2500	2580		ug/Kg		103	80 - 120
Isopropylbenzene	2500	2850		ug/Kg		114	76 - 120
Methyl acetate	5000	4900		ug/Kg		98	71 - 123
Methyl tert-butyl ether	2500	2490		ug/Kg		99	67 - 137
Methylcyclohexane	2500	2790		ug/Kg		112	50 - 130
Methylene Chloride	2500	2720		ug/Kg		109	75 - 118
m,p-Xylene	2500	2690		ug/Kg		108	77 - 125
n-Butylbenzene	2500	2910		ug/Kg		117	80 - 120
N-Propylbenzene	2500	2860		ug/Kg		115	76 - 120
o-Xylene	2500	2800		ug/Kg		112	80 - 124
sec-Butylbenzene	2500	2970		ug/Kg		119	79 - 120
Tetrachloroethene	2500	2570		ug/Kg		103	73 - 133
Toluene	2500	2650		ug/Kg		106	75 - 124
trans-1,2-Dichloroethene	2500	2530		ug/Kg		101	74 - 129
trans-1,3-Dichloropropene	2500	2800		ug/Kg		112	73 - 120
Trichloroethene	2500	2690		ug/Kg		108	75 - 131
Trichlorofluoromethane	2500	2540		ug/Kg		102	29 - 158
Vinyl chloride	2500	2550		ug/Kg		102	59 - 124
cis-1,3-Dichloropropene	2500	2750		ug/Kg		110	75 - 121
Styrene	2500	2770		ug/Kg		111	80 - 120
tert-Butylbenzene	2500	2850		ug/Kg		114	78 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*53 - 146*
4-Bromofluorobenzene (Surr)	*100*		*49 - 148*
Toluene-d8 (Surr)	*99*		*50 - 149*

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

Lab Sample ID: MB 480-461631/1-A
Matrix: Solid
Analysis Batch: 461816

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Acenaphthylene	ND		170	22	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Anthracene	ND		170	42	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Benzo[a]anthracene	ND		170	17	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Benzo[a]pyrene	ND		170	25	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		03/05/19 14:35	03/06/19 23:26	1

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

Lab Sample ID: MB 480-461631/1-A
Matrix: Solid
Analysis Batch: 461816

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461631

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Chrysene	ND		170	38	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Fluoranthene	ND		170	18	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Fluorene	ND		170	20	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Naphthalene	ND		170	22	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Pyrene	ND		170	20	ug/Kg		03/05/19 14:35	03/06/19 23:26	1
Phenanthrene	ND		170	25	ug/Kg		03/05/19 14:35	03/06/19 23:26	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*78*		*54 - 120*	*03/05/19 14:35*	*03/06/19 23:26*	*1*
2-Fluorobiphenyl	*90*		*60 - 120*	*03/05/19 14:35*	*03/06/19 23:26*	*1*
2-Fluorophenol (Surr)	*82*		*52 - 120*	*03/05/19 14:35*	*03/06/19 23:26*	*1*
Phenol-d5 (Surr)	*85*		*54 - 120*	*03/05/19 14:35*	*03/06/19 23:26*	*1*
p-Terphenyl-d14 (Surr)	*106*		*65 - 121*	*03/05/19 14:35*	*03/06/19 23:26*	*1*
Nitrobenzene-d5 (Surr)	*93*		*53 - 120*	*03/05/19 14:35*	*03/06/19 23:26*	*1*

Lab Sample ID: LCS 480-461631/2-A
Matrix: Solid
Analysis Batch: 461816

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461631

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1640	1460		ug/Kg		89	62 - 120
Acenaphthylene	1640	1400		ug/Kg		85	58 - 121
Anthracene	1640	1470		ug/Kg		90	62 - 120
Benzo[a]anthracene	1640	1410		ug/Kg		86	65 - 120
Benzo[a]pyrene	1640	1540		ug/Kg		94	64 - 120
Benzo[b]fluoranthene	1640	1510		ug/Kg		92	64 - 120
Benzo[g,h,i]perylene	1640	1630		ug/Kg		99	45 - 145
Benzo[k]fluoranthene	1640	1510		ug/Kg		92	65 - 120
Chrysene	1640	1440		ug/Kg		88	64 - 120
Dibenz(a,h)anthracene	1640	1650		ug/Kg		100	54 - 132
Fluoranthene	1640	1460		ug/Kg		89	62 - 120
Fluorene	1640	1470		ug/Kg		90	63 - 120
Indeno[1,2,3-cd]pyrene	1640	1650		ug/Kg		100	56 - 134
Naphthalene	1640	1280		ug/Kg		78	55 - 120
Pyrene	1640	1440		ug/Kg		88	61 - 133
Phenanthrene	1640	1440		ug/Kg		88	60 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*98*		*54 - 120*
2-Fluorobiphenyl	*88*		*60 - 120*
2-Fluorophenol (Surr)	*77*		*52 - 120*
Phenol-d5 (Surr)	*76*		*54 - 120*
p-Terphenyl-d14 (Surr)	*102*		*65 - 121*

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

Lab Sample ID: LCS 480-461631/2-A
Matrix: Solid
Analysis Batch: 461816

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461631

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Nitrobenzene-d5 (Surr)	*90*		*53 - 120*

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

Lab Sample ID: MB 480-461632/1-A
Matrix: Solid
Analysis Batch: 461785

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461632

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.20	0.040	mg/Kg		03/05/19 14:43	03/06/19 16:10	1
PCB-1221	ND		0.20	0.040	mg/Kg		03/05/19 14:43	03/06/19 16:10	1
PCB-1232	ND		0.20	0.040	mg/Kg		03/05/19 14:43	03/06/19 16:10	1
PCB-1242	ND		0.20	0.040	mg/Kg		03/05/19 14:43	03/06/19 16:10	1
PCB-1248	ND		0.20	0.040	mg/Kg		03/05/19 14:43	03/06/19 16:10	1
PCB-1254	ND		0.20	0.095	mg/Kg		03/05/19 14:43	03/06/19 16:10	1
PCB-1260	ND		0.20	0.095	mg/Kg		03/05/19 14:43	03/06/19 16:10	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*83*		*60 - 154*	*03/05/19 14:43*	*03/06/19 16:10*	*1*
DCB Decachlorobiphenyl	*81*		*65 - 174*	*03/05/19 14:43*	*03/06/19 16:10*	*1*

Lab Sample ID: LCS 480-461632/2-A
Matrix: Solid
Analysis Batch: 461785

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461632

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			2.04	2.00		mg/Kg		98	51 - 185		
PCB-1260			2.04	2.10		mg/Kg		103	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*92*		*60 - 154*
DCB Decachlorobiphenyl	*91*		*65 - 174*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-461760/1-A
Matrix: Solid
Analysis Batch: 462120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.40	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Barium	ND		0.50	0.11	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Cadmium	ND		0.20	0.030	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Chromium	ND		0.50	0.20	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Lead	ND		1.0	0.24	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Selenium	ND		4.0	0.40	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Silver	ND		0.60	0.20	mg/Kg		03/06/19 10:49	03/07/19 12:39	1

Lab Sample ID: LCSSRM 480-461760/2-A
Matrix: Solid
Analysis Batch: 462120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461760

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	171	151.9		mg/Kg		88.8	66.1 - 122.2
Barium	272	235.6		mg/Kg		86.6	71.7 - 119.5
Cadmium	225	188.9		mg/Kg		84.0	70.2 - 117.3
Chromium	144	127.3		mg/Kg		88.4	66.1 - 122.9
Lead	111	117.9		mg/Kg		106.2	71.0 - 128.8
Selenium	206	179.8		mg/Kg		87.3	63.6 - 122.3
Silver	45.5	40.74		mg/Kg		89.5	66.2 - 124.2

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-461646/1-A
Matrix: Solid
Analysis Batch: 461877

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461646

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.018	0.0074	mg/Kg		03/06/19 13:06	03/06/19 16:20	1

Lab Sample ID: LCSSRM 480-461646/2-A ^10
Matrix: Solid
Analysis Batch: 461877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461646

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	11.38		mg/Kg		94.8	57.3 - 133.3

Lab Sample ID: MB 480-461801/1-A
Matrix: Solid
Analysis Batch: 461877

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461801

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019	0.0077	mg/Kg		03/06/19 13:06	03/06/19 16:45	1

Lab Sample ID: LCSSRM 480-461801/2-A ^10
Matrix: Solid
Analysis Batch: 461877

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461801

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	11.37		mg/Kg		94.8	57.3 - 133.3

GC/MS VOA

Prep Batch: 461604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	5035A_H	
480-149711-2	SB-3 (16-20)	Total/NA	Solid	5035A_H	
MB 480-461604/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-461604/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	

Analysis Batch: 461670

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	8260C	461604
480-149711-2	SB-3 (16-20)	Total/NA	Solid	8260C	461604
MB 480-461604/2-A	Method Blank	Total/NA	Solid	8260C	461604
LCS 480-461604/1-A	Lab Control Sample	Total/NA	Solid	8260C	461604

GC/MS Semi VOA

Prep Batch: 461631

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	3550C	
480-149711-3	SB-4 (1-3)	Total/NA	Solid	3550C	
480-149711-4	SB-5 (3-5)	Total/NA	Solid	3550C	
480-149711-5	SB-9 (3-5)	Total/NA	Solid	3550C	
MB 480-461631/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-461631/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 461816

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	8270D	461631
480-149711-3	SB-4 (1-3)	Total/NA	Solid	8270D	461631
480-149711-4	SB-5 (3-5)	Total/NA	Solid	8270D	461631
480-149711-5	SB-9 (3-5)	Total/NA	Solid	8270D	461631
MB 480-461631/1-A	Method Blank	Total/NA	Solid	8270D	461631
LCS 480-461631/2-A	Lab Control Sample	Total/NA	Solid	8270D	461631

GC Semi VOA

Prep Batch: 461632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	3550C	
480-149711-2	SB-3 (16-20)	Total/NA	Solid	3550C	
480-149711-3	SB-4 (1-3)	Total/NA	Solid	3550C	
480-149711-4	SB-5 (3-5)	Total/NA	Solid	3550C	
MB 480-461632/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-461632/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 461785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	8082A	461632
480-149711-2	SB-3 (16-20)	Total/NA	Solid	8082A	461632
480-149711-3	SB-4 (1-3)	Total/NA	Solid	8082A	461632
480-149711-4	SB-5 (3-5)	Total/NA	Solid	8082A	461632
MB 480-461632/1-A	Method Blank	Total/NA	Solid	8082A	461632

GC Semi VOA (Continued)

Analysis Batch: 461785 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-461632/2-A	Lab Control Sample	Total/NA	Solid	8082A	461632

Metals

Prep Batch: 461646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-3	SB-4 (1-3)	Total/NA	Solid	7471B	
480-149711-4	SB-5 (3-5)	Total/NA	Solid	7471B	
480-149711-5	SB-9 (3-5)	Total/NA	Solid	7471B	
MB 480-461646/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-461646/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Prep Batch: 461760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	3050B	
480-149711-3	SB-4 (1-3)	Total/NA	Solid	3050B	
480-149711-4	SB-5 (3-5)	Total/NA	Solid	3050B	
480-149711-5	SB-9 (3-5)	Total/NA	Solid	3050B	
MB 480-461760/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-461760/2-A	Lab Control Sample	Total/NA	Solid	3050B	

Prep Batch: 461801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	7471B	
MB 480-461801/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-461801/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 461877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	7471B	461801
480-149711-3	SB-4 (1-3)	Total/NA	Solid	7471B	461646
480-149711-4	SB-5 (3-5)	Total/NA	Solid	7471B	461646
480-149711-5	SB-9 (3-5)	Total/NA	Solid	7471B	461646
MB 480-461646/1-A	Method Blank	Total/NA	Solid	7471B	461646
MB 480-461801/1-A	Method Blank	Total/NA	Solid	7471B	461801
LCSSRM 480-461646/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	461646
LCSSRM 480-461801/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	461801

Analysis Batch: 462120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	6010C	461760
480-149711-3	SB-4 (1-3)	Total/NA	Solid	6010C	461760
480-149711-4	SB-5 (3-5)	Total/NA	Solid	6010C	461760
480-149711-5	SB-9 (3-5)	Total/NA	Solid	6010C	461760
MB 480-461760/1-A	Method Blank	Total/NA	Solid	6010C	461760
LCSSRM 480-461760/2-A	Lab Control Sample	Total/NA	Solid	6010C	461760

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

General Chemistry

Analysis Batch: 461606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149711-1	SB-3 (8-12)	Total/NA	Solid	Moisture	
480-149711-2	SB-3 (16-20)	Total/NA	Solid	Moisture	
480-149711-3	SB-4 (1-3)	Total/NA	Solid	Moisture	
480-149711-4	SB-5 (3-5)	Total/NA	Solid	Moisture	
480-149711-5	SB-9 (3-5)	Total/NA	Solid	Moisture	

Client Sample ID: SB-3 (8-12)

Lab Sample ID: 480-149711-1

Date Collected: 02/28/19 09:41

Matrix: Solid

Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

Client Sample ID: SB-3 (8-12)

Lab Sample ID: 480-149711-1

Date Collected: 02/28/19 09:41

Matrix: Solid

Date Received: 03/01/19 16:00

Percent Solids: 73.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			461604	03/05/19 12:58	OMI	TAL BUF
Total/NA	Analysis	8260C		2	461670	03/06/19 03:32	RJF	TAL BUF
Total/NA	Prep	3550C			461631	03/05/19 14:35	ATG	TAL BUF
Total/NA	Analysis	8270D		1	461816	03/07/19 07:17	DMR	TAL BUF
Total/NA	Prep	3550C			461632	03/05/19 14:43	ATG	TAL BUF
Total/NA	Analysis	8082A		1	461785	03/06/19 17:45	W1T	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:37	AMH	TAL BUF
Total/NA	Prep	7471B			461801	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		5	461877	03/06/19 17:12	BMB	TAL BUF

Client Sample ID: SB-3 (16-20)

Lab Sample ID: 480-149711-2

Date Collected: 02/28/19 09:42

Matrix: Solid

Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

Client Sample ID: SB-3 (16-20)

Lab Sample ID: 480-149711-2

Date Collected: 02/28/19 09:42

Matrix: Solid

Date Received: 03/01/19 16:00

Percent Solids: 73.5

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			461604	03/05/19 12:58	OMI	TAL BUF
Total/NA	Analysis	8260C		8	461670	03/06/19 04:00	RJF	TAL BUF
Total/NA	Prep	3550C			461632	03/05/19 14:43	ATG	TAL BUF
Total/NA	Analysis	8082A		1	461785	03/06/19 18:01	W1T	TAL BUF

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

Lab Sample ID: 480-149711-3

Date Collected: 02/28/19 12:00

Matrix: Solid

Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

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

Lab Sample ID: 480-149711-3

Date Collected: 02/28/19 12:00
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 83.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461631	03/05/19 14:35	ATG	TAL BUF
Total/NA	Analysis	8270D		10	461816	03/07/19 07:42	DMR	TAL BUF
Total/NA	Prep	3550C			461632	03/05/19 14:43	ATG	TAL BUF
Total/NA	Analysis	8082A		1	461785	03/06/19 18:17	W1T	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:41	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:37	BMB	TAL BUF

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

Lab Sample ID: 480-149711-4

Date Collected: 02/28/19 13:00
Matrix: Solid
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

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

Lab Sample ID: 480-149711-4

Date Collected: 02/28/19 13:00
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 85.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461631	03/05/19 14:35	ATG	TAL BUF
Total/NA	Analysis	8270D		5	461816	03/07/19 08:07	DMR	TAL BUF
Total/NA	Prep	3550C			461632	03/05/19 14:43	ATG	TAL BUF
Total/NA	Analysis	8082A		1	461785	03/06/19 18:33	W1T	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:45	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:38	BMB	TAL BUF

Client Sample ID: SB-9 (3-5)

Lab Sample ID: 480-149711-5

Date Collected: 02/28/19 15:00
Matrix: Solid
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

Client Sample ID: SB-9 (3-5)

Lab Sample ID: 480-149711-5

Date Collected: 02/28/19 15:00
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461631	03/05/19 14:35	ATG	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Client Sample ID: SB-9 (3-5)
Date Collected: 02/28/19 15:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149711-5
Matrix: Solid
Percent Solids: 78.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8270D		5	461816	03/07/19 08:32	DMR	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:49	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:40	BMB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
TestAmerica Job ID: 480-149711-1
Project/Site: Benchmark - 395 Ganson St.

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_H	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149711-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-149711-1	SB-3 (8-12)	Solid	02/28/19 09:41	03/01/19 16:00
480-149711-2	SB-3 (16-20)	Solid	02/28/19 09:42	03/01/19 16:00
480-149711-3	SB-4 (1-3)	Solid	02/28/19 12:00	03/01/19 16:00
480-149711-4	SB-5 (3-5)	Solid	02/28/19 13:00	03/01/19 16:00
480-149711-5	SB-9 (3-5)	Solid	02/28/19 15:00	03/01/19 16:00

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 304521

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

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

Client Contact	Project Manager: BRYAN MAYBACK	Site Contact: CHAD SCHUSTER	Date: 3/1/19	COC No:
Company Name: BENCHMARK	Tel/Fax:	Lab Contact: BRIAN FISCHER	Carrier:	___ of 1 COCs
Address: 2558 HAMBURG TPK	Analysis Turnaround Time			Sampler:
City/State/Zip: BUFF, NY 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 856 0599	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: 395 CANSON ST	☐ 1 week STD			
Site: 395 CANSON ST	☐ 2 days			Job / SDG No.: 149711
PO# B0476-018-001	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL+CP51 VOC	PAHs	RCRA METALS	PCB	Sample Specific Notes:
SB-3(8-12)	2/28/19	941	G	Soil	2			X	X	X	X	
SB-3(16-20)		942						X			X	
SB-4(1-3)		1200							X	X	X	
SB-5(3-5)		1300							X	X	X	
SB-9(3-5)	↓	1500	↓	↓	↓				X	X		

480-149711 Chain of Custody

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

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

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

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

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

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.5 Corr'd: _____ | Therm ID No.: 4

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Chad M Schuster	BENCHMARK	3/1/19 1600	[signature]	TEST AMERICA	3/1/2019 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

KEK / Cooler @ 3.5°C

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-149711-1

Login Number: 149711

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	BENCHMARK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-149695-1
Client Project/Site: Benchmark - 395 Ganson St.

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

Attn: Bryan Mayback

Joseph V. Giacomazza

Authorized for release by:
3/6/2019 12:57:52 PM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

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

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-149695-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-149695-1

Comments
No additional comments.

Receipt
The sample was received on 3/1/2019 4:00 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-461505 recovered above the upper control limit for Chlorodibromomethane and cis-1,3-Dichloropropene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: SB-3W (480-149695-1).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-461505 recovered outside control limits for the following analyte: Chlorodibromomethane. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) associated with batch 480-461505. The following sample was affected : SB-3W (480-149695-1).

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 - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

Client Sample ID: SB-3W

Lab Sample ID: 480-149695-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	4.0	J	10	3.0	ug/L	1		8260C	Total/NA
Carbon disulfide	0.27	J	1.0	0.19	ug/L	1		8260C	Total/NA
Cyclohexane	0.21	J	1.0	0.18	ug/L	1		8260C	Total/NA
Methylcyclohexane	0.42	J	1.0	0.16	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

Client Sample ID: SB-3W
Date Collected: 03/01/19 08:34
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149695-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/05/19 02:31	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/05/19 02:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/05/19 02:31	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/05/19 02:31	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/05/19 02:31	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/05/19 02:31	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/05/19 02:31	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			03/05/19 02:31	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/05/19 02:31	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/05/19 02:31	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/05/19 02:31	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/05/19 02:31	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			03/05/19 02:31	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/05/19 02:31	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/05/19 02:31	1
2-Butanone (MEK)	ND	*	10	1.3	ug/L			03/05/19 02:31	1
2-Hexanone	ND		5.0	1.2	ug/L			03/05/19 02:31	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			03/05/19 02:31	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/05/19 02:31	1
Acetone	**4.0**	**J**	10	3.0	ug/L			03/05/19 02:31	1
Benzene	ND		1.0	0.41	ug/L			03/05/19 02:31	1
Bromoform	ND		1.0	0.26	ug/L			03/05/19 02:31	1
Bromomethane	ND		1.0	0.69	ug/L			03/05/19 02:31	1
Carbon disulfide	**0.27**	**J**	1.0	0.19	ug/L			03/05/19 02:31	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/05/19 02:31	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/05/19 02:31	1
Dibromochloromethane	ND	*	1.0	0.32	ug/L			03/05/19 02:31	1
Chloroethane	ND		1.0	0.32	ug/L			03/05/19 02:31	1
Chloroform	ND		1.0	0.34	ug/L			03/05/19 02:31	1
Chloromethane	ND		1.0	0.35	ug/L			03/05/19 02:31	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/05/19 02:31	1
Cyclohexane	**0.21**	**J**	1.0	0.18	ug/L			03/05/19 02:31	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/05/19 02:31	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/05/19 02:31	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/05/19 02:31	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/05/19 02:31	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/05/19 02:31	1
Methyl acetate	ND		2.5	1.3	ug/L			03/05/19 02:31	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/05/19 02:31	1
Methylcyclohexane	**0.42**	**J**	1.0	0.16	ug/L			03/05/19 02:31	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/05/19 02:31	1
m,p-Xylene	ND		2.0	0.66	ug/L			03/05/19 02:31	1
n-Butylbenzene	ND		1.0	0.64	ug/L			03/05/19 02:31	1
N-Propylbenzene	ND		1.0	0.69	ug/L			03/05/19 02:31	1
o-Xylene	ND		1.0	0.76	ug/L			03/05/19 02:31	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			03/05/19 02:31	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/05/19 02:31	1
Toluene	ND		1.0	0.51	ug/L			03/05/19 02:31	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/05/19 02:31	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

Client Sample ID: SB-3W
Date Collected: 03/01/19 08:34
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149695-1
Matrix: Water

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		1.0	0.37	ug/L			03/05/19 02:31	1
Trichloroethene	ND		1.0	0.46	ug/L			03/05/19 02:31	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/05/19 02:31	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/05/19 02:31	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/05/19 02:31	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/05/19 02:31	1
Styrene	ND		1.0	0.73	ug/L			03/05/19 02:31	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			03/05/19 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*103*		*77 - 120*		*03/05/19 02:31*	*1*
4-Bromofluorobenzene (Surr)	*105*		*73 - 120*		*03/05/19 02:31*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/05/19 02:31*	*1*

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-149695-1	SB-3W	103	105	97
LCS 480-461505/5	Lab Control Sample	106	109	100
MB 480-461505/9	Method Blank	105	109	97

Surrogate Legend

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

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

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

Lab Sample ID: MB 480-461505/9
Matrix: Water
Analysis Batch: 461505

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/05/19 00:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/05/19 00:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/05/19 00:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/05/19 00:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/05/19 00:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/05/19 00:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/05/19 00:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			03/05/19 00:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/05/19 00:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/05/19 00:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/05/19 00:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/05/19 00:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			03/05/19 00:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/05/19 00:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/05/19 00:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/05/19 00:36	1
2-Hexanone	ND		5.0	1.2	ug/L			03/05/19 00:36	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			03/05/19 00:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/05/19 00:36	1
Acetone	ND		10	3.0	ug/L			03/05/19 00:36	1
Benzene	ND		1.0	0.41	ug/L			03/05/19 00:36	1
Bromoform	ND		1.0	0.26	ug/L			03/05/19 00:36	1
Bromomethane	ND		1.0	0.69	ug/L			03/05/19 00:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/05/19 00:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/05/19 00:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/05/19 00:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/05/19 00:36	1
Chloroethane	ND		1.0	0.32	ug/L			03/05/19 00:36	1
Chloroform	ND		1.0	0.34	ug/L			03/05/19 00:36	1
Chloromethane	ND		1.0	0.35	ug/L			03/05/19 00:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/05/19 00:36	1
Cyclohexane	ND		1.0	0.18	ug/L			03/05/19 00:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/05/19 00:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/05/19 00:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/05/19 00:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/05/19 00:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/05/19 00:36	1
Methyl acetate	ND		2.5	1.3	ug/L			03/05/19 00:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/05/19 00:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/05/19 00:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/05/19 00:36	1
m,p-Xylene	ND		2.0	0.66	ug/L			03/05/19 00:36	1
n-Butylbenzene	ND		1.0	0.64	ug/L			03/05/19 00:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			03/05/19 00:36	1
o-Xylene	ND		1.0	0.76	ug/L			03/05/19 00:36	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			03/05/19 00:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/05/19 00:36	1
Toluene	ND		1.0	0.51	ug/L			03/05/19 00:36	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

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

Lab Sample ID: MB 480-461505/9
Matrix: Water
Analysis Batch: 461505

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/05/19 00:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/05/19 00:36	1
Trichloroethene	ND		1.0	0.46	ug/L			03/05/19 00:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/05/19 00:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/05/19 00:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/05/19 00:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/05/19 00:36	1
Styrene	ND		1.0	0.73	ug/L			03/05/19 00:36	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			03/05/19 00:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*03/05/19 00:36*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*03/05/19 00:36*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/05/19 00:36*	*1*

Lab Sample ID: LCS 480-461505/5
Matrix: Water
Analysis Batch: 461505

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.4		ug/L		110	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.4		ug/L		117	61 - 148
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	25.9		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	28.7		ug/L		115	66 - 127
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	79 - 122
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L		98	56 - 134
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	24.1		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	26.6		ug/L		106	76 - 120
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	77 - 121
1,3-Dichlorobenzene	25.0	24.6		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	24.6		ug/L		99	80 - 120
2-Butanone (MEK)	125	249	*	ug/L		199	57 - 140
2-Hexanone	125	134		ug/L		107	65 - 127
4-Isopropyltoluene	25.0	26.3		ug/L		105	73 - 120
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		95	71 - 125
Acetone	125	137		ug/L		110	56 - 142
Benzene	25.0	27.2		ug/L		109	71 - 124
Bromoform	25.0	31.8		ug/L		127	61 - 132
Bromomethane	25.0	27.2		ug/L		109	55 - 144
Carbon disulfide	25.0	24.0		ug/L		96	59 - 134
Carbon tetrachloride	25.0	30.8		ug/L		123	72 - 134
Chlorobenzene	25.0	25.1		ug/L		100	80 - 120
Dibromochloromethane	25.0	31.6	*	ug/L		126	75 - 125

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

Lab Sample ID: LCS 480-461505/5
Matrix: Water
Analysis Batch: 461505

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	26.5		ug/L		106	69 - 136
Chloroform	25.0	25.6		ug/L		102	73 - 127
Chloromethane	25.0	25.7		ug/L		103	68 - 124
cis-1,2-Dichloroethene	25.0	25.8		ug/L		103	74 - 124
Cyclohexane	25.0	29.6		ug/L		118	59 - 135
Bromodichloromethane	25.0	30.1		ug/L		121	80 - 122
Dichlorodifluoromethane	25.0	28.7		ug/L		115	59 - 135
Ethylbenzene	25.0	24.9		ug/L		99	77 - 123
1,2-Dibromoethane	25.0	28.2		ug/L		113	77 - 120
Isopropylbenzene	25.0	25.0		ug/L		100	77 - 122
Methyl acetate	50.0	44.7		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	25.8		ug/L		103	77 - 120
Methylcyclohexane	25.0	30.4		ug/L		122	68 - 134
Methylene Chloride	25.0	26.4		ug/L		106	75 - 124
m,p-Xylene	25.0	25.4		ug/L		102	76 - 122
n-Butylbenzene	25.0	25.3		ug/L		101	71 - 128
N-Propylbenzene	25.0	24.6		ug/L		98	75 - 127
o-Xylene	25.0	23.6		ug/L		94	76 - 122
sec-Butylbenzene	25.0	25.7		ug/L		103	74 - 127
Tetrachloroethene	25.0	29.3		ug/L		117	74 - 122
Toluene	25.0	25.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	26.1		ug/L		104	73 - 127
trans-1,3-Dichloropropene	25.0	28.0		ug/L		112	80 - 120
Trichloroethene	25.0	27.2		ug/L		109	74 - 123
Trichlorofluoromethane	25.0	27.6		ug/L		110	62 - 150
Vinyl chloride	25.0	27.5		ug/L		110	65 - 133
cis-1,3-Dichloropropene	25.0	30.6		ug/L		123	74 - 124
Styrene	25.0	25.3		ug/L		101	80 - 120
tert-Butylbenzene	25.0	26.2		ug/L		105	75 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

GC/MS VOA

Analysis Batch: 461505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149695-1	SB-3W	Total/NA	Water	8260C	
MB 480-461505/9	Method Blank	Total/NA	Water	8260C	
LCS 480-461505/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

Client Sample ID: SB-3W
Date Collected: 03/01/19 08:34
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149695-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	461505	03/05/19 02:31	NMC	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
TestAmerica Job ID: 480-149695-1
Project/Site: Benchmark - 395 Ganson St.

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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 - 395 Ganson St.

TestAmerica Job ID: 480-149695-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-149695-1	SB-3W	Water	03/01/19 08:34	03/01/19 16:00

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 304529

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

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

Client Contact	Project Manager: BRYAN MAYBACK	Site Contact: CHAD SCHUSTER	Date: 3/1/19	COC No:
Company Name: BENCHMARK	Tel/Fax:	Lab Contact: BRIAN FISCHER	Carrier:	1 of 1 COCs
Address: 2558 HAMBG TPK	Analysis Turnaround Time			Sampler:
City/State/Zip: BUFF, NY 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 856 0599	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: 375 CANSON ST	☐ 1 week STD			
Site: 395 CANSON ST	☐ 2 days			Job / SDG No.:
PO# B0476-018-001	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL+CP51 VOCs	Sample Specific Notes:
SB-3W	3/1/19	834	G	AQW	3			X	

480-149695 Chain of Custody

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

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

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

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

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

Special Instructions/QC Requirements & Comments:

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Chad M Schuster	BENCHMARK	3/1/19 1600	K Kasperek	TEST AMERICA	3/1/2019 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

KK / COOLER @ 3.5°C

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3/6/2019

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-149695-1

Login Number: 149695

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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	BENCHMARK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-149734-1
Client Project/Site: Benchmark - 305-339 Ganson St.

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

Attn: Bryan Mayback

Joseph V. Giacomazza

Authorized for release by:
3/11/2019 11:41:01 AM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

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

Table of Contents

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
vs	Reported analyte concentrations are below 200 ug/kg and may be biased low due to the sample not being collected according to 5035A-L low-level specifications.
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	LCS or LCSD is outside acceptance limits.
B	Compound was found in the blank and sample.

GC/MS Semi VOA

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

GC Semi VOA

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

Metals

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

Glossary

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

Glossary (Continued)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-149734-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-149734-1

Comments
No additional comments.

Receipt
The samples were received on 3/1/2019 4:00 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-461683 and analytical batch 480-461667 recovered outside control limits for the following analyte: Chloroethane. Chloroethane has been identified as a poor performing analyte when analyzed using this method; therefore, re-analysis was not performed. The following sample is affected: SB-9 (3-5) (480-149734-6).

Method(s) 8260C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-461683 and analytical batch 480-461667 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. The following samples are impacted: (480-149734-A-6-B MS) and (480-149734-A-6-C MSD).

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 was diluted due to color, appearance and/or viscosity: SB-2 (3-5) (480-149734-1), SB-3 (2-4) (480-149734-2), SB-4 (1-3) (480-149734-3), SB-5 (3-5) (480-149734-4), SB-8 (3-5) (480-149734-5) and SB-9 (3-5) (480-149734-6). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following samples required a dilution due to physical characteristics: SB-4 (1-3) (480-149734-3), SB-5 (3-5) (480-149734-4), SB-8 (3-5) (480-149734-5) and SB-9 (3-5) (480-149734-6). Because of this dilution, the surrogate spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: Six surrogates are used for this analysis. The laboratory's SOP allows one acid and one base of these surrogates to be outside acceptance criteria without performing re-extraction/re-analysis. The following sample contained an allowable number of surrogate compounds outside limits: SB-3 (2-4) (480-149734-2). These results have been reported and qualified.

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

GC Semi VOA
Method(s) 8082A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 480-461833 and analytical batch 480-461975 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 8082A: The matrix spike / matrix spike duplicate (MS/MSD) precision for preparation batch 480-461833 and analytical batch 480-461975 was outside control limits. Sample matrix interference is suspected.

Method(s) 8082A: Surrogate recovery was outside acceptance limits for the following matrix spike/matrix spike duplicate (MS/MSD) sample: (480-149734-B-1-B MS). The parent sample's surrogate recovery was within limits. The MS/MSD sample has been qualified and reported.

Method(s) 8082A: Surrogate recovery for the following sample was outside control limits: SB-5 (3-5) (480-149734-4). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

Method(s) 8082A: The following samples are associated with a continuing calibration verification (CCV 480-461975/5) that had recoveries for the surrogate Decachlorobiphenyl that were below acceptance limits: SB-2 (3-5) (480-149734-1) and SB-5 (3-5) (480-149734-4). The secondary surrogate Tetrachloro-m-xylene is within limits. Therefore, the data has been reported.

Job ID: 480-149734-1 (Continued)

Laboratory: TestAmerica Buffalo (Continued)

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

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

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-2 (3-5) — Lab Sample ID: 480-149734-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	260	J	930	140	ug/Kg	5	☼	8270D	Total/NA
Anthracene	690	J	930	230	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	2400		930	93	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	2000		930	140	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	2800		930	150	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1400		930	98	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	1100		930	120	ug/Kg	5	☼	8270D	Total/NA
Chrysene	2500		930	210	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	4800		930	98	ug/Kg	5	☼	8270D	Total/NA
Fluorene	190	J	930	110	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1100		930	110	ug/Kg	5	☼	8270D	Total/NA
Pyrene	4000		930	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	3000		930	140	ug/Kg	5	☼	8270D	Total/NA
Arsenic	7.7	F1	2.3	0.45	mg/Kg	1	☼	6010C	Total/NA
Barium	177		0.57	0.12	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.56	F1	0.23	0.034	mg/Kg	1	☼	6010C	Total/NA
Chromium	12.0	F2	0.57	0.23	mg/Kg	1	☼	6010C	Total/NA
Lead	568	F2	1.1	0.27	mg/Kg	1	☼	6010C	Total/NA
Selenium	1.3	J F1	4.5	0.45	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.65	F1	0.020	0.0082	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-3 (2-4) — Lab Sample ID: 480-149734-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	3500		1100	160	ug/Kg	5	☼	8270D	Total/NA
Anthracene	7500		1100	260	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]anthracene	9900		1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	8200		1100	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	9400		1100	170	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	4700		1100	110	ug/Kg	5	☼	8270D	Total/NA
Benzo[k]fluoranthene	4500		1100	140	ug/Kg	5	☼	8270D	Total/NA
Chrysene	8900		1100	240	ug/Kg	5	☼	8270D	Total/NA
Dibenz(a,h)anthracene	1200		1100	190	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	20000		1100	110	ug/Kg	5	☼	8270D	Total/NA
Fluorene	3500		1100	130	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	4300		1100	130	ug/Kg	5	☼	8270D	Total/NA
Naphthalene	590	J	1100	140	ug/Kg	5	☼	8270D	Total/NA
Pyrene	17000		1100	130	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	21000		1100	160	ug/Kg	5	☼	8270D	Total/NA
Arsenic	6.8		2.6	0.52	mg/Kg	1	☼	6010C	Total/NA
Barium	130		0.65	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.42		0.26	0.039	mg/Kg	1	☼	6010C	Total/NA
Chromium	26.3		0.65	0.26	mg/Kg	1	☼	6010C	Total/NA
Lead	151		1.3	0.31	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.20		0.025	0.0099	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-4 (1-3) — Lab Sample ID: 480-149734-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	1200	J	3900	390	ug/Kg	20	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-4 (1-3) (Continued) — Lab Sample ID: 480-149734-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	1200	J	3900	570	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	1800	J	3900	620	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1200	J	3900	410	ug/Kg	20	☼	8270D	Total/NA
Chrysene	1600	J	3900	870	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	2800	J	3900	410	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1000	J	3900	480	ug/Kg	20	☼	8270D	Total/NA
Pyrene	2400	J	3900	460	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	1300	J	3900	570	ug/Kg	20	☼	8270D	Total/NA
Arsenic	8.7		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	191		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.42		0.24	0.035	mg/Kg	1	☼	6010C	Total/NA
Chromium	27.2		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	143		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Selenium	2.0	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.097		0.024	0.0097	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-5 (3-5) — Lab Sample ID: 480-149734-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	2300	J	4000	400	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	2000	J	4000	590	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	2800	J	4000	640	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	1500	J	4000	430	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	1600	J	4000	520	ug/Kg	20	☼	8270D	Total/NA
Chrysene	2700	J	4000	900	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	5600		4000	430	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	1300	J	4000	500	ug/Kg	20	☼	8270D	Total/NA
Pyrene	4500		4000	470	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	4000		4000	590	ug/Kg	20	☼	8270D	Total/NA
Arsenic	6.3		2.4	0.47	mg/Kg	1	☼	6010C	Total/NA
Barium	173		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.43		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	15.6		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	162		1.2	0.28	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.59	J	4.7	0.47	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.25		0.025	0.010	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-8 (3-5) — Lab Sample ID: 480-149734-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[b]fluoranthene	770	J	4000	630	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	530	J	4000	420	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	1200	J	4000	420	ug/Kg	20	☼	8270D	Total/NA
Pyrene	1100	J	4000	470	ug/Kg	20	☼	8270D	Total/NA
Arsenic	6.9		2.4	0.48	mg/Kg	1	☼	6010C	Total/NA
Barium	102		0.59	0.13	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.57		0.24	0.036	mg/Kg	1	☼	6010C	Total/NA
Chromium	30.2		0.59	0.24	mg/Kg	1	☼	6010C	Total/NA
Lead	424		1.2	0.29	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.97	J	4.8	0.48	mg/Kg	1	☼	6010C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-8 (3-5) (Continued)

Lab Sample ID: 480-149734-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.47		0.023	0.0091	mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-9 (3-5)

Lab Sample ID: 480-149734-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.7	J F1 vs	6.2	1.2	ug/Kg	1	☼	8260C	Total/NA
Acetone	20	J vs	31	5.3	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.41	J vs	6.2	0.31	ug/Kg	1	☼	8260C	Total/NA
Chloroform	0.49	J B vs	6.2	0.39	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	7.6	F1 vs	6.2	0.94	ug/Kg	1	☼	8260C	Total/NA
2-Butanone (MEK)	4.4	J F1 vs	31	2.3	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	9.5	B vs	6.2	2.9	ug/Kg	1	☼	8260C	Total/NA
m,p-Xylene	1.6	J F1 vs	12	1.0	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	3.4	J F1 vs	6.2	0.50	ug/Kg	1	☼	8260C	Total/NA
sec-Butylbenzene	5.9	J F1 vs	6.2	0.54	ug/Kg	1	☼	8260C	Total/NA
tert-Butylbenzene	2.3	J F1 vs	6.2	0.65	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	1.6	J F1 vs	12	1.0	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	440	J	4200	420	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	940	J	4200	670	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	620	J	4200	440	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	1700	J	4200	440	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	540	J	4200	520	ug/Kg	20	☼	8270D	Total/NA
Pyrene	1300	J	4200	490	ug/Kg	20	☼	8270D	Total/NA
Arsenic	3.6		2.5	0.50	mg/Kg	1	☼	6010C	Total/NA
Barium	116		0.63	0.14	mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.22	J	0.25	0.038	mg/Kg	1	☼	6010C	Total/NA
Chromium	7.0		0.63	0.25	mg/Kg	1	☼	6010C	Total/NA
Lead	44.1		1.3	0.30	mg/Kg	1	☼	6010C	Total/NA
Selenium	0.93	J	5.0	0.50	mg/Kg	1	☼	6010C	Total/NA
Mercury	0.041		0.025	0.010	mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-2 (3-5)
Date Collected: 02/27/19 09:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-1
Matrix: Solid
Percent Solids: 89.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	260	J	930	140	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Acenaphthylene	ND		930	120	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Anthracene	690	J	930	230	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Benzo[a]anthracene	2400		930	93	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Benzo[a]pyrene	2000		930	140	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Benzo[b]fluoranthene	2800		930	150	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Benzo[g,h,i]perylene	1400		930	98	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Benzo[k]fluoranthene	1100		930	120	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Chrysene	2500		930	210	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Dibenz(a,h)anthracene	ND		930	160	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Fluoranthene	4800		930	98	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Fluorene	190	J	930	110	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Indeno[1,2,3-cd]pyrene	1100		930	110	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Naphthalene	ND		930	120	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Pyrene	4000		930	110	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5
Phenanthrene	3000		930	140	ug/Kg	☼	03/06/19 07:22	03/08/19 15:34	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*69*		*54 - 120*	*03/06/19 07:22*	*03/08/19 15:34*	*5*
2-Fluorobiphenyl	*87*		*60 - 120*	*03/06/19 07:22*	*03/08/19 15:34*	*5*
2-Fluorophenol (Surr)	*79*		*52 - 120*	*03/06/19 07:22*	*03/08/19 15:34*	*5*
Phenol-d5 (Surr)	*89*		*54 - 120*	*03/06/19 07:22*	*03/08/19 15:34*	*5*
p-Terphenyl-d14 (Surr)	*111*		*65 - 121*	*03/06/19 07:22*	*03/08/19 15:34*	*5*
Nitrobenzene-d5 (Surr)	*81*		*53 - 120*	*03/06/19 07:22*	*03/08/19 15:34*	*5*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND	F1 F2	0.28	0.054	mg/Kg	☼	03/06/19 14:30	03/07/19 18:20	1
PCB-1221	ND		0.28	0.054	mg/Kg	☼	03/06/19 14:30	03/07/19 18:20	1
PCB-1232	ND		0.28	0.054	mg/Kg	☼	03/06/19 14:30	03/07/19 18:20	1
PCB-1242	ND		0.28	0.054	mg/Kg	☼	03/06/19 14:30	03/07/19 18:20	1
PCB-1248	ND		0.28	0.054	mg/Kg	☼	03/06/19 14:30	03/07/19 18:20	1
PCB-1254	ND		0.28	0.13	mg/Kg	☼	03/06/19 14:30	03/07/19 18:20	1
PCB-1260	ND	F2	0.28	0.13	mg/Kg	☼	03/06/19 14:30	03/07/19 18:20	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*64*		*60 - 154*	*03/06/19 14:30*	*03/07/19 18:20*	*1*
DCB Decachlorobiphenyl	*66*		*65 - 174*	*03/06/19 14:30*	*03/07/19 18:20*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	7.7	F1	2.3	0.45	mg/Kg	☼	03/06/19 10:49	03/07/19 12:46	1
Barium	177		0.57	0.12	mg/Kg	☼	03/06/19 10:49	03/07/19 12:46	1
Cadmium	0.56	F1	0.23	0.034	mg/Kg	☼	03/06/19 10:49	03/07/19 12:46	1
Chromium	12.0	F2	0.57	0.23	mg/Kg	☼	03/06/19 10:49	03/07/19 12:46	1
Lead	568	F2	1.1	0.27	mg/Kg	☼	03/06/19 10:49	03/07/19 12:46	1
Selenium	1.3	J F1	4.5	0.45	mg/Kg	☼	03/06/19 10:49	03/07/19 12:46	1
Silver	ND		0.68	0.23	mg/Kg	☼	03/06/19 10:49	03/07/19 12:46	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-2 (3-5)
Date Collected: 02/27/19 09:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-1
Matrix: Solid
Percent Solids: 89.6

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.65	F1	0.020	0.0082	mg/Kg	☼	03/06/19 13:06	03/06/19 16:23	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-3 (2-4)
Date Collected: 02/27/19 09:30
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-2
Matrix: Solid
Percent Solids: 78.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	3500		1100	160	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Acenaphthylene	ND		1100	140	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Anthracene	7500		1100	260	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Benzo[a]anthracene	9900		1100	110	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Benzo[a]pyrene	8200		1100	160	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Benzo[b]fluoranthene	9400		1100	170	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Benzo[g,h,i]perylene	4700		1100	110	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Benzo[k]fluoranthene	4500		1100	140	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Chrysene	8900		1100	240	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Dibenz(a,h)anthracene	1200		1100	190	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Fluoranthene	20000		1100	110	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Fluorene	3500		1100	130	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Indeno[1,2,3-cd]pyrene	4300		1100	130	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Naphthalene	590	J	1100	140	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Pyrene	17000		1100	130	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5
Phenanthrene	21000		1100	160	ug/Kg	☼	03/06/19 07:22	03/08/19 16:02	5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*52*	*X*	*54 - 120*	*03/06/19 07:22*	*03/08/19 16:02*	*5*
2-Fluorobiphenyl	*95*		*60 - 120*	*03/06/19 07:22*	*03/08/19 16:02*	*5*
2-Fluorophenol (Surr)	*85*		*52 - 120*	*03/06/19 07:22*	*03/08/19 16:02*	*5*
Phenol-d5 (Surr)	*86*		*54 - 120*	*03/06/19 07:22*	*03/08/19 16:02*	*5*
p-Terphenyl-d14 (Surr)	*116*		*65 - 121*	*03/06/19 07:22*	*03/08/19 16:02*	*5*
Nitrobenzene-d5 (Surr)	*87*		*53 - 120*	*03/06/19 07:22*	*03/08/19 16:02*	*5*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.8		2.6	0.52	mg/Kg	☼	03/06/19 10:49	03/07/19 13:06	1
Barium	130		0.65	0.14	mg/Kg	☼	03/06/19 10:49	03/07/19 13:06	1
Cadmium	0.42		0.26	0.039	mg/Kg	☼	03/06/19 10:49	03/07/19 13:06	1
Chromium	26.3		0.65	0.26	mg/Kg	☼	03/06/19 10:49	03/07/19 13:06	1
Lead	151		1.3	0.31	mg/Kg	☼	03/06/19 10:49	03/07/19 13:06	1
Selenium	ND		5.2	0.52	mg/Kg	☼	03/06/19 10:49	03/07/19 13:06	1
Silver	ND		0.78	0.26	mg/Kg	☼	03/06/19 10:49	03/07/19 13:06	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.20		0.025	0.0099	mg/Kg	☼	03/06/19 13:06	03/06/19 16:28	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-4 (1-3)
Date Collected: 02/27/19 10:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-3
Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3900	570	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Acenaphthylene	ND		3900	510	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Anthracene	ND		3900	970	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Benzo[a]anthracene	**1200**	**J**	3900	390	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Benzo[a]pyrene	**1200**	**J**	3900	570	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Benzo[b]fluoranthene	**1800**	**J**	3900	620	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Benzo[g,h,i]perylene	**1200**	**J**	3900	410	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Benzo[k]fluoranthene	ND		3900	510	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Chrysene	**1600**	**J**	3900	870	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Dibenz(a,h)anthracene	ND		3900	690	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Fluoranthene	**2800**	**J**	3900	410	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Fluorene	ND		3900	460	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Indeno[1,2,3-cd]pyrene	**1000**	**J**	3900	480	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Naphthalene	ND		3900	510	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Pyrene	**2400**	**J**	3900	460	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20
Phenanthrene	**1300**	**J**	3900	570	ug/Kg	☼	03/06/19 07:22	03/08/19 16:30	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*54 - 120*	*03/06/19 07:22*	*03/08/19 16:30*	*20*
2-Fluorobiphenyl	*72*		*60 - 120*	*03/06/19 07:22*	*03/08/19 16:30*	*20*
2-Fluorophenol (Surr)	*74*		*52 - 120*	*03/06/19 07:22*	*03/08/19 16:30*	*20*
Phenol-d5 (Surr)	*80*		*54 - 120*	*03/06/19 07:22*	*03/08/19 16:30*	*20*
p-Terphenyl-d14 (Surr)	*104*		*65 - 121*	*03/06/19 07:22*	*03/08/19 16:30*	*20*
Nitrobenzene-d5 (Surr)	*76*		*53 - 120*	*03/06/19 07:22*	*03/08/19 16:30*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**8.7**		2.4	0.47	mg/Kg	☼	03/06/19 10:49	03/07/19 13:10	1
Barium	**191**		0.59	0.13	mg/Kg	☼	03/06/19 10:49	03/07/19 13:10	1
Cadmium	**0.42**		0.24	0.035	mg/Kg	☼	03/06/19 10:49	03/07/19 13:10	1
Chromium	**27.2**		0.59	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:10	1
Lead	**143**		1.2	0.28	mg/Kg	☼	03/06/19 10:49	03/07/19 13:10	1
Selenium	**2.0**	**J**	4.7	0.47	mg/Kg	☼	03/06/19 10:49	03/07/19 13:10	1
Silver	ND		0.71	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:10	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.097**		0.024	0.0097	mg/Kg	☼	03/06/19 13:06	03/06/19 16:29	1

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

Date Collected: 02/27/19 10:30
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-4

Matrix: Solid
Percent Solids: 82.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4000	590	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Acenaphthylene	ND		4000	520	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Anthracene	ND		4000	990	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Benzo[a]anthracene	**2300**	**J**	4000	400	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Benzo[a]pyrene	**2000**	**J**	4000	590	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Benzo[b]fluoranthene	**2800**	**J**	4000	640	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Benzo[g,h,i]perylene	**1500**	**J**	4000	430	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Benzo[k]fluoranthene	**1600**	**J**	4000	520	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Chrysene	**2700**	**J**	4000	900	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Dibenz(a,h)anthracene	ND		4000	710	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Fluoranthene	**5600**		4000	430	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Fluorene	ND		4000	470	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Indeno[1,2,3-cd]pyrene	**1300**	**J**	4000	500	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Naphthalene	ND		4000	520	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Pyrene	**4500**		4000	470	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20
Phenanthrene	**4000**		4000	590	ug/Kg	☼	03/06/19 07:22	03/08/19 16:57	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*54 - 120*	*03/06/19 07:22*	*03/08/19 16:57*	*20*
2-Fluorobiphenyl	*81*		*60 - 120*	*03/06/19 07:22*	*03/08/19 16:57*	*20*
2-Fluorophenol (Surr)	*84*		*52 - 120*	*03/06/19 07:22*	*03/08/19 16:57*	*20*
Phenol-d5 (Surr)	*91*		*54 - 120*	*03/06/19 07:22*	*03/08/19 16:57*	*20*
p-Terphenyl-d14 (Surr)	*118*		*65 - 121*	*03/06/19 07:22*	*03/08/19 16:57*	*20*
Nitrobenzene-d5 (Surr)	*82*		*53 - 120*	*03/06/19 07:22*	*03/08/19 16:57*	*20*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.30	0.058	mg/Kg	☼	03/06/19 14:30	03/07/19 18:36	1
PCB-1221	ND		0.30	0.058	mg/Kg	☼	03/06/19 14:30	03/07/19 18:36	1
PCB-1232	ND		0.30	0.058	mg/Kg	☼	03/06/19 14:30	03/07/19 18:36	1
PCB-1242	ND		0.30	0.058	mg/Kg	☼	03/06/19 14:30	03/07/19 18:36	1
PCB-1248	ND		0.30	0.058	mg/Kg	☼	03/06/19 14:30	03/07/19 18:36	1
PCB-1254	ND		0.30	0.14	mg/Kg	☼	03/06/19 14:30	03/07/19 18:36	1
PCB-1260	ND		0.30	0.14	mg/Kg	☼	03/06/19 14:30	03/07/19 18:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*57*	*X*	*60 - 154*	*03/06/19 14:30*	*03/07/19 18:36*	*1*
DCB Decachlorobiphenyl	*56*	*X*	*65 - 174*	*03/06/19 14:30*	*03/07/19 18:36*	*1*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.3**		2.4	0.47	mg/Kg	☼	03/06/19 10:49	03/07/19 13:26	1
Barium	**173**		0.59	0.13	mg/Kg	☼	03/06/19 10:49	03/07/19 13:26	1
Cadmium	**0.43**		0.24	0.036	mg/Kg	☼	03/06/19 10:49	03/07/19 13:26	1
Chromium	**15.6**		0.59	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:26	1
Lead	**162**		1.2	0.28	mg/Kg	☼	03/06/19 10:49	03/07/19 13:26	1
Selenium	**0.59**	**J**	4.7	0.47	mg/Kg	☼	03/06/19 10:49	03/07/19 13:26	1
Silver	ND		0.71	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:26	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-5 (3-5)
Date Collected: 02/27/19 10:30
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-4
Matrix: Solid
Percent Solids: 82.3

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.25		0.025	0.010	mg/Kg	☼	03/06/19 13:06	03/06/19 16:30	1

Client Sample ID: SB-8 (3-5)
Date Collected: 02/27/19 13:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-5
Matrix: Solid
Percent Solids: 85.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4000	580	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Acenaphthylene	ND		4000	510	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Anthracene	ND		4000	980	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Benzo[a]anthracene	ND		4000	400	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Benzo[a]pyrene	ND		4000	580	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Benzo[b]fluoranthene	**770**	**J**	4000	630	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Benzo[g,h,i]perylene	**530**	**J**	4000	420	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Benzo[k]fluoranthene	ND		4000	510	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Chrysene	ND		4000	880	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Dibenz(a,h)anthracene	ND		4000	700	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Fluoranthene	**1200**	**J**	4000	420	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Fluorene	ND		4000	470	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Indeno[1,2,3-cd]pyrene	ND		4000	490	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Naphthalene	ND		4000	510	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Pyrene	**1100**	**J**	4000	470	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20
Phenanthrene	ND		4000	580	ug/Kg	☼	03/06/19 07:22	03/08/19 17:25	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*54 - 120*	*03/06/19 07:22*	*03/08/19 17:25*	*20*
2-Fluorobiphenyl	*66*		*60 - 120*	*03/06/19 07:22*	*03/08/19 17:25*	*20*
2-Fluorophenol (Surr)	*81*		*52 - 120*	*03/06/19 07:22*	*03/08/19 17:25*	*20*
Phenol-d5 (Surr)	*80*		*54 - 120*	*03/06/19 07:22*	*03/08/19 17:25*	*20*
p-Terphenyl-d14 (Surr)	*97*		*65 - 121*	*03/06/19 07:22*	*03/08/19 17:25*	*20*
Nitrobenzene-d5 (Surr)	*75*		*53 - 120*	*03/06/19 07:22*	*03/08/19 17:25*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**6.9**		2.4	0.48	mg/Kg	☼	03/06/19 10:49	03/07/19 13:29	1
Barium	**102**		0.59	0.13	mg/Kg	☼	03/06/19 10:49	03/07/19 13:29	1
Cadmium	**0.57**		0.24	0.036	mg/Kg	☼	03/06/19 10:49	03/07/19 13:29	1
Chromium	**30.2**		0.59	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:29	1
Lead	**424**		1.2	0.29	mg/Kg	☼	03/06/19 10:49	03/07/19 13:29	1
Selenium	**0.97**	**J**	4.8	0.48	mg/Kg	☼	03/06/19 10:49	03/07/19 13:29	1
Silver	ND		0.71	0.24	mg/Kg	☼	03/06/19 10:49	03/07/19 13:29	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	**0.47**		0.023	0.0091	mg/Kg	☼	03/06/19 13:06	03/06/19 16:32	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-9 (3-5)
Date Collected: 02/27/19 14:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-6
Matrix: Solid
Percent Solids: 79.6

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	6.2	0.45	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,1,2,2-Tetrachloroethane	ND	F1 vs	6.2	1.0	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.2	1.4	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,1,2-Trichloroethane	ND	vs	6.2	0.81	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,1-Dichloroethane	ND	vs	6.2	0.76	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,1-Dichloroethene	ND	vs	6.2	0.76	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,2,4-Trichlorobenzene	ND	F1 vs	6.2	0.38	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,2,4-Trimethylbenzene	**1.7**	**J F1 vs**	6.2	1.2	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,2-Dibromo-3-Chloropropane	ND	F1 vs	6.2	3.1	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,2-Dichlorobenzene	ND	F1 vs	6.2	0.49	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,2-Dichloroethane	ND	vs	6.2	0.31	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,2-Dichloropropane	ND	vs	6.2	3.1	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,3,5-Trimethylbenzene	ND	F1 vs	6.2	0.40	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,3-Dichlorobenzene	ND	F1 vs	6.2	0.32	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,4-Dichlorobenzene	ND	F1 vs	6.2	0.87	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
2-Hexanone	ND	F1 vs	31	3.1	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
4-Isopropyltoluene	ND	F1 vs	6.2	0.50	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Acetone	**20**	**J vs**	31	5.3	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Benzene	**0.41**	**J vs**	6.2	0.31	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Bromoform	ND	F1 vs	6.2	3.1	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Bromomethane	ND	vs	6.2	0.56	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Carbon disulfide	ND	vs	6.2	3.1	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Carbon tetrachloride	ND	vs	6.2	0.60	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Chlorobenzene	ND	F1 vs	6.2	0.82	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Dibromochloromethane	ND	F1 vs	6.2	0.80	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Chloroethane	ND	* vs	6.2	1.4	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Chloroform	**0.49**	**J B vs**	6.2	0.39	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Chloromethane	ND	vs	6.2	0.38	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
cis-1,2-Dichloroethene	ND	vs	6.2	0.80	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
cis-1,3-Dichloropropene	ND	vs	6.2	0.90	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Cyclohexane	ND	vs	6.2	0.87	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Bromodichloromethane	ND	vs	6.2	0.84	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Dichlorodifluoromethane	ND	vs	6.2	0.52	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Ethylbenzene	ND	F1 vs	6.2	0.43	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
1,2-Dibromoethane	ND	F1 vs	6.2	0.80	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Isopropylbenzene	**7.6**	**F1 vs**	6.2	0.94	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Methyl acetate	ND	vs	31	3.8	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
2-Butanone (MEK)	**4.4**	**J F1 vs**	31	2.3	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	31	2.0	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Methyl tert-butyl ether	ND	vs	6.2	0.61	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Methylcyclohexane	ND	F1 vs	6.2	0.95	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Methylene Chloride	**9.5**	**B vs**	6.2	2.9	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
m,p-Xylene	**1.6**	**J F1 vs**	12	1.0	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
n-Butylbenzene	ND	F1 vs	6.2	0.54	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
N-Propylbenzene	**3.4**	**J F1 vs**	6.2	0.50	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
o-Xylene	ND	F1 vs	6.2	0.82	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
sec-Butylbenzene	**5.9**	**J F1 vs**	6.2	0.54	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Styrene	ND	F1 vs	6.2	0.31	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
tert-Butylbenzene	**2.3**	**J F1 vs**	6.2	0.65	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-9 (3-5)
Date Collected: 02/27/19 14:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-6
Matrix: Solid
Percent Solids: 79.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND	F1 vs	6.2	0.84	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Toluene	ND	vs	6.2	0.47	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
trans-1,2-Dichloroethene	ND	vs	6.2	0.64	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
trans-1,3-Dichloropropene	ND	F1 vs	6.2	2.7	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Trichloroethene	ND	vs	6.2	1.4	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Trichlorofluoromethane	ND	vs	6.2	0.59	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Vinyl chloride	ND	vs	6.2	0.76	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1
Xylenes, Total	**1.6**	**J F1 vs**	12	1.0	ug/Kg	☼	03/05/19 20:52	03/06/19 01:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*03/05/19 20:52*	*03/06/19 01:12*	*1*
Toluene-d8 (Surr)	*96*		*71 - 125*	*03/05/19 20:52*	*03/06/19 01:12*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*	*03/05/19 20:52*	*03/06/19 01:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		4200	620	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Acenaphthylene	ND		4200	540	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Anthracene	ND		4200	1000	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Benzo[a]anthracene	**440**	**J**	4200	420	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Benzo[a]pyrene	ND		4200	620	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Benzo[b]fluoranthene	**940**	**J**	4200	670	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Benzo[g,h,i]perylene	**620**	**J**	4200	440	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Benzo[k]fluoranthene	ND		4200	540	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Chrysene	ND		4200	940	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Dibenz(a,h)anthracene	ND		4200	740	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Fluoranthene	**1700**	**J**	4200	440	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Fluorene	ND		4200	490	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Indeno[1,2,3-cd]pyrene	**540**	**J**	4200	520	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Naphthalene	ND		4200	540	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Pyrene	**1300**	**J**	4200	490	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20
Phenanthrene	ND		4200	620	ug/Kg	☼	03/06/19 07:22	03/08/19 17:53	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*0*	*X*	*54 - 120*	*03/06/19 07:22*	*03/08/19 17:53*	*20*
2-Fluorobiphenyl	*51*	*X*	*60 - 120*	*03/06/19 07:22*	*03/08/19 17:53*	*20*
2-Fluorophenol (Surr)	*60*		*52 - 120*	*03/06/19 07:22*	*03/08/19 17:53*	*20*
Phenol-d5 (Surr)	*64*		*54 - 120*	*03/06/19 07:22*	*03/08/19 17:53*	*20*
p-Terphenyl-d14 (Surr)	*78*		*65 - 121*	*03/06/19 07:22*	*03/08/19 17:53*	*20*
Nitrobenzene-d5 (Surr)	*58*		*53 - 120*	*03/06/19 07:22*	*03/08/19 17:53*	*20*

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	**3.6**		2.5	0.50	mg/Kg	☼	03/06/19 10:49	03/07/19 13:33	1
Barium	**116**		0.63	0.14	mg/Kg	☼	03/06/19 10:49	03/07/19 13:33	1
Cadmium	**0.22**	**J**	0.25	0.038	mg/Kg	☼	03/06/19 10:49	03/07/19 13:33	1
Chromium	**7.0**		0.63	0.25	mg/Kg	☼	03/06/19 10:49	03/07/19 13:33	1
Lead	**44.1**		1.3	0.30	mg/Kg	☼	03/06/19 10:49	03/07/19 13:33	1
Selenium	**0.93**	**J**	5.0	0.50	mg/Kg	☼	03/06/19 10:49	03/07/19 13:33	1
Silver	ND		0.75	0.25	mg/Kg	☼	03/06/19 10:49	03/07/19 13:33	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-9 (3-5)
Date Collected: 02/27/19 14:00
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149734-6
Matrix: Solid
Percent Solids: 79.6

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.041		0.025	0.010	mg/Kg	☼	03/06/19 13:06	03/06/19 16:36	1

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	TOL	BFB
Lab Sample ID	Client Sample ID	(64-126)	(71-125)	(72-126)
480-149734-6	SB-9 (3-5)	108	96	93
480-149734-6 MS	SB-9 (3-5)	96	95	94
480-149734-6 MSD	SB-9 (3-5)	95	99	93
LCS 480-461683/1-A	Lab Control Sample	107	98	108
MB 480-461683/2-A	Method Blank	108	100	103

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)					
		TBP	FBP	2FP	PHL	TPHd14	NBZ
Lab Sample ID	Client Sample ID	(54-120)	(60-120)	(52-120)	(54-120)	(65-121)	(53-120)
480-149734-1	SB-2 (3-5)	69	87	79	89	111	81
480-149734-2	SB-3 (2-4)	52 X	95	85	86	116	87
480-149734-3	SB-4 (1-3)	0 X	72	74	80	104	76
480-149734-4	SB-5 (3-5)	0 X	81	84	91	118	82
480-149734-5	SB-8 (3-5)	0 X	66	81	80	97	75
480-149734-6	SB-9 (3-5)	0 X	51 X	60	64	78	58
LCS 480-461693/2-A	Lab Control Sample	100	104	83	92	111	93
MB 480-461693/1-A	Method Blank	67	91	78	86	112	86

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)	
		TCX2	DCBP2
Lab Sample ID	Client Sample ID	(60-154)	(65-174)
480-149734-1	SB-2 (3-5)	64	66
480-149734-1 MS	SB-2 (3-5)	53 X	58 X
480-149734-1 MSD	SB-2 (3-5)	71	74
480-149734-4	SB-5 (3-5)	57 X	56 X
LCS 480-461833/2-A	Lab Control Sample	88	89
MB 480-461833/1-A	Method Blank	77	73

Surrogate Legend

TCX = Tetrachloro-m-xylene
DCBP = DCB Decachlorobiphenyl

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

Lab Sample ID: MB 480-461683/2-A
Matrix: Solid
Analysis Batch: 461667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
2-Hexanone	ND		25	2.5	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Acetone	ND		25	4.2	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Benzene	ND		5.0	0.25	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Bromoform	ND		5.0	2.5	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Bromomethane	ND		5.0	0.45	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Chloroethane	ND		5.0	1.1	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Chloroform	0.312	J	5.0	0.31	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Chloromethane	ND		5.0	0.30	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Cyclohexane	ND		5.0	0.70	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Methyl acetate	ND		25	3.0	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Methylene Chloride	4.37	J	5.0	2.3	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
m,p-Xylene	ND		10	0.84	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
o-Xylene	ND		5.0	0.65	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Styrene	ND		5.0	0.25	ug/Kg		03/05/19 20:52	03/06/19 00:05	1

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

Lab Sample ID: MB 480-461683/2-A
Matrix: Solid
Analysis Batch: 461667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461683

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Toluene	ND		5.0	0.38	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Trichloroethene	ND		5.0	1.1	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		03/05/19 20:52	03/06/19 00:05	1
Xylenes, Total	ND		10	0.84	ug/Kg		03/05/19 20:52	03/06/19 00:05	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*108*		*64 - 126*	*03/05/19 20:52*	*03/06/19 00:05*	*1*
Toluene-d8 (Surr)	*100*		*71 - 125*	*03/05/19 20:52*	*03/06/19 00:05*	*1*
4-Bromofluorobenzene (Surr)	*103*		*72 - 126*	*03/05/19 20:52*	*03/06/19 00:05*	*1*

Lab Sample ID: LCS 480-461683/1-A
Matrix: Solid
Analysis Batch: 461667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	49.6		ug/Kg		99	77 - 121
1,1,2,2-Tetrachloroethane	50.0	43.4		ug/Kg		87	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.4		ug/Kg		99	60 - 140
1,1,2-Trichloroethane	50.0	45.1		ug/Kg		90	78 - 122
1,1-Dichloroethane	50.0	49.7		ug/Kg		99	73 - 126
1,1-Dichloroethene	50.0	49.5		ug/Kg		99	59 - 125
1,2,4-Trichlorobenzene	50.0	43.4		ug/Kg		87	64 - 120
1,2,4-Trimethylbenzene	50.0	40.4		ug/Kg		81	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	38.7		ug/Kg		77	63 - 124
1,2-Dichlorobenzene	50.0	41.4		ug/Kg		83	75 - 120
1,2-Dichloroethane	50.0	49.7		ug/Kg		99	77 - 122
1,2-Dichloropropane	50.0	48.7		ug/Kg		97	75 - 124
1,3,5-Trimethylbenzene	50.0	40.2		ug/Kg		80	74 - 120
1,3-Dichlorobenzene	50.0	42.0		ug/Kg		84	74 - 120
1,4-Dichlorobenzene	50.0	41.9		ug/Kg		84	73 - 120
2-Hexanone	250	244		ug/Kg		98	59 - 130
4-Isopropyltoluene	50.0	40.5		ug/Kg		81	74 - 120
Acetone	250	281		ug/Kg		112	61 - 137
Benzene	50.0	49.7		ug/Kg		99	79 - 127
Bromoform	50.0	48.0		ug/Kg		96	68 - 126
Bromomethane	50.0	39.5		ug/Kg		79	37 - 149
Carbon disulfide	50.0	48.4		ug/Kg		97	64 - 131
Carbon tetrachloride	50.0	49.6		ug/Kg		99	75 - 135
Chlorobenzene	50.0	44.3		ug/Kg		89	76 - 124
Dibromochloromethane	50.0	45.7		ug/Kg		91	76 - 125
Chloroethane	50.0	32.7	*	ug/Kg		65	69 - 135
Chloroform	50.0	50.1		ug/Kg		100	80 - 120

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

Lab Sample ID: LCS 480-461683/1-A
Matrix: Solid
Analysis Batch: 461667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461683

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloromethane	50.0	49.2		ug/Kg		98	63 - 127
cis-1,2-Dichloroethene	50.0	50.2		ug/Kg		100	81 - 120
cis-1,3-Dichloropropene	50.0	48.2		ug/Kg		96	80 - 120
Cyclohexane	50.0	43.9		ug/Kg		88	65 - 120
Bromodichloromethane	50.0	48.1		ug/Kg		96	80 - 122
Dichlorodifluoromethane	50.0	49.1		ug/Kg		98	57 - 142
Ethylbenzene	50.0	43.8		ug/Kg		88	80 - 120
1,2-Dibromoethane	50.0	46.1		ug/Kg		92	78 - 120
Isopropylbenzene	50.0	39.8		ug/Kg		80	72 - 120
Methyl acetate	100	93.4		ug/Kg		93	55 - 136
2-Butanone (MEK)	250	278		ug/Kg		111	70 - 134
4-Methyl-2-pentanone (MIBK)	250	238		ug/Kg		95	65 - 133
Methyl tert-butyl ether	50.0	51.1		ug/Kg		102	63 - 125
Methylcyclohexane	50.0	45.7		ug/Kg		91	60 - 140
Methylene Chloride	50.0	49.2		ug/Kg		98	61 - 127
m,p-Xylene	50.0	43.5		ug/Kg		87	70 - 130
n-Butylbenzene	50.0	39.7		ug/Kg		79	70 - 120
N-Propylbenzene	50.0	40.8		ug/Kg		82	70 - 130
o-Xylene	50.0	42.9		ug/Kg		86	70 - 130
sec-Butylbenzene	50.0	39.9		ug/Kg		80	74 - 120
Styrene	50.0	41.5		ug/Kg		83	80 - 120
tert-Butylbenzene	50.0	39.9		ug/Kg		80	73 - 120
Tetrachloroethene	50.0	45.9		ug/Kg		92	74 - 122
Toluene	50.0	44.0		ug/Kg		88	74 - 128
trans-1,2-Dichloroethene	50.0	51.5		ug/Kg		103	78 - 126
trans-1,3-Dichloropropene	50.0	44.5		ug/Kg		89	73 - 123
Trichloroethene	50.0	49.5		ug/Kg		99	77 - 129
Trichlorofluoromethane	50.0	41.8		ug/Kg		84	65 - 146
Vinyl chloride	50.0	50.8		ug/Kg		102	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*107*		*64 - 126*
Toluene-d8 (Surr)	*98*		*71 - 125*
4-Bromofluorobenzene (Surr)	*108*		*72 - 126*

Lab Sample ID: 480-149734-6 MS
Matrix: Solid
Analysis Batch: 461667

Client Sample ID: SB-9 (3-5)
Prep Type: Total/NA
Prep Batch: 461683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND	vs	62.7	58.9	vs	ug/Kg	☼	94	77 - 121
1,1,2,2-Tetrachloroethane	ND	F1 vs	62.7	51.8	vs	ug/Kg	☼	83	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	62.7	57.7	vs	ug/Kg	☼	92	60 - 140
1,1,2-Trichloroethane	ND	vs	62.7	60.8	vs	ug/Kg	☼	97	78 - 122
1,1-Dichloroethane	ND	vs	62.7	60.4	vs	ug/Kg	☼	96	73 - 126
1,1-Dichloroethene	ND	vs	62.7	59.9	vs	ug/Kg	☼	96	59 - 125
1,2,4-Trichlorobenzene	ND	F1 vs	62.7	19.6	F1 vs	ug/Kg	☼	31	64 - 120

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

Lab Sample ID: 480-149734-6 MS
Matrix: Solid
Analysis Batch: 461667

Client Sample ID: SB-9 (3-5)
Prep Type: Total/NA
Prep Batch: 461683

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	1.7	J F1 vs	62.7	46.9	F1 vs	ug/Kg	☼	72	74 - 120
1,2-Dibromo-3-Chloropropane	ND	F1 vs	62.7	31.2	F1 vs	ug/Kg	☼	50	63 - 124
1,2-Dichlorobenzene	ND	F1 vs	62.7	37.2	F1 vs	ug/Kg	☼	59	75 - 120
1,2-Dichloroethane	ND	vs	62.7	55.1	vs	ug/Kg	☼	88	77 - 122
1,2-Dichloropropane	ND	vs	62.7	58.2	vs	ug/Kg	☼	93	75 - 124
1,3,5-Trimethylbenzene	ND	F1 vs	62.7	44.4	F1 vs	ug/Kg	☼	71	74 - 120
1,3-Dichlorobenzene	ND	F1 vs	62.7	39.9	F1 vs	ug/Kg	☼	64	74 - 120
1,4-Dichlorobenzene	ND	F1 vs	62.7	39.4	F1 vs	ug/Kg	☼	63	73 - 120
2-Hexanone	ND	F1 vs	313	183	F1 vs	ug/Kg	☼	58	59 - 130
4-Isopropyltoluene	ND	F1 vs	62.7	36.7	F1 vs	ug/Kg	☼	58	74 - 120
Acetone	20	J vs	313	240	vs	ug/Kg	☼	70	61 - 137
Benzene	0.41	J vs	62.7	60.6	vs	ug/Kg	☼	96	79 - 127
Bromoform	ND	F1 vs	62.7	39.9	F1 vs	ug/Kg	☼	64	68 - 126
Bromomethane	ND	vs	62.7	61.4	vs	ug/Kg	☼	98	37 - 149
Carbon disulfide	ND	vs	62.7	56.1	vs	ug/Kg	☼	89	64 - 131
Carbon tetrachloride	ND	vs	62.7	57.9	vs	ug/Kg	☼	92	75 - 135
Chlorobenzene	ND	F1 vs	62.7	47.5	vs	ug/Kg	☼	76	76 - 124
Dibromochloromethane	ND	F1 vs	62.7	46.4	F1 vs	ug/Kg	☼	74	76 - 125
Chloroethane	ND	* vs	62.7	54.5	vs	ug/Kg	☼	87	69 - 135
Chloroform	0.49	J B vs	62.7	61.1	vs	ug/Kg	☼	97	80 - 120
Chloromethane	ND	vs	62.7	57.1	vs	ug/Kg	☼	91	63 - 127
cis-1,2-Dichloroethene	ND	vs	62.7	60.2	vs	ug/Kg	☼	96	80 - 120
cis-1,3-Dichloropropene	ND	vs	62.7	55.0	vs	ug/Kg	☼	88	80 - 120
Cyclohexane	ND	vs	62.7	56.5	vs	ug/Kg	☼	90	65 - 120
Bromodichloromethane	ND	vs	62.7	57.9	vs	ug/Kg	☼	92	80 - 122
Dichlorodifluoromethane	ND	vs	62.7	58.6	vs	ug/Kg	☼	93	57 - 142
Ethylbenzene	ND	F1 vs	62.7	46.6	F1 vs	ug/Kg	☼	74	80 - 120
1,2-Dibromoethane	ND	F1 vs	62.7	44.6	F1 vs	ug/Kg	☼	71	78 - 120
Isopropylbenzene	7.6	F1 vs	62.7	57.9	vs	ug/Kg	☼	80	72 - 120
Methyl acetate	ND	vs	125	83.6	vs	ug/Kg	☼	67	55 - 136
2-Butanone (MEK)	4.4	J F1 vs	313	204	F1 vs	ug/Kg	☼	64	70 - 134
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	313	177	F1 vs	ug/Kg	☼	57	65 - 133
Methyl tert-butyl ether	ND	vs	62.7	55.5	vs	ug/Kg	☼	89	63 - 125
Methylcyclohexane	ND	F1 vs	62.7	44.7	vs	ug/Kg	☼	71	60 - 140
Methylene Chloride	9.5	B vs	62.7	61.7	vs	ug/Kg	☼	83	61 - 127
m,p-Xylene	1.6	J F1 vs	62.7	47.0	vs	ug/Kg	☼	72	70 - 130
n-Butylbenzene	ND	F1 vs	62.7	34.5	F1 vs	ug/Kg	☼	55	70 - 120
N-Propylbenzene	3.4	J F1 vs	62.7	51.3	vs	ug/Kg	☼	76	70 - 130
o-Xylene	ND	F1 vs	62.7	45.2	vs	ug/Kg	☼	72	70 - 130
sec-Butylbenzene	5.9	J F1 vs	62.7	41.2	F1 vs	ug/Kg	☼	56	74 - 120
Styrene	ND	F1 vs	62.7	41.9	F1 vs	ug/Kg	☼	67	80 - 120
tert-Butylbenzene	2.3	J F1 vs	62.7	43.1	F1 vs	ug/Kg	☼	65	73 - 120
Tetrachloroethene	ND	F1 vs	62.7	46.9	vs	ug/Kg	☼	75	74 - 122
Toluene	ND	vs	62.7	50.1	vs	ug/Kg	☼	80	74 - 128
trans-1,2-Dichloroethene	ND	vs	62.7	60.5	vs	ug/Kg	☼	97	78 - 126
trans-1,3-Dichloropropene	ND	F1 vs	62.7	44.4	F1 vs	ug/Kg	☼	71	73 - 123
Trichloroethene	ND	vs	62.7	58.5	vs	ug/Kg	☼	93	77 - 129
Trichlorofluoromethane	ND	vs	62.7	54.1	vs	ug/Kg	☼	86	65 - 146

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

Lab Sample ID: 480-149734-6 MS — **Client Sample ID: SB-9 (3-5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 461667 — **Prep Batch: 461683**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Vinyl chloride	ND	vs	62.7	59.2	vs	ug/Kg	☼	94	61 - 133

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*64 - 126*
Toluene-d8 (Surr)	*95*		*71 - 125*
4-Bromofluorobenzene (Surr)	*94*		*72 - 126*

Lab Sample ID: 480-149734-6 MSD — **Client Sample ID: SB-9 (3-5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 461667 — **Prep Batch: 461683**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND	vs	62.6	55.3	vs	ug/Kg	☼	88	77 - 121	6	30
1,1,2,2-Tetrachloroethane	ND	F1 vs	62.6	49.6	F1 vs	ug/Kg	☼	79	80 - 120	4	30
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	62.6	52.7	vs	ug/Kg	☼	84	60 - 140	9	30
1,1,2-Trichloroethane	ND	vs	62.6	56.7	vs	ug/Kg	☼	91	78 - 122	7	30
1,1-Dichloroethane	ND	vs	62.6	58.9	vs	ug/Kg	☼	94	73 - 126	3	30
1,1-Dichloroethene	ND	vs	62.6	57.6	vs	ug/Kg	☼	92	59 - 125	4	30
1,2,4-Trichlorobenzene	ND	F1 vs	62.6	15.1	F1 vs	ug/Kg	☼	24	64 - 120	26	30
1,2,4-Trimethylbenzene	1.7	J F1 vs	62.6	40.6	F1 vs	ug/Kg	☼	62	74 - 120	14	30
1,2-Dibromo-3-Chloropropane	ND	F1 vs	62.6	28.0	F1 vs	ug/Kg	☼	45	63 - 124	11	30
1,2-Dichlorobenzene	ND	F1 vs	62.6	31.5	F1 vs	ug/Kg	☼	50	75 - 120	17	30
1,2-Dichloroethane	ND	vs	62.6	53.2	vs	ug/Kg	☼	85	77 - 122	4	30
1,2-Dichloropropane	ND	vs	62.6	55.3	vs	ug/Kg	☼	88	75 - 124	5	30
1,3,5-Trimethylbenzene	ND	F1 vs	62.6	39.5	F1 vs	ug/Kg	☼	63	74 - 120	12	30
1,3-Dichlorobenzene	ND	F1 vs	62.6	33.8	F1 vs	ug/Kg	☼	54	74 - 120	17	30
1,4-Dichlorobenzene	ND	F1 vs	62.6	33.4	F1 vs	ug/Kg	☼	53	73 - 120	17	30
2-Hexanone	ND	F1 vs	313	177	F1 vs	ug/Kg	☼	57	59 - 130	3	30
4-Isopropyltoluene	ND	F1 vs	62.6	32.0	F1 vs	ug/Kg	☼	51	74 - 120	14	30
Acetone	20	J vs	313	239	vs	ug/Kg	☼	70	61 - 137	0	30
Benzene	0.41	J vs	62.6	57.8	vs	ug/Kg	☼	92	79 - 127	5	30
Bromoform	ND	F1 vs	62.6	36.0	F1 vs	ug/Kg	☼	58	68 - 126	10	30
Bromomethane	ND	vs	62.6	59.8	vs	ug/Kg	☼	96	37 - 149	3	30
Carbon disulfide	ND	vs	62.6	52.9	vs	ug/Kg	☼	84	64 - 131	6	30
Carbon tetrachloride	ND	vs	62.6	52.8	vs	ug/Kg	☼	84	75 - 135	9	30
Chlorobenzene	ND	F1 vs	62.6	43.1	F1 vs	ug/Kg	☼	69	76 - 124	10	30
Dibromochloromethane	ND	F1 vs	62.6	43.6	F1 vs	ug/Kg	☼	70	76 - 125	6	30
Chloroethane	ND	* vs	62.6	51.6	vs	ug/Kg	☼	82	69 - 135	6	30
Chloroform	0.49	J B vs	62.6	58.7	vs	ug/Kg	☼	93	80 - 120	4	30
Chloromethane	ND	vs	62.6	55.5	vs	ug/Kg	☼	89	63 - 127	3	30
cis-1,2-Dichloroethene	ND	vs	62.6	57.8	vs	ug/Kg	☼	92	80 - 120	4	30
cis-1,3-Dichloropropene	ND	vs	62.6	50.5	vs	ug/Kg	☼	81	80 - 120	9	30
Cyclohexane	ND	vs	62.6	48.6	vs	ug/Kg	☼	78	65 - 120	15	30
Bromodichloromethane	ND	vs	62.6	54.9	vs	ug/Kg	☼	88	80 - 122	5	30
Dichlorodifluoromethane	ND	vs	62.6	57.8	vs	ug/Kg	☼	92	57 - 142	1	30
Ethylbenzene	ND	F1 vs	62.6	41.9	F1 vs	ug/Kg	☼	67	80 - 120	11	30
1,2-Dibromoethane	ND	F1 vs	62.6	41.9	F1 vs	ug/Kg	☼	67	78 - 120	6	30

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

Lab Sample ID: 480-149734-6 MSD | **Client Sample ID: SB-9 (3-5)**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 461667 | **Prep Batch: 461683**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Isopropylbenzene	7.6	F1 vs	62.6	51.5	F1 vs	ug/Kg	☼	70	72 - 120	12	30
Methyl acetate	ND	vs	125	91.6	vs	ug/Kg	☼	73	55 - 136	9	30
2-Butanone (MEK)	4.4	J F1 vs	313	198	F1 vs	ug/Kg	☼	62	70 - 134	3	30
4-Methyl-2-pentanone (MIBK)	ND	F1 vs	313	176	F1 vs	ug/Kg	☼	56	65 - 133	1	30
Methyl tert-butyl ether	ND	vs	62.6	54.8	vs	ug/Kg	☼	88	63 - 125	1	30
Methylcyclohexane	ND	F1 vs	62.6	36.9	F1 vs	ug/Kg	☼	59	60 - 140	19	30
Methylene Chloride	9.5	B vs	62.6	62.6	vs	ug/Kg	☼	85	61 - 127	1	30
m,p-Xylene	1.6	J F1 vs	62.6	42.1	F1 vs	ug/Kg	☼	65	70 - 130	11	30
n-Butylbenzene	ND	F1 vs	62.6	28.6	F1 vs	ug/Kg	☼	46	70 - 120	19	30
N-Propylbenzene	3.4	J F1 vs	62.6	43.3	F1 vs	ug/Kg	☼	64	70 - 130	17	30
o-Xylene	ND	F1 vs	62.6	40.6	F1 vs	ug/Kg	☼	65	70 - 130	11	30
sec-Butylbenzene	5.9	J F1 vs	62.6	37.3	F1 vs	ug/Kg	☼	50	74 - 120	10	30
Styrene	ND	F1 vs	62.6	36.0	F1 vs	ug/Kg	☼	58	80 - 120	15	30
tert-Butylbenzene	2.3	J F1 vs	62.6	38.7	F1 vs	ug/Kg	☼	58	73 - 120	11	30
Tetrachloroethene	ND	F1 vs	62.6	42.0	F1 vs	ug/Kg	☼	67	74 - 122	11	30
Toluene	ND	vs	62.6	46.9	vs	ug/Kg	☼	75	74 - 128	7	30
trans-1,2-Dichloroethene	ND	vs	62.6	57.6	vs	ug/Kg	☼	92	78 - 126	5	30
trans-1,3-Dichloropropene	ND	F1 vs	62.6	41.0	F1 vs	ug/Kg	☼	66	73 - 123	8	30
Trichloroethene	ND	vs	62.6	52.6	vs	ug/Kg	☼	84	77 - 129	11	30
Trichlorofluoromethane	ND	vs	62.6	50.9	vs	ug/Kg	☼	81	65 - 146	6	30
Vinyl chloride	ND	vs	62.6	57.3	vs	ug/Kg	☼	92	61 - 133	3	30

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*64 - 126*
Toluene-d8 (Surr)	*99*		*71 - 125*
4-Bromofluorobenzene (Surr)	*93*		*72 - 126*

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

Lab Sample ID: MB 480-461693/1-A | **Client Sample ID: Method Blank**
Matrix: Solid | **Prep Type: Total/NA**
Analysis Batch: 462015 | **Prep Batch: 461693**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	24	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Acenaphthylene	ND		170	21	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Anthracene	ND		170	41	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Benzo[a]anthracene	ND		170	17	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Benzo[a]pyrene	ND		170	24	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Benzo[b]fluoranthene	ND		170	26	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Benzo[k]fluoranthene	ND		170	21	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Chrysene	ND		170	37	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Dibenz(a,h)anthracene	ND		170	29	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Fluoranthene	ND		170	18	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Fluorene	ND		170	19	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Indeno[1,2,3-cd]pyrene	ND		170	20	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Naphthalene	ND		170	21	ug/Kg		03/06/19 07:22	03/07/19 15:46	1

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

Lab Sample ID: MB 480-461693/1-A
Matrix: Solid
Analysis Batch: 462015

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461693

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Pyrene	ND		170	19	ug/Kg		03/06/19 07:22	03/07/19 15:46	1
Phenanthrene	ND		170	24	ug/Kg		03/06/19 07:22	03/07/19 15:46	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
2,4,6-Tribromophenol (Surr)	*67*		*54 - 120*	*03/06/19 07:22*	*03/07/19 15:46*	*1*
2-Fluorobiphenyl	*91*		*60 - 120*	*03/06/19 07:22*	*03/07/19 15:46*	*1*
2-Fluorophenol (Surr)	*78*		*52 - 120*	*03/06/19 07:22*	*03/07/19 15:46*	*1*
Phenol-d5 (Surr)	*86*		*54 - 120*	*03/06/19 07:22*	*03/07/19 15:46*	*1*
p-Terphenyl-d14 (Surr)	*112*		*65 - 121*	*03/06/19 07:22*	*03/07/19 15:46*	*1*
Nitrobenzene-d5 (Surr)	*86*		*53 - 120*	*03/06/19 07:22*	*03/07/19 15:46*	*1*

Lab Sample ID: LCS 480-461693/2-A
Matrix: Solid
Analysis Batch: 462015

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461693

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1620	1490		ug/Kg		92	62 - 120
Acenaphthylene	1620	1620		ug/Kg		100	58 - 121
Anthracene	1620	1670		ug/Kg		103	62 - 120
Benzo[a]anthracene	1620	1600		ug/Kg		99	65 - 120
Benzo[a]pyrene	1620	1710		ug/Kg		106	64 - 120
Benzo[b]fluoranthene	1620	1680		ug/Kg		104	64 - 120
Benzo[g,h,i]perylene	1620	1400		ug/Kg		87	45 - 145
Benzo[k]fluoranthene	1620	1690		ug/Kg		104	65 - 120
Chrysene	1620	1620		ug/Kg		100	64 - 120
Dibenz(a,h)anthracene	1620	1450		ug/Kg		90	54 - 132
Fluoranthene	1620	1670		ug/Kg		103	62 - 120
Fluorene	1620	1630		ug/Kg		101	63 - 120
Indeno[1,2,3-cd]pyrene	1620	1430		ug/Kg		88	56 - 134
Naphthalene	1620	1410		ug/Kg		87	55 - 120
Pyrene	1620	1650		ug/Kg		102	61 - 133
Phenanthrene	1620	1610		ug/Kg		100	60 - 120

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
2,4,6-Tribromophenol (Surr)	*100*		*54 - 120*
2-Fluorobiphenyl	*104*		*60 - 120*
2-Fluorophenol (Surr)	*83*		*52 - 120*
Phenol-d5 (Surr)	*92*		*54 - 120*
p-Terphenyl-d14 (Surr)	*111*		*65 - 121*
Nitrobenzene-d5 (Surr)	*93*		*53 - 120*

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

Lab Sample ID: MB 480-461833/1-A
Matrix: Solid
Analysis Batch: 461975

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461833

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
PCB-1016	ND		0.23	0.045	mg/Kg		03/06/19 14:30	03/07/19 17:16	1
PCB-1221	ND		0.23	0.045	mg/Kg		03/06/19 14:30	03/07/19 17:16	1
PCB-1232	ND		0.23	0.045	mg/Kg		03/06/19 14:30	03/07/19 17:16	1
PCB-1242	ND		0.23	0.045	mg/Kg		03/06/19 14:30	03/07/19 17:16	1
PCB-1248	ND		0.23	0.045	mg/Kg		03/06/19 14:30	03/07/19 17:16	1
PCB-1254	ND		0.23	0.11	mg/Kg		03/06/19 14:30	03/07/19 17:16	1
PCB-1260	ND		0.23	0.11	mg/Kg		03/06/19 14:30	03/07/19 17:16	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Tetrachloro-m-xylene	*77*		*60 - 154*	*03/06/19 14:30*	*03/07/19 17:16*	*1*
DCB Decachlorobiphenyl	*73*		*65 - 174*	*03/06/19 14:30*	*03/07/19 17:16*	*1*

Lab Sample ID: LCS 480-461833/2-A
Matrix: Solid
Analysis Batch: 461975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461833

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016			2.26	2.21		mg/Kg		98	51 - 185		
PCB-1260			2.26	2.30		mg/Kg		102	61 - 184		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Tetrachloro-m-xylene	*88*		*60 - 154*
DCB Decachlorobiphenyl	*89*		*65 - 174*

Lab Sample ID: 480-149734-1 MS
Matrix: Solid
Analysis Batch: 461975

Client Sample ID: SB-2 (3-5)
Prep Type: Total/NA
Prep Batch: 461833

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
PCB-1016	ND	F1 F2	2.44	1.05	F1	mg/Kg	☼	43	50 - 177		
PCB-1260	ND	F2	2.44	1.06		mg/Kg	☼	43	33 - 200		

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
Tetrachloro-m-xylene	*53*	*X*	*60 - 154*
DCB Decachlorobiphenyl	*58*	*X*	*65 - 174*

Lab Sample ID: 480-149734-1 MSD
Matrix: Solid
Analysis Batch: 461975

Client Sample ID: SB-2 (3-5)
Prep Type: Total/NA
Prep Batch: 461833

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
PCB-1016	ND	F1 F2	2.62	2.11	F2	mg/Kg	☼	80	50 - 177	67	50
PCB-1260	ND	F2	2.62	2.26	F2	mg/Kg	☼	86	33 - 200	73	50

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
Tetrachloro-m-xylene	*71*		*60 - 154*
DCB Decachlorobiphenyl	*74*		*65 - 174*

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-461760/1-A
Matrix: Solid
Analysis Batch: 462120

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 461760

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.0	0.40	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Barium	ND		0.50	0.11	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Cadmium	ND		0.20	0.030	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Chromium	ND		0.50	0.20	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Lead	ND		1.0	0.24	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Selenium	ND		4.0	0.40	mg/Kg		03/06/19 10:49	03/07/19 12:39	1
Silver	ND		0.60	0.20	mg/Kg		03/06/19 10:49	03/07/19 12:39	1

Lab Sample ID: LCSSRM 480-461760/2-A
Matrix: Solid
Analysis Batch: 462120

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 461760

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	171	151.9		mg/Kg		88.8	66.1 - 122.2
Barium	272	235.6		mg/Kg		86.6	71.7 - 119.5
Cadmium	225	188.9		mg/Kg		84.0	70.2 - 117.3
Chromium	144	127.3		mg/Kg		88.4	66.1 - 122.9
Lead	111	117.9		mg/Kg		106.2	71.0 - 128.8
Selenium	206	179.8		mg/Kg		87.3	63.6 - 122.3
Silver	45.5	40.74		mg/Kg		89.5	66.2 - 124.2

Lab Sample ID: 480-149734-1 MS
Matrix: Solid
Analysis Batch: 462120

Client Sample ID: SB-2 (3-5)
Prep Type: Total/NA
Prep Batch: 461760

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	7.7	F1	22.3	33.39		mg/Kg	☼	115	75 - 125
Barium	177		22.3	193.5	4	mg/Kg	☼	74	75 - 125
Cadmium	0.56	F1	22.3	25.00		mg/Kg	☼	110	75 - 125
Chromium	12.0	F2	22.3	29.78		mg/Kg	☼	80	75 - 125
Lead	568	F2	22.3	382.9	4	mg/Kg	☼	-829	75 - 125
Selenium	1.3	J F1	22.3	17.80	F1	mg/Kg	☼	74	75 - 125
Silver	ND		5.57	6.16		mg/Kg	☼	111	75 - 125

Lab Sample ID: 480-149734-1 MSD
Matrix: Solid
Analysis Batch: 462120

Client Sample ID: SB-2 (3-5)
Prep Type: Total/NA
Prep Batch: 461760

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	7.7	F1	22.8	39.10	F1	mg/Kg	☼	138	75 - 125	16	20
Barium	177		22.8	210.1	4	mg/Kg	☼	146	75 - 125	8	20
Cadmium	0.56	F1	22.8	29.23	F1	mg/Kg	☼	126	75 - 125	16	20
Chromium	12.0	F2	22.8	38.86	F2	mg/Kg	☼	118	75 - 125	26	20

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

Lab Sample ID: 480-149734-1 MSD — **Client Sample ID: SB-2 (3-5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 462120 — **Prep Batch: 461760**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	568	F2	22.8	507.7	4 F2	mg/Kg	☼	-264	75 - 125	28	20
Selenium	1.3	J F1	22.8	21.82		mg/Kg	☼	90	75 - 125	20	20
Silver	ND		5.69	6.97		mg/Kg	☼	123	75 - 125	12	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-461646/1-A — **Client Sample ID: Method Blank**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 461877 — **Prep Batch: 461646**

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.018	0.0074	mg/Kg		03/06/19 13:06	03/06/19 16:20	1

Lab Sample ID: LCSSRM 480-461646/2-A ^10 — **Client Sample ID: Lab Control Sample**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 461877 — **Prep Batch: 461646**

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.0	11.38		mg/Kg		94.8	57.3 - 133.3

Lab Sample ID: 480-149734-1 MS — **Client Sample ID: SB-2 (3-5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 461877 — **Prep Batch: 461646**

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.65	F1	0.383	1.05		mg/Kg	☼	104	80 - 120

Lab Sample ID: 480-149734-1 MSD — **Client Sample ID: SB-2 (3-5)**
Matrix: Solid — **Prep Type: Total/NA**
Analysis Batch: 461877 — **Prep Batch: 461646**

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.65	F1	0.354	1.22	F1	mg/Kg	☼	162	80 - 120	15	20

GC/MS VOA

Analysis Batch: 461667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-6	SB-9 (3-5)	Total/NA	Solid	8260C	461683
MB 480-461683/2-A	Method Blank	Total/NA	Solid	8260C	461683
LCS 480-461683/1-A	Lab Control Sample	Total/NA	Solid	8260C	461683
480-149734-6 MS	SB-9 (3-5)	Total/NA	Solid	8260C	461683
480-149734-6 MSD	SB-9 (3-5)	Total/NA	Solid	8260C	461683

Prep Batch: 461683

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-6	SB-9 (3-5)	Total/NA	Solid	5035A_L	
MB 480-461683/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-461683/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	
480-149734-6 MS	SB-9 (3-5)	Total/NA	Solid	5035A_L	
480-149734-6 MSD	SB-9 (3-5)	Total/NA	Solid	5035A_L	

GC/MS Semi VOA

Prep Batch: 461693

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	3550C	
480-149734-2	SB-3 (2-4)	Total/NA	Solid	3550C	
480-149734-3	SB-4 (1-3)	Total/NA	Solid	3550C	
480-149734-4	SB-5 (3-5)	Total/NA	Solid	3550C	
480-149734-5	SB-8 (3-5)	Total/NA	Solid	3550C	
480-149734-6	SB-9 (3-5)	Total/NA	Solid	3550C	
MB 480-461693/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-461693/2-A	Lab Control Sample	Total/NA	Solid	3550C	

Analysis Batch: 462015

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 480-461693/1-A	Method Blank	Total/NA	Solid	8270D	461693
LCS 480-461693/2-A	Lab Control Sample	Total/NA	Solid	8270D	461693

Analysis Batch: 462180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	8270D	461693
480-149734-2	SB-3 (2-4)	Total/NA	Solid	8270D	461693
480-149734-3	SB-4 (1-3)	Total/NA	Solid	8270D	461693
480-149734-4	SB-5 (3-5)	Total/NA	Solid	8270D	461693
480-149734-5	SB-8 (3-5)	Total/NA	Solid	8270D	461693
480-149734-6	SB-9 (3-5)	Total/NA	Solid	8270D	461693

GC Semi VOA

Prep Batch: 461833

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	3550C	
480-149734-4	SB-5 (3-5)	Total/NA	Solid	3550C	
MB 480-461833/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-461833/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-149734-1 MS	SB-2 (3-5)	Total/NA	Solid	3550C	

GC Semi VOA (Continued)

Prep Batch: 461833 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1 MSD	SB-2 (3-5)	Total/NA	Solid	3550C	

Analysis Batch: 461975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	8082A	461833
480-149734-4	SB-5 (3-5)	Total/NA	Solid	8082A	461833
MB 480-461833/1-A	Method Blank	Total/NA	Solid	8082A	461833
LCS 480-461833/2-A	Lab Control Sample	Total/NA	Solid	8082A	461833
480-149734-1 MS	SB-2 (3-5)	Total/NA	Solid	8082A	461833
480-149734-1 MSD	SB-2 (3-5)	Total/NA	Solid	8082A	461833

Metals

Prep Batch: 461646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	7471B	
480-149734-2	SB-3 (2-4)	Total/NA	Solid	7471B	
480-149734-3	SB-4 (1-3)	Total/NA	Solid	7471B	
480-149734-4	SB-5 (3-5)	Total/NA	Solid	7471B	
480-149734-5	SB-8 (3-5)	Total/NA	Solid	7471B	
480-149734-6	SB-9 (3-5)	Total/NA	Solid	7471B	
MB 480-461646/1-A	Method Blank	Total/NA	Solid	7471B	
LCSSRM 480-461646/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-149734-1 MS	SB-2 (3-5)	Total/NA	Solid	7471B	
480-149734-1 MSD	SB-2 (3-5)	Total/NA	Solid	7471B	

Prep Batch: 461760

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	3050B	
480-149734-2	SB-3 (2-4)	Total/NA	Solid	3050B	
480-149734-3	SB-4 (1-3)	Total/NA	Solid	3050B	
480-149734-4	SB-5 (3-5)	Total/NA	Solid	3050B	
480-149734-5	SB-8 (3-5)	Total/NA	Solid	3050B	
480-149734-6	SB-9 (3-5)	Total/NA	Solid	3050B	
MB 480-461760/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-461760/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-149734-1 MS	SB-2 (3-5)	Total/NA	Solid	3050B	
480-149734-1 MSD	SB-2 (3-5)	Total/NA	Solid	3050B	

Analysis Batch: 461877

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	7471B	461646
480-149734-2	SB-3 (2-4)	Total/NA	Solid	7471B	461646
480-149734-3	SB-4 (1-3)	Total/NA	Solid	7471B	461646
480-149734-4	SB-5 (3-5)	Total/NA	Solid	7471B	461646
480-149734-5	SB-8 (3-5)	Total/NA	Solid	7471B	461646
480-149734-6	SB-9 (3-5)	Total/NA	Solid	7471B	461646
MB 480-461646/1-A	Method Blank	Total/NA	Solid	7471B	461646
LCSSRM 480-461646/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	461646
480-149734-1 MS	SB-2 (3-5)	Total/NA	Solid	7471B	461646

Metals (Continued)

Analysis Batch: 461877 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1 MSD	SB-2 (3-5)	Total/NA	Solid	7471B	461646

Analysis Batch: 462120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	6010C	461760
480-149734-2	SB-3 (2-4)	Total/NA	Solid	6010C	461760
480-149734-3	SB-4 (1-3)	Total/NA	Solid	6010C	461760
480-149734-4	SB-5 (3-5)	Total/NA	Solid	6010C	461760
480-149734-5	SB-8 (3-5)	Total/NA	Solid	6010C	461760
480-149734-6	SB-9 (3-5)	Total/NA	Solid	6010C	461760
MB 480-461760/1-A	Method Blank	Total/NA	Solid	6010C	461760
LCSSRM 480-461760/2-A	Lab Control Sample	Total/NA	Solid	6010C	461760
480-149734-1 MS	SB-2 (3-5)	Total/NA	Solid	6010C	461760
480-149734-1 MSD	SB-2 (3-5)	Total/NA	Solid	6010C	461760

General Chemistry

Analysis Batch: 461606

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149734-1	SB-2 (3-5)	Total/NA	Solid	Moisture	
480-149734-2	SB-3 (2-4)	Total/NA	Solid	Moisture	
480-149734-3	SB-4 (1-3)	Total/NA	Solid	Moisture	
480-149734-4	SB-5 (3-5)	Total/NA	Solid	Moisture	
480-149734-5	SB-8 (3-5)	Total/NA	Solid	Moisture	
480-149734-6	SB-9 (3-5)	Total/NA	Solid	Moisture	

Client Sample ID: SB-2 (3-5) — **Lab Sample ID: 480-149734-1**
Date Collected: 02/27/19 09:00 — **Matrix: Solid**
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

Client Sample ID: SB-2 (3-5) — **Lab Sample ID: 480-149734-1**
Date Collected: 02/27/19 09:00 — **Matrix: Solid**
Date Received: 03/01/19 16:00 — **Percent Solids: 89.6**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461693	03/06/19 07:22	SMP	TAL BUF
Total/NA	Analysis	8270D		5	462180	03/08/19 15:34	PJQ	TAL BUF
Total/NA	Prep	3550C			461833	03/06/19 14:30	ATG	TAL BUF
Total/NA	Analysis	8082A		1	461975	03/07/19 18:20	W1T	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 12:46	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:23	BMB	TAL BUF

Client Sample ID: SB-3 (2-4) — **Lab Sample ID: 480-149734-2**
Date Collected: 02/27/19 09:30 — **Matrix: Solid**
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

Client Sample ID: SB-3 (2-4) — **Lab Sample ID: 480-149734-2**
Date Collected: 02/27/19 09:30 — **Matrix: Solid**
Date Received: 03/01/19 16:00 — **Percent Solids: 78.8**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461693	03/06/19 07:22	SMP	TAL BUF
Total/NA	Analysis	8270D		5	462180	03/08/19 16:02	PJQ	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:06	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:28	BMB	TAL BUF

Client Sample ID: SB-4 (1-3) — **Lab Sample ID: 480-149734-3**
Date Collected: 02/27/19 10:00 — **Matrix: Solid**
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

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

Lab Sample ID: 480-149734-3

Date Collected: 02/27/19 10:00
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461693	03/06/19 07:22	SMP	TAL BUF
Total/NA	Analysis	8270D		20	462180	03/08/19 16:30	PJQ	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:10	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:29	BMB	TAL BUF

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

Lab Sample ID: 480-149734-4

Date Collected: 02/27/19 10:30
Matrix: Solid
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

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

Lab Sample ID: 480-149734-4

Date Collected: 02/27/19 10:30
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 82.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461693	03/06/19 07:22	SMP	TAL BUF
Total/NA	Analysis	8270D		20	462180	03/08/19 16:57	PJQ	TAL BUF
Total/NA	Prep	3550C			461833	03/06/19 14:30	ATG	TAL BUF
Total/NA	Analysis	8082A		1	461975	03/07/19 18:36	W1T	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:26	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:30	BMB	TAL BUF

Client Sample ID: SB-8 (3-5)

Lab Sample ID: 480-149734-5

Date Collected: 02/27/19 13:00
Matrix: Solid
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

Client Sample ID: SB-8 (3-5)

Lab Sample ID: 480-149734-5

Date Collected: 02/27/19 13:00
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			461693	03/06/19 07:22	SMP	TAL BUF
Total/NA	Analysis	8270D		20	462180	03/08/19 17:25	PJQ	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Client Sample ID: SB-8 (3-5)

Lab Sample ID: 480-149734-5

Date Collected: 02/27/19 13:00
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 85.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	6010C		1	462120	03/07/19 13:29	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:32	BMB	TAL BUF

Client Sample ID: SB-9 (3-5)

Lab Sample ID: 480-149734-6

Date Collected: 02/27/19 14:00
Matrix: Solid
Date Received: 03/01/19 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	461606	03/05/19 13:04	KPK	TAL BUF

Client Sample ID: SB-9 (3-5)

Lab Sample ID: 480-149734-6

Date Collected: 02/27/19 14:00
Matrix: Solid
Date Received: 03/01/19 16:00
Percent Solids: 79.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			461683	03/05/19 20:52	AEM	TAL BUF
Total/NA	Analysis	8260C		1	461667	03/06/19 01:12	CDC	TAL BUF
Total/NA	Prep	3550C			461693	03/06/19 07:22	SMP	TAL BUF
Total/NA	Analysis	8270D		20	462180	03/08/19 17:53	PJQ	TAL BUF
Total/NA	Prep	3050B			461760	03/06/19 10:49	MV	TAL BUF
Total/NA	Analysis	6010C		1	462120	03/07/19 13:33	AMH	TAL BUF
Total/NA	Prep	7471B			461646	03/06/19 13:06	BMB	TAL BUF
Total/NA	Analysis	7471B		1	461877	03/06/19 16:36	BMB	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL BUF
8082A	Polychlorinated Biphenyls (PCBs) by Gas Chromatography	SW846	TAL BUF
6010C	Metals (ICP)	SW846	TAL BUF
7471B	Mercury (CVAA)	SW846	TAL BUF
Moisture	Percent Moisture	EPA	TAL BUF
3050B	Preparation, Metals	SW846	TAL BUF
3550C	Ultrasonic Extraction	SW846	TAL BUF
5035A_L	Closed System Purge and Trap	SW846	TAL BUF
7471B	Preparation, Mercury	SW846	TAL BUF

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149734-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-149734-1	SB-2 (3-5)	Solid	02/27/19 09:00	03/01/19 16:00
480-149734-2	SB-3 (2-4)	Solid	02/27/19 09:30	03/01/19 16:00
480-149734-3	SB-4 (1-3)	Solid	02/27/19 10:00	03/01/19 16:00
480-149734-4	SB-5 (3-5)	Solid	02/27/19 10:30	03/01/19 16:00
480-149734-5	SB-8 (3-5)	Solid	02/27/19 13:00	03/01/19 16:00
480-149734-6	SB-9 (3-5)	Solid	02/27/19 14:00	03/01/19 16:00

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 304523

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

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

Client Contact	Project Manager: BRYAN MAYBACK	Site Contact: CHAD SCHUSTER	Date: 3/1/19	COC No:
Company Name: BENCHMARK	Tel/Fax:	Lab Contact: BRIAN FISCHER	Carrier:	1 of 1 COCs
Address: 2558 HAMBG. TPK	Analysis Turnaround Time			Sampler: CS
City/State/Zip: BUFF NY 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 856-0599	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			
Project Name: 305-339 GANSON ST	☐ 1 week STD			
Site: 305-339 GANSON ST	☐ 2 days			
PO# B0476-018-001	☐ 1 day			

480-149734 Chain of Custody

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL + CP51 VOCs	PAHs	RCRA METAL	PCB	Sample Specific Notes:
SB-2(3-5)	2/27/19	900	G	SOIL	2				X	X	X	
SB-3(2-4)		930							X	X		
SB-4(1-3)		1000							X	X		
SB-5(3-5)		1030							X	X	X	
SB-8(3-5)		1300							X	X		
SB-9(3-5)		1400						X	X	X		

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

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

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

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

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

Special Instructions/QC Requirements & Comments:

Custody Seals Intact: ☐ Yes ☐ No | Custody Seal No.: | Cooler Temp. (°C): Obs'd: 3.5 Corr'd: _____ | Therm ID No.: 4

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Chad M Schuster	BENCHMARK	3/1/19 1600		TEST AMERICA	3/1/2019 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

VK / COOLER @ 3.5°C

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3/11/2019

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-149734-1

Login Number: 149734

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	Benchmark
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-149696-1
Client Project/Site: Benchmark - 305-339 Ganson St.

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

Attn: Bryan Mayback

Joseph V. Giacomazza

Authorized for release by:
3/6/2019 1:05:34 PM
Joe Giacomazza, Project Management Assistant II
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Designee for

Brian Fischer, Manager of Project Management
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brian.fischer@testamericainc.com

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

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

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

Table of Contents

Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Job ID: 480-149696-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-149696-1

Comments
No additional comments.

Receipt
The sample was received on 3/1/2019 4:00 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5º C.

GC/MS VOA
Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SB-2W (480-149696-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: SB-2W (480-149696-1).
The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-461505 recovered above the upper control limit for Chlorodibromomethane and cis-1,3-Dichloropropene. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: SB-2W (480-149696-1).

Method(s) 8260C: The laboratory control sample (LCS) for analytical batch 480-461505 recovered outside control limits for the following analyte: Chlorodibromomethane. This analyte was biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method(s) 8260C: Due to the coelution of Ethyl Acetate with 2-Butanone in the full spike solution, these analytes exceeded control limits in the laboratory control sample (LCS) associated with batch 480-461505. The following sample was affected : SB-2W (480-149696-1).

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 - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

Client Sample ID: SB-2W

Lab Sample ID: 480-149696-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	39		20	6.0	ug/L	2		8260C	Total/NA
Carbon disulfide	0.46	J	2.0	0.38	ug/L	2		8260C	Total/NA
Methylene Chloride	1.2	J	2.0	0.88	ug/L	2		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

Client Sample ID: SB-2W
Date Collected: 03/01/19 09:15
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149696-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2.0	1.6	ug/L			03/05/19 02:58	2
1,1,2,2-Tetrachloroethane	ND		2.0	0.42	ug/L			03/05/19 02:58	2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0	0.62	ug/L			03/05/19 02:58	2
1,1,2-Trichloroethane	ND		2.0	0.46	ug/L			03/05/19 02:58	2
1,1-Dichloroethane	ND		2.0	0.76	ug/L			03/05/19 02:58	2
1,1-Dichloroethene	ND		2.0	0.58	ug/L			03/05/19 02:58	2
1,2,4-Trichlorobenzene	ND		2.0	0.82	ug/L			03/05/19 02:58	2
1,2,4-Trimethylbenzene	ND		2.0	1.5	ug/L			03/05/19 02:58	2
1,2-Dibromo-3-Chloropropane	ND		2.0	0.78	ug/L			03/05/19 02:58	2
1,2-Dichlorobenzene	ND		2.0	1.6	ug/L			03/05/19 02:58	2
1,2-Dichloroethane	ND		2.0	0.42	ug/L			03/05/19 02:58	2
1,2-Dichloropropane	ND		2.0	1.4	ug/L			03/05/19 02:58	2
1,3,5-Trimethylbenzene	ND		2.0	1.5	ug/L			03/05/19 02:58	2
1,3-Dichlorobenzene	ND		2.0	1.6	ug/L			03/05/19 02:58	2
1,4-Dichlorobenzene	ND		2.0	1.7	ug/L			03/05/19 02:58	2
2-Butanone (MEK)	ND	*	20	2.6	ug/L			03/05/19 02:58	2
2-Hexanone	ND		10	2.5	ug/L			03/05/19 02:58	2
4-Isopropyltoluene	ND		2.0	0.62	ug/L			03/05/19 02:58	2
4-Methyl-2-pentanone (MIBK)	ND		10	4.2	ug/L			03/05/19 02:58	2
Acetone	**39**		20	6.0	ug/L			03/05/19 02:58	2
Benzene	ND		2.0	0.82	ug/L			03/05/19 02:58	2
Bromoform	ND		2.0	0.52	ug/L			03/05/19 02:58	2
Bromomethane	ND		2.0	1.4	ug/L			03/05/19 02:58	2
Carbon disulfide	**0.46**	**J**	2.0	0.38	ug/L			03/05/19 02:58	2
Carbon tetrachloride	ND		2.0	0.54	ug/L			03/05/19 02:58	2
Chlorobenzene	ND		2.0	1.5	ug/L			03/05/19 02:58	2
Dibromochloromethane	ND	*	2.0	0.64	ug/L			03/05/19 02:58	2
Chloroethane	ND		2.0	0.64	ug/L			03/05/19 02:58	2
Chloroform	ND		2.0	0.68	ug/L			03/05/19 02:58	2
Chloromethane	ND		2.0	0.70	ug/L			03/05/19 02:58	2
cis-1,2-Dichloroethene	ND		2.0	1.6	ug/L			03/05/19 02:58	2
Cyclohexane	ND		2.0	0.36	ug/L			03/05/19 02:58	2
Bromodichloromethane	ND		2.0	0.78	ug/L			03/05/19 02:58	2
Dichlorodifluoromethane	ND		2.0	1.4	ug/L			03/05/19 02:58	2
Ethylbenzene	ND		2.0	1.5	ug/L			03/05/19 02:58	2
1,2-Dibromoethane	ND		2.0	1.5	ug/L			03/05/19 02:58	2
Isopropylbenzene	ND		2.0	1.6	ug/L			03/05/19 02:58	2
Methyl acetate	ND		5.0	2.6	ug/L			03/05/19 02:58	2
Methyl tert-butyl ether	ND		2.0	0.32	ug/L			03/05/19 02:58	2
Methylcyclohexane	ND		2.0	0.32	ug/L			03/05/19 02:58	2
Methylene Chloride	**1.2**	**J**	2.0	0.88	ug/L			03/05/19 02:58	2
m,p-Xylene	ND		4.0	1.3	ug/L			03/05/19 02:58	2
n-Butylbenzene	ND		2.0	1.3	ug/L			03/05/19 02:58	2
N-Propylbenzene	ND		2.0	1.4	ug/L			03/05/19 02:58	2
o-Xylene	ND		2.0	1.5	ug/L			03/05/19 02:58	2
sec-Butylbenzene	ND		2.0	1.5	ug/L			03/05/19 02:58	2
Tetrachloroethene	ND		2.0	0.72	ug/L			03/05/19 02:58	2
Toluene	ND		2.0	1.0	ug/L			03/05/19 02:58	2
trans-1,2-Dichloroethene	ND		2.0	1.8	ug/L			03/05/19 02:58	2

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

Client Sample ID: SB-2W
Date Collected: 03/01/19 09:15
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149696-1
Matrix: Water

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		2.0	0.74	ug/L			03/05/19 02:58	2
Trichloroethene	ND		2.0	0.92	ug/L			03/05/19 02:58	2
Trichlorofluoromethane	ND		2.0	1.8	ug/L			03/05/19 02:58	2
Vinyl chloride	ND		2.0	1.8	ug/L			03/05/19 02:58	2
Xylenes, Total	ND		4.0	1.3	ug/L			03/05/19 02:58	2
cis-1,3-Dichloropropene	ND		2.0	0.72	ug/L			03/05/19 02:58	2
Styrene	ND		2.0	1.5	ug/L			03/05/19 02:58	2
tert-Butylbenzene	ND		2.0	1.6	ug/L			03/05/19 02:58	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*03/05/19 02:58*	*2*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*03/05/19 02:58*	*2*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/05/19 02:58*	*2*

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-149696-1	SB-2W	105	109	97
LCS 480-461505/5	Lab Control Sample	106	109	100
MB 480-461505/9	Method Blank	105	109	97

Surrogate Legend

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

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

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

Lab Sample ID: MB 480-461505/9
Matrix: Water
Analysis Batch: 461505

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			03/05/19 00:36	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			03/05/19 00:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			03/05/19 00:36	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			03/05/19 00:36	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			03/05/19 00:36	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			03/05/19 00:36	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			03/05/19 00:36	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			03/05/19 00:36	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			03/05/19 00:36	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			03/05/19 00:36	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			03/05/19 00:36	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			03/05/19 00:36	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			03/05/19 00:36	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			03/05/19 00:36	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			03/05/19 00:36	1
2-Butanone (MEK)	ND		10	1.3	ug/L			03/05/19 00:36	1
2-Hexanone	ND		5.0	1.2	ug/L			03/05/19 00:36	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			03/05/19 00:36	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			03/05/19 00:36	1
Acetone	ND		10	3.0	ug/L			03/05/19 00:36	1
Benzene	ND		1.0	0.41	ug/L			03/05/19 00:36	1
Bromoform	ND		1.0	0.26	ug/L			03/05/19 00:36	1
Bromomethane	ND		1.0	0.69	ug/L			03/05/19 00:36	1
Carbon disulfide	ND		1.0	0.19	ug/L			03/05/19 00:36	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			03/05/19 00:36	1
Chlorobenzene	ND		1.0	0.75	ug/L			03/05/19 00:36	1
Dibromochloromethane	ND		1.0	0.32	ug/L			03/05/19 00:36	1
Chloroethane	ND		1.0	0.32	ug/L			03/05/19 00:36	1
Chloroform	ND		1.0	0.34	ug/L			03/05/19 00:36	1
Chloromethane	ND		1.0	0.35	ug/L			03/05/19 00:36	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			03/05/19 00:36	1
Cyclohexane	ND		1.0	0.18	ug/L			03/05/19 00:36	1
Bromodichloromethane	ND		1.0	0.39	ug/L			03/05/19 00:36	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			03/05/19 00:36	1
Ethylbenzene	ND		1.0	0.74	ug/L			03/05/19 00:36	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			03/05/19 00:36	1
Isopropylbenzene	ND		1.0	0.79	ug/L			03/05/19 00:36	1
Methyl acetate	ND		2.5	1.3	ug/L			03/05/19 00:36	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			03/05/19 00:36	1
Methylcyclohexane	ND		1.0	0.16	ug/L			03/05/19 00:36	1
Methylene Chloride	ND		1.0	0.44	ug/L			03/05/19 00:36	1
m,p-Xylene	ND		2.0	0.66	ug/L			03/05/19 00:36	1
n-Butylbenzene	ND		1.0	0.64	ug/L			03/05/19 00:36	1
N-Propylbenzene	ND		1.0	0.69	ug/L			03/05/19 00:36	1
o-Xylene	ND		1.0	0.76	ug/L			03/05/19 00:36	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			03/05/19 00:36	1
Tetrachloroethene	ND		1.0	0.36	ug/L			03/05/19 00:36	1
Toluene	ND		1.0	0.51	ug/L			03/05/19 00:36	1

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

Lab Sample ID: MB 480-461505/9
Matrix: Water
Analysis Batch: 461505

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			03/05/19 00:36	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			03/05/19 00:36	1
Trichloroethene	ND		1.0	0.46	ug/L			03/05/19 00:36	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			03/05/19 00:36	1
Vinyl chloride	ND		1.0	0.90	ug/L			03/05/19 00:36	1
Xylenes, Total	ND		2.0	0.66	ug/L			03/05/19 00:36	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			03/05/19 00:36	1
Styrene	ND		1.0	0.73	ug/L			03/05/19 00:36	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			03/05/19 00:36	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*105*		*77 - 120*		*03/05/19 00:36*	*1*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*		*03/05/19 00:36*	*1*
Toluene-d8 (Surr)	*97*		*80 - 120*		*03/05/19 00:36*	*1*

Lab Sample ID: LCS 480-461505/5
Matrix: Water
Analysis Batch: 461505

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.4		ug/L		110	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.8		ug/L		99	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	29.4		ug/L		117	61 - 148
1,1,2-Trichloroethane	25.0	25.0		ug/L		100	76 - 122
1,1-Dichloroethane	25.0	25.9		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	28.7		ug/L		115	66 - 127
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	79 - 122
1,2,4-Trimethylbenzene	25.0	25.3		ug/L		101	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	24.4		ug/L		98	56 - 134
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	24.1		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	26.6		ug/L		106	76 - 120
1,3,5-Trimethylbenzene	25.0	25.2		ug/L		101	77 - 121
1,3-Dichlorobenzene	25.0	24.6		ug/L		98	77 - 120
1,4-Dichlorobenzene	25.0	24.6		ug/L		99	80 - 120
2-Butanone (MEK)	125	249	*	ug/L		199	57 - 140
2-Hexanone	125	134		ug/L		107	65 - 127
4-Isopropyltoluene	25.0	26.3		ug/L		105	73 - 120
4-Methyl-2-pentanone (MIBK)	125	118		ug/L		95	71 - 125
Acetone	125	137		ug/L		110	56 - 142
Benzene	25.0	27.2		ug/L		109	71 - 124
Bromoform	25.0	31.8		ug/L		127	61 - 132
Bromomethane	25.0	27.2		ug/L		109	55 - 144
Carbon disulfide	25.0	24.0		ug/L		96	59 - 134
Carbon tetrachloride	25.0	30.8		ug/L		123	72 - 134
Chlorobenzene	25.0	25.1		ug/L		100	80 - 120
Dibromochloromethane	25.0	31.6	*	ug/L		126	75 - 125

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

Lab Sample ID: LCS 480-461505/5
Matrix: Water
Analysis Batch: 461505

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	25.0	26.5		ug/L		106	69 - 136
Chloroform	25.0	25.6		ug/L		102	73 - 127
Chloromethane	25.0	25.7		ug/L		103	68 - 124
cis-1,2-Dichloroethene	25.0	25.8		ug/L		103	74 - 124
Cyclohexane	25.0	29.6		ug/L		118	59 - 135
Bromodichloromethane	25.0	30.1		ug/L		121	80 - 122
Dichlorodifluoromethane	25.0	28.7		ug/L		115	59 - 135
Ethylbenzene	25.0	24.9		ug/L		99	77 - 123
1,2-Dibromoethane	25.0	28.2		ug/L		113	77 - 120
Isopropylbenzene	25.0	25.0		ug/L		100	77 - 122
Methyl acetate	50.0	44.7		ug/L		89	74 - 133
Methyl tert-butyl ether	25.0	25.8		ug/L		103	77 - 120
Methylcyclohexane	25.0	30.4		ug/L		122	68 - 134
Methylene Chloride	25.0	26.4		ug/L		106	75 - 124
m,p-Xylene	25.0	25.4		ug/L		102	76 - 122
n-Butylbenzene	25.0	25.3		ug/L		101	71 - 128
N-Propylbenzene	25.0	24.6		ug/L		98	75 - 127
o-Xylene	25.0	23.6		ug/L		94	76 - 122
sec-Butylbenzene	25.0	25.7		ug/L		103	74 - 127
Tetrachloroethene	25.0	29.3		ug/L		117	74 - 122
Toluene	25.0	25.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	26.1		ug/L		104	73 - 127
trans-1,3-Dichloropropene	25.0	28.0		ug/L		112	80 - 120
Trichloroethene	25.0	27.2		ug/L		109	74 - 123
Trichlorofluoromethane	25.0	27.6		ug/L		110	62 - 150
Vinyl chloride	25.0	27.5		ug/L		110	65 - 133
cis-1,3-Dichloropropene	25.0	30.6		ug/L		123	74 - 124
Styrene	25.0	25.3		ug/L		101	80 - 120
tert-Butylbenzene	25.0	26.2		ug/L		105	75 - 123

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*109*		*73 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

GC/MS VOA

Analysis Batch: 461505

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-149696-1	SB-2W	Total/NA	Water	8260C	
MB 480-461505/9	Method Blank	Total/NA	Water	8260C	
LCS 480-461505/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

Client Sample ID: SB-2W
Date Collected: 03/01/19 09:15
Date Received: 03/01/19 16:00

Lab Sample ID: 480-149696-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	461505	03/05/19 02:58	NMC	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Benchmark Env. Eng. & Science, PLLC
TestAmerica Job ID: 480-149696-1
Project/Site: Benchmark - 305-339 Ganson St.

Laboratory: TestAmerica Buffalo

The accreditations/certifications listed below are applicable to this report.

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

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 - 305-339 Ganson St.

TestAmerica Job ID: 480-149696-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-149696-1	SB-2W	Water	03/01/19 09:15	03/01/19 16:00

TestAmerica Buffalo
10 Hazelwood Drive

Amherst, NY 14228
Phone: 716.691.2600 Fax: 716.691.7991

Chain of Custody Record 304522

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING
TestAmerica Laboratories, Inc.
TAL-8210 (0713)

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

Client Contact	Project Manager: BRYAN MAYBACK	Site Contact: CHAD SCHUSTER	Date: 3/1/19	COC No:
Company Name: BENCHMARK	Tel/Fax:	Lab Contact: BRIAN FISCHER	Carrier:	1 of 1 COCs
Address: 2558 HAMBURG TPK	Analysis Turnaround Time			Sampler: CS
City/State/Zip: BUFF, NY 14218	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: 856 0599	TAT if different from Below			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: 305-339 CANSON ST	☐ 1 week STD			
Site: 305-339 CANSON ST	☐ 2 days			Job / SDG No.:
PO# B0476-018-001	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	TCL+CP51 VOC	Sample Specific Notes:
SB-2W	3/1/19	915	G	AQUA	3			X	

480-149696 Chain of Custody

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

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

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

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

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

Special Instructions/QC Requirements & Comments:

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Chad M Schuster	BENCHMARK	3/1/19 1600	[signature]	TEST AMERICA	3/1/2019 1600
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

VPK Cooler @ 3.5°C

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-149696-1

Login Number: 149696

List Source: TestAmerica Buffalo

List Number: 1

Creator: Kolb, Chris M

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	BENCHMARK
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	