

Phase II Environmental Investigation Report

*1485-1491 Niagara Street
Buffalo, New York*

May 2017

T0417-017-001

Prepared For:

Natale Development Company



Prepared By:



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PHASE II ENVIRONMENTAL INVESTIGATION REPORT

**1485-1491 Niagara Street
Buffalo, New York**

May 2017

T0417-017-001

Prepared for:

**Natale Development Company
9159 Main Street
Clarence, New York**

Prepared by:



**TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, New York 14218**

PHASE II ENVIRONMENTAL INVESTIGATION REPORT

1485-1491 Niagara Street Site
Buffalo, New York

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PHASE II ENVIRONMENTAL INVESTIGATION REPORT

1485-1491 Niagara Street Site
Buffalo, New York

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1.0 INTRODUCTION

1.1 Background and Site Description

TurnKey Environmental Restoration, LLC (TurnKey) preformed a Phase II Environmental Investigation for Natale Development Company at the property addressed at 1485-1495 Niagara Street, City of Buffalo, Erie County, New York (Site).

The Site is currently unoccupied and is located in a highly developed industrial, commercial and residential area (see Figure 1). The Site consists of two parcels totaling approximately 0.75 acres. As shown on Figure 2, two structures are present on the Site. The Site is supplied with municipal sanitary sewer, electric, natural-gas and public water.

The Site has a heavy industrial history with a variety of manufacturing operations. A Phase I Environmental Site Assessment completed by TurnKey for the Site in August 2016 revealed historic operations, staining and the presence of miscellaneous debris/materials as recognized environmental conditions (RECs). Additional information relative to the previous study is provided below.

The purpose of the Phase II investigation was to assess subsurface conditions.

1.2 Previous Study

As previously indicated, TurnKey completed a Phase I Environmental Site Assessment for the Site in August 2016. The Phase I was completed for others for due diligence purposes prior to potential purchase of the Site.

At the time of the assessment, the Site was occupied by S.A. Day Buffalo Flux Facility, Johnson Manufacturing Co. (S.A. Day), a manufacturer of brass and copper soldering and brazing fluxes, custom fluxes and aluminum brazing flux for the automotive heat transfer industry. S.A. Day was founded in 1912 and was initially involved in the production of buffing compounds. During the 1960s, S.A. Day became a pioneer in the development of bromide based fluxes that are still in use today.

Building 1 was used for production/manufacturing and Building 2 was used as a storage warehouse for finished products and raw materials.

Review of historical sources revealed that the Site had an extensive industrial history since at least 1889 with operations including copper and brass goods manufacturing, piano

manufacturing, buffing wheels and compounds manufacturing, brazing flux manufacturing, a tin shop, etc.

The following potential environmental concerns were identified at the time of the site reconnaissance:

- Building 1 is currently used for manufacturing purposes with production areas and equipment, approximately 14 aboveground process tanks, a QA/QC laboratory, and the storage and use of various hazardous/regulated materials. In addition, hazardous/regulated wastes generated on-site are reportedly (per the site contact) transferred off-site by Advanced Waste Solutions, Inc.
- The site contact indicated that effluent from Building 1 drains and equipment/operations, including the QA/QC laboratory sinks, discharge into an aboveground poly “master neutralizing tank” located in the western production area of the first floor of Building 1. Once the liquid contents within the tank are neutralized to a pH of 7, such are reportedly discharged into the municipal sewer system. The site contact indicated that a National Pollutant Discharge Elimination System (NPDES) permit is maintained for this discharge. The site contact also indicated that sludge that accumulates within the neutralizing tank is removed and transferred off-site for disposal by Advanced Waste Solutions.
- One exterior sump was noted on the exterior proximate to the loading dock. The site contact indicated that the sump discharges into the public sewer system.
- Staining was noted to concrete throughout interior portions of Building 1, including areas proximate to aboveground process tanks.
- Miscellaneous debris and materials including vehicle tires, 55-gallon drums, inactive manufacturing equipment, etc. were noted throughout exterior portions of the Site.
- The site contact indicated that permits are maintained for air emissions from on-Site manufacturing equipment. Four vent stacks from equipment within Building 1 were observed along exterior walls, extending beyond the roof of the building.
- TurnKey is aware of former buildings at the Site thus it is possible that fill materials from unknown origins were brought to the Site to bring former building areas to grade. In addition, TurnKey observed the presence of suspected slag material along with demolition debris including brick and concrete scattered on exterior areas.

TurnKey’s investigation revealed the following RECs in connection with the Site:

- The extensive industrial history with manufacturing since at least 1889 along with the use of hazardous/regulated materials, wastes generated, process-related discharges into the public sewer system (post neutralization), and floor drains as subsurface

conditions are unknown. Specific industrial operations were identified through review of historical sources as including copper and brass goods manufacturing, piano manufacturing, a tin shop, buffing wheels and compounds manufacturing, brazing flux manufacturing and more.

- Staining was noted to concrete ground surfaces throughout Building 1.
- Miscellaneous debris and materials including vehicle tires, 55-gallon drums, inactive manufacturing equipment, etc. noted throughout exterior portions of the Site due to the potential for impacts.

Due to the RECs identified above, TurnKey recommended completion of a Phase II Environmental Investigation to assess subsurface conditions. Additional information relative to the work completed at the Site by TurnKey is provided below.

2.0 SITE INVESTIGATION ACTIVITIES

2.1 Interior Hand Core Surface/Near Surface Sampling

A concrete corer was used to remove concrete at two interior sample points within Building 1 in order to access soil/fill beneath the building foundation. Samples HA-1 and HA-2 were collected using a stainless steel hand auger to a depth of one foot below ground surface (fbgs). The soil/fill sample from HA-1 collected from the former production portion of Building 1 was selected by TurnKey for analysis by the laboratory for polycyclic aromatic hydrocarbons (PAHs) and Resource Conservation and Recovery Act (RCRA) metals.

Visual and/or olfactory observations were noted. All field observations, including lithology, depths, photoionization detector (PID) scan results, etc., at each investigation location are summarized in the Soil Boring Log sheets provided in Appendix A.

2.2 Soil Boring Investigation

On April 10, 2017, TurnKey's subcontractor, Nature's Way Environmental (Nature's Way), mobilized a truck-mounted Earthprobe 200 drill rig equipped with a 1.5-inch diameter, 48 inch long macro-core sampler, to the Site. As shown on Figure 2, eight soil borings designated as SB-1 through SB-8 were completed across the Site. The soil borings were advanced to a target depth between 12 and 15 fbgs.

The direct-push soil borings were advanced using 1.5-inch diameter samplers that are 4-feet in length. Continuous four foot sample cores were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples by TurnKey's Environmental Scientist. The physical characteristics of all soil borings were classified using the ASTM D2488 Visual-Manual Procedure Description. Soils from each boring were screened via headspace screening using a MiniRae 3000 PID. Visual and/or olfactory observations were noted. All field observations, including lithology, depths, PID scan results, etc., at each investigation location are summarized in the Soil Boring Log sheets provided in Appendix A. Photographs taken during the work are included in Appendix B.

Seven soil/fill samples selected for laboratory analysis were analyzed by the laboratory for Target Compound List (TCL) plus New York State Department of

Environmental Conservation (NYSDEC) Commissioners Policy 51 (CP-51) volatile organic compounds (VOCs), PAHs and/or RCRA metals. All samples were collected in laboratory provided sample bottles and were cooled to 4 °C prior to transport.

2.3 Groundwater Sampling

Three soil borings, SB-2, SB-4, and SB-8, were converted into temporary one-inch diameter monitoring wells (TMW-1 through TMW-3). 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.

Three 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 the laboratory for analysis of TCL plus CP-51 VOCs.

3.0 INVESTIGATION FINDINGS

3.1 Site Geology/Hydrogeology

The overburden geology observed during the investigation activities is generally described as fill materials consisting of fine sand with suspected slag, gravel, brick fragments and/or ash/cinders to depths between approximately 1 and 4.5 fbgs overlying native lean clay soils to at least 12 fbgs.

Groundwater was encountered at select investigation locations at depths between approximately 5 and 8 fbgs. Groundwater flow is likely to the west toward the Niagara 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 brief description of the field observations during the boring investigation is presented below:

Investigation Location ID	Environmental Concern Assessed	Highest PID reading (parts per million, ppm) and depth (fbgs)	Other Observations
SB-1	55-gallon drum storage and former operations (i.e., tin shop).	356 ppm from 2' to 3 fbgs.	Black staining and odors noted. Fill material observed to 4.5 fbgs.
SB-2/TMW-3	Former storage area (iron and lime warehouse).	8.0 ppm from 1.5' to 2.5 fbgs.	Fill materials observed to 4.5 fbgs.
SB-3	Former storage area (iron and lime warehouse).	0.5 ppm from 2'' - 1 fbgs.	Fill materials observed to 1 fbgs.
SB-4/TMW-2	Asphalt disturbance.	0.5 ppm from 2''-1' fbgs.	Fill materials observed to 0.5 fbgs.
SB-5	Former warehouse.	0.0 ppm throughout boring.	Fill materials observed to 1.5 fbgs.
SB-6	Former manufacturing area.	0.0 ppm throughout boring.	Fill materials observed to 1.5 fbgs.
SB-7	Former manufacturing area.	0.0 ppm throughout boring.	Fill materials observed to 0.5 fbgs.
SB-8/TMW-1	Former engine room, black smith, forge shop and iron storage.	0.4 ppm from 1' - 1.5 fbgs.	Fill materials observed to 1.5 fbgs.
HA-1	Production area.	0.4 ppm from 0 - 6''.	Fill materials observed throughout hand auger sample to 1 fbgs.
HA-2	Production area	0.2 ppm from 0 - 6''.	

3.3 Soil Analytical Results

Table 1 presents a summary of the detected VOCs, PAHs and metals for each soil/fill sample selected for laboratory analysis. For comparative purposes, Table 1 includes 6NYCRR Part 375 Unrestricted, Restricted-Residential, and Commercial Use Soil Cleanup Objectives (USCOs, RRSCOs and CSCOs, respectively). Based on the groundwater analytical results further described below, Part 375 Protection of Groundwater applies to the specific VOCs identified at concentrations above Class GA Groundwater Quality Standards (GWQS, see Table 2). Appendix C contains a copy of the laboratory analytical data package.

As summarized in Table 1, chlorinated VOCs (cVOCs) trichloroethene (TCE) and cis-1,2-dichloroethene exceeded their respective Protection of Groundwater SCOs at SB-2 (0-2') on the southern parcel. Acetone exceeded its respective USCO at SB-1; however, acetone is a common laboratory contaminant and such is likely not indicative of site conditions.

PAHs were identified at concentrations exceeding USCOs, RRSCOs and/or CSCOs in three soil/fill samples collected from across the Site on both subject parcels at SB-2 (0-2'), SB-6 (near surface to 1.5') and SB-8 (0-0.5'). The specific PAHs identified at concentrations exceeding CSCOs include benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene and dibenzo(a,h)anthracene. The most significant PAH concentrations were identified at SB-6.

Metals were identified at concentrations exceeding Part 375 SCOs in all but one soil/fill samples collected from across the Site on both subject parcels including a sample collected from within the existing building footprint. In particular, concentrations of arsenic, barium, cadmium, chromium, lead, mercury and silver exceeded USCOs, RRSCOs and/or CSCOs.

3.4 Groundwater Analytical Results

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

As indicated on Table 2, one or more individual cVOCs were identified at concentrations exceeding Class GA GWQS in the three groundwater samples collected from the Site at TMW-1, TMW-2 and TMW-3. Specifically, tetrachloroethene (PCE) and degradation compounds trichloroethene (TCE), cis-1,2-dichloroethene, trans-1,2-

dichloroethene and vinyl chloride were identified at concentrations exceeding Class GA GWQS at TMW-1. PCE, TCE and cis-1,2-dichloroethene exceeded their respective Class GA GWQS at TMW-3. TCE was the only exceedance at TMW-2.

4.0 CONCLUSIONS AND RECOMMENDATIONS

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

- The Site is currently vacant and underutilized and is located within a historic industrial area of the City of Buffalo. The Site has had an extensive industrial history (since at least 1889) with a variety of operations including copper and brass goods manufacturing, piano manufacturing, buffing wheels and compounds manufacturing, brazing flux manufacturing, a tin shop, etc.
- Staining was noted to concrete throughout interior portions of Building 1, including areas proximate to aboveground process tanks.
- Elevated PID readings were identified during the work with the highest PID reading of 356 ppm identified at SB-1 completed south of Building 2 proximate to the parcel boundary that bisects the two subject parcels.
- Black staining and odors were also noted at SB-1.
- Suspected fill materials consisting of fine sand with suspected slag, gravel, brick fragments and/or ash/cinders were encountered across the Site at depths up to at least 4.5 fbgs.
- Elevated PAHs and/or metals were detected at concentrations above Part 375 SCOs, including CSCOs, in the majority of the soil/fill samples collected from across the Site from interior and exterior areas.
- Elevated cVOC concentrations above Part 375 Protection of Groundwater SCOs were identified in soil/fill material at SB-2.
- cVOC-impacted groundwater was identified on-Site with the more significant concentrations identified on the southern portion of the Site at TMW-1 and TMW-3.
- We understand that you are considering redeveloping the Site as a residential apartment building. Based on the findings detailed above, the Site is a potential candidate for the New York Brownfield Cleanup Program (BCP).

5.0 LIMITATIONS

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

TABLES



TABLE 1
SUMMARY OF SUBSURFACE SOIL/FILL ANALYTICAL RESULTS
Phase II Environmental Investigation
1485-1491 Niagara Street
Buffalo, NY

PARAMETER ¹	Unrestricted Use SCOs ²	Restricted Residential Use SCOs ²	Commercial Use SCOs ²	Protection of Groundwater ²	Sample Location						
					SB-1 (2-3')	SB-2 (0-2')	SB-3 (2"-1')	SB-5 (2"-1.5')	SB-6 (2"-1.5')	SB-8 (0-6")	HA-1 (0-6")
					4/10/2017						
Volatile Organic Compounds (VOCs) - mg/Kg ³											
Acetone	0.05	100	500	NA	0.073 J	ND	--	--	--	--	--
cis-1,2-Dichloroethene	0.25	100	500	0.25	0.031	0.89 J	--	--	--	--	--
Isopropylbenzene	--	--	--	NA	0.02	ND	--	--	--	--	--
tert-Butylbenzene	5.9	100	500	NA	0.049	ND	--	--	--	--	--
trans-1,2-Dichloroethene	0.19	100	500	0.19	0.047	ND	--	--	--	--	--
Tetrachloroethene	1.3	19	150	1.3	ND	ND	--	--	--	--	--
Trichloroethene	0.47	21	200	0.47	0.024	120	--	--	--	--	--
Vinyl chloride	0.02	0.9	13	0.02	ND	ND	--	--	--	--	--
Semi-Volatile Organic Compunds (SVOCs) - mg/Kg ³											
Acenaphthene	20	100	500	NA	ND	ND	ND	--	4 J	ND	ND
Anthracene	100	100	500	NA	ND	ND	ND	--	8.7 J	ND	ND
Benzo(a)anthracene	1	1	5.6	NA	0.13 J	3.9 F1 F2	0.27 J	--	10	1.4 J	ND
Benzo(a)pyrene	1	1	1	NA	ND	4 F1 F2	0.25 J	--	9.1 J	1.3 J	ND
Benzo(b)fluoranthene	1	1	5.6	NA	0.18 J	8.1 F2	0.38 J	--	11	1.7 J	ND
Benzo(ghi)perylene	100	100	500	NA	0.11 J	5.1 F1 F2	0.22 J	--	5.4 J	0.79 J	ND
Benzo(k)fluoranthene	0.8	3.9	56	NA	ND	2.6 J F1 F2	ND	--	5.3 J	0.75 J	ND
Chrysene	1	3.9	56	NA	ND	7 F1 F2	0.31 J	--	10	1.4 J	ND
Dibenzo(a,h)anthracene	0.33	0.33	0.56	NA	ND	1.5 J F1 F2	ND	--	ND	ND	ND
Fluoranthene	100	100	500	NA	0.37 J	10 F2	0.52 J	--	29	3.3 J	ND
Fluorene	30	100	500	NA	ND	ND	ND	--	5.7 J	ND	ND
Indeno(1,2,3-cd)pyrene	0.5	0.5	5.6	NA	ND	4.4 F1 F2	0.18 J	--	4.9 J	0.81 J	ND
Naphthalene	12	100	500	NA	ND	ND	ND	--	3.1 J	ND	ND
Phenanthrene	100	100	500	NA	0.15 J	4.9 F1 F2	0.34 J	--	33	2.9 J	ND
Pyrene	100	100	500	NA	0.29 J	7.2 F1	0.4 J	--	21	2.3 J	ND
Total Metals - mg/kg											
Arsenic	13	16	16	NA	6.1	16.4	24.3	3.6	6.9	5.2	30.8
Barium	350	400	400	NA	170	239	437	310	149	27.5	318 F2
Cadmium	2.5	4.3	9.3	NA	0.46	64.9	1	2	1.6	5.1	1.1
Chromium	30	180	1500	NA	57.3	524	59.2	17.9	52.6	150	15.1
Lead	63	400	1000	NA	78.1	696	464	57.7	234	23.7	455
Mercury	0.18	0.81	2.8	NA	0.097	0.17	0.47 F1 F2	0.024	0.5	0.11	0.14
Silver	2	180	1500	NA	ND	ND	3.6	ND	ND	ND	7.5 F1 F2

Notes:

- Only those parameters detected at a minimum of one sample location are presented in this table; other compounds were reported as non-detect.
- Values per NYSDEC Part 375 Soil Cleanup Objectives (SCOs). Protection of Groundwater SCOs apply to PCE and TCE based on elevated concentrations of these specific compounds identified in groundwater (see Table 2).
- 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.

NA = Not Applicable.

-- = No value available for the parameter. Or parameter not analyzed for.

"F1" = MS and/ or MSD Recovery is outside acceptance limits.

"F2" = MS/MSD RPD exceeds control limits

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

Bold	= Result exceeds Unrestricted Use SCOs.
Bold	= Result exceeds Restricted Residential Use SCOs.
Bold	= Result exceeds Commercial Use SCOs.
Bold	= Where applicable, result exceeds Protection of Groundwater SCOs.



TABLE 2

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
Phase II Environmental Investigation
1485-1491 Niagara Street
Buffalo, NY

PARAMETER ¹	GWQS ²			
		TMW-1 ³	TMW-2	TMW-3 ³
		5/1/2017		
Volatile Organic Compounds (VOCs) - ug/L				
Acetone	50	ND	16	ND
cis-1,2-Dichloroethene	5	810	1.3 J	380
Tetrachloroethene	5	23000 E	3	36
trans-1,2-Dichloroethene	5	120 J	ND	ND
Trichloroethene	5	2000	8.8	5100
Vinyl chloride	2	18 J	ND	ND

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Regulatory limits are NYSDEC Class "GA" Groundwater Quality Standards (GWQS) and Guidance Values and Groundwater Effluent Limitations.
3. Sample was diluted by the laboratory. Results shown are after first dilution.

Definitions:

ND = Parameter not detected above laboratory detection limit.

J = Estimated value; result is less than the sample quantitation limit but greater than zero.

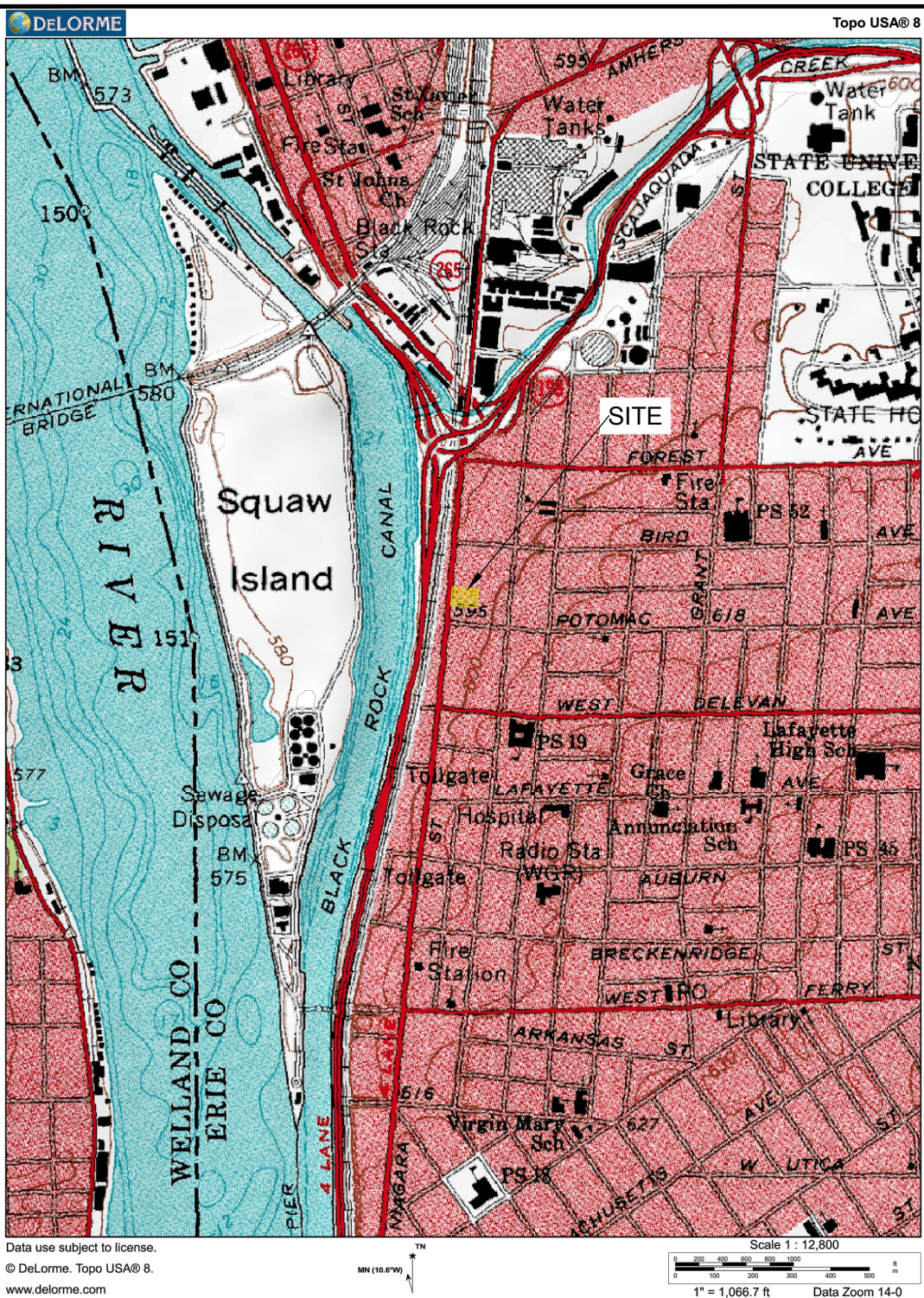
E = Concentration of analyte exceeds the range of calibration curve and/or linear range of the instrument.

Bold	= Result exceeds class "GA" Groundwater Quality Standards
-------------	---

FIGURES

F:\CAD\TurnKey\The Frizlen Group\Phase I\Figures\Figure 1: Site Location and Vicinity Map.dwg

FIGURE 1



2558 HAMBURG TURNPIKE
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SITE LOCATION AND VICINITY MAP

PHASE II ENVIRONMENTAL INVESTIGATION

1485 - 1491 NIAGARA STREET

BUFFALO, NEW YORK

PREPARED FOR

NATALE DEVELOPMENT COMPANY

PROJECT NO.: T0417-017-001

DATE: APRIL 2017

DRAFTED BY: NAS

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PROJECT NO.: T0417-017-001

DATE: APRIL 2017

DRAFTED BY: NAS

SITE PLAN AND AERIAL MAP

PHASE II ENVIRONMENTAL INVESTIGATION

1485 - 1491 NIAGARA STREET

BUFFALO, NEW YORK

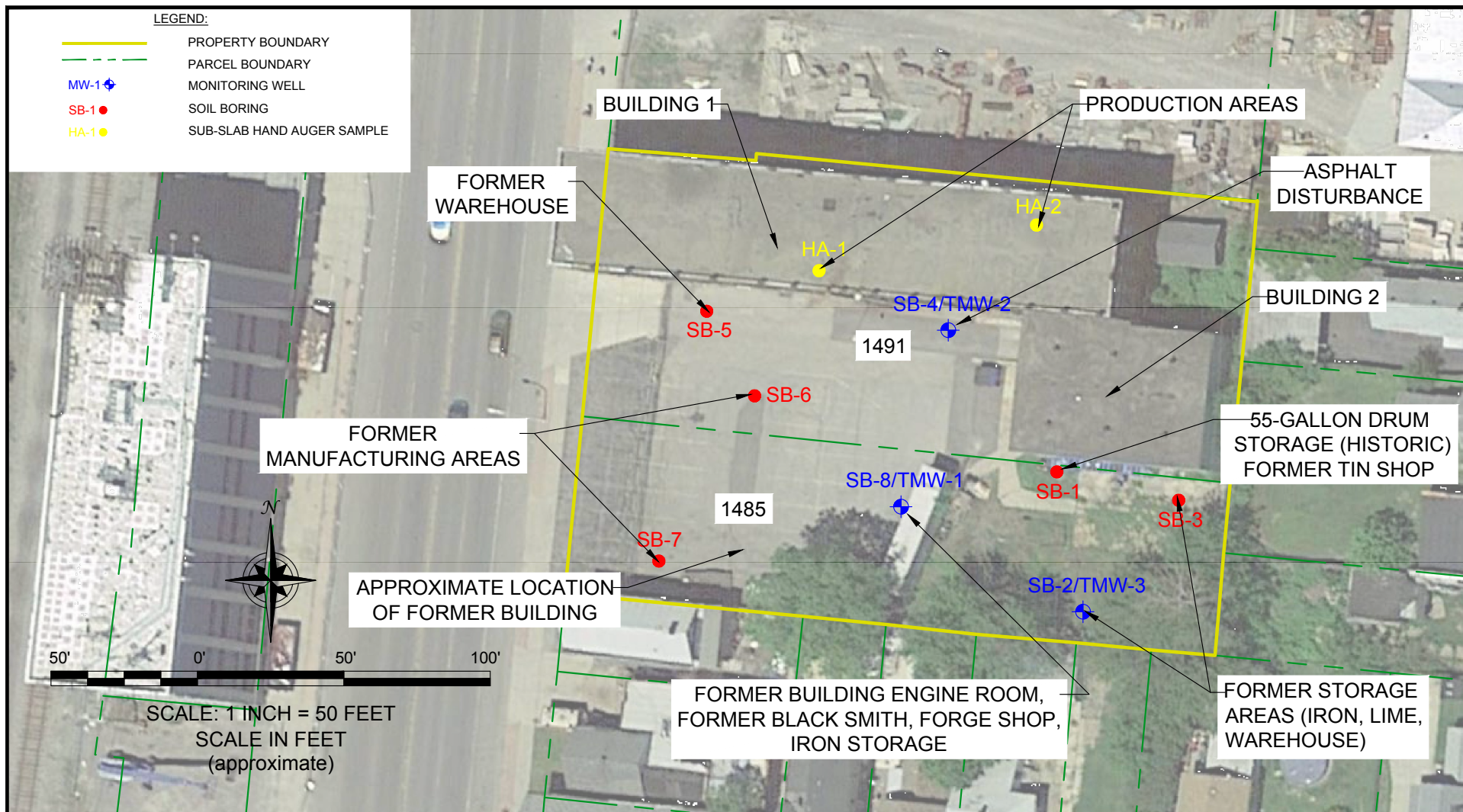
PREPARED FOR

NATALE DEVELOPMENT COMPANY

FIGURE 2

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PROJECT NO.: T0417-017-001

DATE: APRIL 2017

DRAFTED BY: NAS

INVESTIGATION LOCATIONS

PHASE II ENVIRONMENTAL INVESTIGATION

1485 - 1491 NIAGARA STREET

BUFFALO, NEW YORK

PREPARED FOR

NATALE DEVELOPMENT COMPANY

FIGURE 3

DISCLAIMER:

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APPENDIX A

SOIL BORING LOGS

Project No: T0417-017-001

Borehole Number: HA-1

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 250 500	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		Concrete							
	-0.3 0.3	Fine sand with gravel and fill Brown, moist, mostly fine sand, some subangular gravel, little glass, tile, brick, cinders, loose when disturbed, no odors	1		3		0.4 0.4	Sampled (0-6")	
	-1.0 1.0	End of Borehole							
5.0									

Drilled By: Nature's Way Environmental

Drill Rig Type: NA

Drill Method: Hand auger

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

Project No: T0417-017-001

Borehole Number: HA-2

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



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Buffalo, NY 14218
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SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 250 500	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		Concrete							
	-0.3 0.3	Fine sand with gravel and fill Brown, moist, mostly subangular gravel, some fine sand, little glass, brick, cinders, loose when disturbed, no odors	1		3		0.2	Sampled (0-6")	
	-1.0 1.0	End of Borehole					0.2		
5.0									

Drilled By: Nature's Way Environmental

Drill Rig Type: NA

Drill Method: Hand auger

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

Project No: T0417-017-001

Borehole Number: SB-1

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



TurnKey Environmental Restoration, LLC
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 (716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 250 500	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0 0.0	Ground Surface							
		Fine sand with fill Blackish brown, moist, mostly fine sand, little silt, some brick, little cinders, ash, slag, no odors					0.7		
	-2.0 2.0	Lean Clay with fill Reddish brown with black staining, moist, mostly medium plasticity fines, few fine sand, little cinders, few subrounded gravel, stiff, odors	1		3		300.0	Sampled (2-3')	
							356.0		
							109.0		
	-4.5 4.5	Lean Clay Reddish brown, moist, mostly medium plasticity fines, few fine sand, few subrounded gravel, stiff, massive, no odors					2.2		
5.0			2		4		1.6		
							2.5		
							1.0		
10.0			3		4		0.0		
							0.0		
							0.0		
							0.0		
	-12.0 12.0	End of Borehole					0.0		
15.0									

Drilled By: Nature's Way Environmental

Drill Rig Type: Truck mounted earthprobe 200

Drill Method: Direct push with 4' macro-core sampler

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

Borehole Number: SB-2/TMW-3

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



TurnKey Environmental Restoration, LLC
2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs		Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	ppm 0 12.5 25			
-2.0										
		Ground Surface								
0.0 0.0		Topsoil with fill Dark brown, moist, mostly organics, little fine sand, Few wood, slag, no odors					0.0 1.5 5.0 8.0 8.0		SAMPLED (0'-2')	
-1.0 1.0		Fine sand with fill Greyish black, moist, mostly fine sand, little slag, cinders, glass, subrounded gravel, no odors	1		3		5.0 8.0			
-2.0 2.0		Lean clay with fill Tannish white, mostly medium plasticity fines, suspect drywall, no odors					5.0 4.0			
3.0		Gravel with fill Blackish grey, moist, mostly slag and subangular gravel, few medium plasticity fines, no odors					1.3			
-4.5 4.5		Lean Clay with fill Reddish brown with black staining, moist, mostly medium plasticity fines, few fine sand, little cinders, few subrounded gravel, stiff, petroleum-like odors	2		4		1.0 0.0			
8.0		Lean Clay Reddish brown, moist to wet (7'), mostly medium plasticity fines, few fine sand,few subrounded gravel, stiff, massive, no odors					0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
			3		4		0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0			
			4		2		0.0 0.0 0.0			
-14.0 14.0		End of Borehole					0.0			
18.0										

DTW 7' During Drilling

Drilled By: Nature's Way Environmental

Drill Rig Type: Truck mounted earthprobe 200

Drill Method: Direct push with 4' macro-core sampler

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

Borehole Number: SB-3

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



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2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

[illegible]

Drilled By: Nature's Way Environmental

Drill Rig Type: Truck mounted earthprobe 200

Drill Method: Direct push with 4' macro-core sampler

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

Project No: T0417-017-001

Borehole Number: SB-4/TMW-2

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



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Buffalo, NY 14218
(716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
-2.0									
	0.0	Ground Surface							
	-0.5	Asphalt					0.5		
	0.5	Fine sand with fill Greyish brown, moist, mostly fine sand, some silt, little slag, brick, wood, cinders, no odors					0.0		
		Lean Clay Reddish brown, moist to wet (7"), mostly medium plasticity fines, few fine sand, few subrounded gravel, stiff, massive, no odors	1		4		0.0		
3.0							0.0		
							0.0		
			2		4		0.0		
							0.0		
							0.0		
8.0							0.0		
							0.0		
			3		4		0.0		
							0.0		
							0.0		
13.0			4		3		0.0		
							0.0		
	-15.0	End of Borehole					0.0		
	15.0								
18.0									

Drilled By: Nature's Way Environmental
Drill Rig Type: Truck mounted earthprobe 200
Drill Method: Direct push with 4' macro-core sampler
Comments:
Drill Date(s): 4/10/2017

Hole Size: 3"
Stick-up: NA
Datum: Mean Sea Level
Sheet: 1 of 1

Project No: T0417-017-001

Borehole Number: SB-5

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



TurnKey Environmental Restoration, LLC
 2558 Hamburg Turnpike, Suite 300
 Buffalo, NY 14218
 (716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	0.0	Asphalt							
	-1.0	Fine sand with fill							
	1.0	Tan, moist, mostly fine sand, some subangular gravel, few slag, glass, cinders, medium dense, no odors							
	-1.5	Lean clay with fill							
	1.5	Dark brown, moist, mostly medium plasticity fines, little silt, few brick, cinders, medium dense, no odors							
		Lean Clay							
		Reddish brown, moist to wet (8'), mostly medium plasticity fines, few fine sand, few subrounded gravel, stiff, massive, no odors							
5.0			1		2.5				
			2		4				
10.0			3		4				
	-12.0								
	12.0	End of Borehole							
15.0									

Drilled By: Nature's Way Environmental

Drill Rig Type: Truck mounted earthprobe 200

Drill Method: Direct push with 4' macro-core sampler

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

Borehole Number: SB-6

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



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2558 Hamburg Turnpike, Suite 300
Buffalo, NY 14218
(716) 856-0635

[illegible]

Drilled By: Nature's Way Environmental
Drill Rig Type: Truck mounted earthprobe 200
Drill Method: Direct push with 4' macro-core sampler
Comments:
Drill Date(s): 4/10/2017

Hole Size: 3"
Stick-up: NA
Datum: Mean Sea Level

Sheet: 1 of 1

Project No: T0417-017-001

Borehole Number: SB-7

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



TurnKey Environmental Restoration, LLC
 2558 Hamburg Turnpike, Suite 300
 Buffalo, NY 14218
 (716) 856-0635

SUBSURFACE PROFILE			SAMPLE				PID VOCs ppm 0 12.5 25	Lab Sample	Well Completion Details or Remarks
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol			
0.0	0.0	Ground Surface							
	0.0	Asphalt							
	-0.5	Fine sand with fill							
	0.5	Black, moist, mostly fine sand, some subangular gravel, few cinders, few brick, medium dense, no odors							
		Lean Clay							
		Reddish brown, moist, mostly medium plasticity fines, few fine sand, few subrounded gravel, stiff, massive, no odors	1		.5				
5.0			2		4				
10.0			3		4				
	-12.0								
	12.0	End of Borehole							
15.0									

Drilled By: Nature's Way Environmental

Drill Rig Type: Truck mounted earthprobe 200

Drill Method: Direct push with 4' macro-core sampler

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

Borehole Number: SB-8/TMW-1

Project: 1485-1491 Niagara Street

A.K.A.:

Client: Natale Development Company

Logged By: NAS

Site Location: Buffalo, NY

Checked By: BWM



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Buffalo, NY 14218
(716) 856-0635

[illegible]

Drilled By: Nature's Way Environmental

Drill Rig Type: Truck mounted earthprobe 200

Drill Method: Direct push with 4' macro-core sampler

Comments:

Drill Date(s): 4/10/2017

Hole Size: 3"

Stick-up: NA

Datum: Mean Sea Level

Sheet: 1 of 1

APPENDIX B

PHOTO LOG

SITE PHOTOGRAPHS

Photo 1:



Photo 2:



Photo 3:



Photo 4:



Photo 1: View of the drilling of SB-1 facing east.

Photo 2: View of the impacted soil noted in SB-1.

Photo 3: View of the drilling of SB-2 facing south.

Photo 4: View of the suspected drywall material noted within borings SB-2 and SB-3.

1485-1491 Niagara Street

Photo Date: April 10, 2017



SITE PHOTOGRAPHS

Photo 5:



Photo 6:



Photo 7:



Photo 8:



Photo 5: Another view of suspected drywall material noted within SB-2 and SB-3.

Photo 6: View of the drilling of SB-3 facing west.

Photo 7: View of the drilling of SB-4 facing north.

Photo 8: View of the typical urban fill materials noted across the Site.

1485-1491 Niagara Street

Photo Date: April 10, 2017



SITE PHOTOGRAPHS

Photo 9:



Photo 10:



Photo 11:



Photo 12:



Photo 9: View of the typical soil/fill noted across the Site.

Photo 10: View of the drilling of SB-5 facing northwest.

Photo 11: View of the drilling of SB-6 facing northeast.

Photo 12: View of the drilling of SB-8 facing northeast.

1485-1491 Niagara Street

Photo Date: April 10, 2017



SITE PHOTOGRAPHS

Photo 13:



Photo 14:



Photo 13: View of HA-1 taken from beneath the building in former production areas.

Photo 14: View of HA-2 taken from beneath the building in former production areas.

1485-1491 Niagara Street

Photo Date: April 10, 2017



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: 480-115992-1

Client Project/Site: Benchmark - 1485-1491 Niagara St.

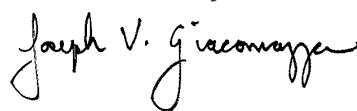
For:

Benchmark Env. Eng. & Science, PLLC

2558 Hamburg Turnpike

Lackawanna, New York 14218

Attn: Brian Mayback



Authorized for release by:

4/18/2017 3:51:17 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

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

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

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

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Definitions/Glossary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

GC/MS Semi VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
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
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.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Case Narrative

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Job ID: 480-115992-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative 480-115992-1

Receipt

The samples were received on 4/11/2017 5:12 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.7° C.

GC/MS VOA

Method(s) 8260C: Reported analyte concentrations in the following sample is below 200 ug/kg and may be biased low due to the sample not being collected according to 5035-L/5035A-L low-level specifications: SB-1 (2'-3') (480-115992-1).

Method(s) 8260C: The following sample was diluted due to the abundance of target analytes : (480-115992-A-2-F MS) and (480-115992-A-2-G MSD). Because of this dilution, the matrix spike and matrix spike duplicate concentrations in the sample were reduced to a level where the recovery calculation and precision does not provide useful information.

Method(s) 8260C: The following samples were analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-2 (0'-2') (480-115992-2), (480-115992-A-2-F MS) and (480-115992-A-2-G MSD). Elevated reporting limits (RLs) are provided.

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

GC/MS Semi VOA

Method(s) 8270D: The following samples were diluted due to color and appearance: SB-1 (2'-3') (480-115992-1), SB-2 (0'-2') (480-115992-2), SB-3 (2'-1') (480-115992-3), SB-6 (2'-1.5') (480-115992-6), SB-8 (2'-1.5') (480-115992-8), HA-1 (0'-6") (480-115992-9), (480-115992-A-2-A MS) and (480-115992-A-2-B MSD). Elevated reporting limits (RL) are provided.

Method(s) 8270D: The following sample was diluted due to color and appearance: (480-115992-A-2-A MS) and (480-115992-A-2-B MSD). Because of this dilution, the surrogate spike and matrix spike concentration in the sample was reduced to a level where the recovery calculation does not provide useful information.

Method(s) 8270D: The following samples required a dilution due to the nature of the sample matrix: SB-2 (0'-2') (480-115992-2), SB-6 (2'-1.5') (480-115992-6), SB-8 (2'-1.5') (480-115992-8) and HA-1 (0'-6") (480-115992-9). 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.

Metals

Method(s) 6010C: Due to sample matrix effect on the internal standard (Yttrium), a dilution was required for Total Barium for the following sample: SB-5 (2'-1.5') (480-115992-5).

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

Organic Prep

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

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-1 (2-3')

Lab Sample ID: 480-115992-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	73	J	77	13	ug/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	31		15	2.0	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	20		15	2.3	ug/Kg	1	☼	8260C	Total/NA
trans-1,2-Dichloroethene	47		15	1.6	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	24		15	3.4	ug/Kg	1	☼	8260C	Total/NA
tert-Butylbenzene	49		15	1.6	ug/Kg	1	☼	8260C	Total/NA
Benzo[a]anthracene	130	J	1000	100	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	180	J	1000	160	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	110	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Fluoranthene	370	J	1000	110	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	150	J	1000	150	ug/Kg	5	☼	8270D	Total/NA
Pyrene	290	J	1000	120	ug/Kg	5	☼	8270D	Total/NA
Arsenic	6.1		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	170		0.59		mg/Kg	1	☼	6010C	Total/NA
Cadmium	0.46		0.24		mg/Kg	1	☼	6010C	Total/NA
Chromium	57.3		0.59		mg/Kg	1	☼	6010C	Total/NA
Lead	78.1		1.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.097		0.022		mg/Kg	1	☼	7471B	Total/NA

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

Lab Sample ID: 480-115992-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	890	J	2400	680	ug/Kg	20	☼	8260C	Total/NA
Trichloroethene	120000		2400	680	ug/Kg	20	☼	8260C	Total/NA
Benzo[a]anthracene	3900	F1 F2	3900	390	ug/Kg	20	☼	8270D	Total/NA
Benzo[a]pyrene	4000	F1 F2	3900	570	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	8100	F2	3900	620	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	5100	F1 F2	3900	410	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	2600	J F1 F2	3900	500	ug/Kg	20	☼	8270D	Total/NA
Chrysene	7000	F1 F2	3900	870	ug/Kg	20	☼	8270D	Total/NA
Dibenz[a,h]anthracene	1500	J F1 F2	3900	680	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	10000	F2	3900	410	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	4400	F1 F2	3900	480	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	4900	F1 F2	3900	570	ug/Kg	20	☼	8270D	Total/NA
Pyrene	7200	F1	3900	460	ug/Kg	20	☼	8270D	Total/NA
Arsenic	16.4		2.1		mg/Kg	1	☼	6010C	Total/NA
Barium	239		0.53		mg/Kg	1	☼	6010C	Total/NA
Cadmium	64.9		0.21		mg/Kg	1	☼	6010C	Total/NA
Chromium	524		0.53		mg/Kg	1	☼	6010C	Total/NA
Lead	696		1.1		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.17		0.021		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-3 (2"-1')

Lab Sample ID: 480-115992-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	270	J	1200	120	ug/Kg	5	☼	8270D	Total/NA
Benzo[a]pyrene	250	J	1200	180	ug/Kg	5	☼	8270D	Total/NA
Benzo[b]fluoranthene	380	J	1200	190	ug/Kg	5	☼	8270D	Total/NA
Benzo[g,h,i]perylene	220	J	1200	130	ug/Kg	5	☼	8270D	Total/NA
Chrysene	310	J	1200	270	ug/Kg	5	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-3 (2"-1') (Continued)

Lab Sample ID: 480-115992-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoranthene	520	J	1200	130	ug/Kg	5	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	180	J	1200	150	ug/Kg	5	☼	8270D	Total/NA
Phenanthrene	340	J	1200	180	ug/Kg	5	☼	8270D	Total/NA
Pyrene	400	J	1200	140	ug/Kg	5	☼	8270D	Total/NA
Arsenic	24.3		3.0		mg/Kg	1	☼	6010C	Total/NA
Barium	437		0.74		mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.0		0.30		mg/Kg	1	☼	6010C	Total/NA
Chromium	59.2		0.74		mg/Kg	1	☼	6010C	Total/NA
Lead	464		1.5		mg/Kg	1	☼	6010C	Total/NA
Silver	3.6		0.89		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.47	F1 F2	0.028		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-5 (2"-1.5')

Lab Sample ID: 480-115992-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	3.6		2.3		mg/Kg	1	☼	6010C	Total/NA
Barium	310		1.2		mg/Kg	2	☼	6010C	Total/NA
Cadmium	2.0		0.23		mg/Kg	1	☼	6010C	Total/NA
Chromium	17.9		0.58		mg/Kg	1	☼	6010C	Total/NA
Lead	57.7		1.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.024		0.023		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-6 (2"-1.5')

Lab Sample ID: 480-115992-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acenaphthene	4000	J	9900	1400	ug/Kg	50	☼	8270D	Total/NA
Anthracene	8700	J	9900	2400	ug/Kg	50	☼	8270D	Total/NA
Benzo[a]anthracene	10000		9900	990	ug/Kg	50	☼	8270D	Total/NA
Benzo[a]pyrene	9100	J	9900	1400	ug/Kg	50	☼	8270D	Total/NA
Benzo[b]fluoranthene	11000		9900	1600	ug/Kg	50	☼	8270D	Total/NA
Benzo[g,h,i]perylene	5400	J	9900	1000	ug/Kg	50	☼	8270D	Total/NA
Benzo[k]fluoranthene	5300	J	9900	1300	ug/Kg	50	☼	8270D	Total/NA
Chrysene	10000		9900	2200	ug/Kg	50	☼	8270D	Total/NA
Fluoranthene	29000		9900	1000	ug/Kg	50	☼	8270D	Total/NA
Fluorene	5700	J	9900	1200	ug/Kg	50	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	4900	J	9900	1200	ug/Kg	50	☼	8270D	Total/NA
Naphthalene	3100	J	9900	1300	ug/Kg	50	☼	8270D	Total/NA
Phenanthrene	33000		9900	1400	ug/Kg	50	☼	8270D	Total/NA
Pyrene	21000		9900	1200	ug/Kg	50	☼	8270D	Total/NA
Arsenic	6.9		2.4		mg/Kg	1	☼	6010C	Total/NA
Barium	149		0.59		mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.6		0.24		mg/Kg	1	☼	6010C	Total/NA
Chromium	52.6		0.59		mg/Kg	1	☼	6010C	Total/NA
Lead	234		1.2		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.50		0.023		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: SB-8 (2'-1.5')

Lab Sample ID: 480-115992-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]anthracene	1400	J	3900	390	ug/Kg	20	☼	8270D	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Detection Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-8 (2'-1.5') (Continued)

Lab Sample ID: 480-115992-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Benzo[a]pyrene	1300	J	3900	570	ug/Kg	20	☼	8270D	Total/NA
Benzo[b]fluoranthene	1700	J	3900	620	ug/Kg	20	☼	8270D	Total/NA
Benzo[g,h,i]perylene	790	J	3900	410	ug/Kg	20	☼	8270D	Total/NA
Benzo[k]fluoranthene	750	J	3900	500	ug/Kg	20	☼	8270D	Total/NA
Chrysene	1400	J	3900	870	ug/Kg	20	☼	8270D	Total/NA
Fluoranthene	3300	J	3900	410	ug/Kg	20	☼	8270D	Total/NA
Indeno[1,2,3-cd]pyrene	810	J	3900	480	ug/Kg	20	☼	8270D	Total/NA
Phenanthrene	2900	J	3900	570	ug/Kg	20	☼	8270D	Total/NA
Pyrene	2300	J	3900	460	ug/Kg	20	☼	8270D	Total/NA
Arsenic	5.2		1.9		mg/Kg	1	☼	6010C	Total/NA
Barium	27.5		0.46		mg/Kg	1	☼	6010C	Total/NA
Cadmium	5.1		0.19		mg/Kg	1	☼	6010C	Total/NA
Chromium	150		0.46		mg/Kg	1	☼	6010C	Total/NA
Lead	23.7		0.93		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.11		0.020		mg/Kg	1	☼	7471B	Total/NA

Client Sample ID: HA-1 (0-6")

Lab Sample ID: 480-115992-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	30.8		2.8		mg/Kg	1	☼	6010C	Total/NA
Barium	318	F2	0.70		mg/Kg	1	☼	6010C	Total/NA
Cadmium	1.1		0.28		mg/Kg	1	☼	6010C	Total/NA
Chromium	15.1		0.70		mg/Kg	1	☼	6010C	Total/NA
Lead	455		1.4		mg/Kg	1	☼	6010C	Total/NA
Silver	7.5	F1 F2	0.84		mg/Kg	1	☼	6010C	Total/NA
Mercury	0.14		0.026		mg/Kg	1	☼	7471B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-1 (2-3')

Lab Sample ID: 480-115992-1

Date Collected: 04/10/17 09:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		15	1.1	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,1,2,2-Tetrachloroethane	ND		15	2.5	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15	3.5	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,1,2-Trichloroethane	ND		15	2.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,1-Dichloroethane	ND		15	1.9	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,1-Dichloroethene	ND		15	1.9	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,2,4-Trichlorobenzene	ND		15	0.93	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,2,4-Trimethylbenzene	ND		15	2.9	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,2-Dibromo-3-Chloropropane	ND		15	7.7	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,2-Dichlorobenzene	ND		15	1.2	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,2-Dichloroethane	ND		15	0.77	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,2-Dichloropropane	ND		15	7.7	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,3,5-Trimethylbenzene	ND		15	0.99	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,3-Dichlorobenzene	ND		15	0.79	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,4-Dichlorobenzene	ND		15	2.1	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
2-Butanone (MEK)	ND		77	5.6	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
2-Hexanone	ND		77	7.7	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
4-Isopropyltoluene	ND		15	1.2	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
4-Methyl-2-pentanone (MIBK)	ND		77	5.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Acetone	73	J	77	13	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Benzene	ND		15	0.75	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Bromoform	ND		15	7.7	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Bromomethane	ND		15	1.4	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Carbon disulfide	ND		15	7.7	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Carbon tetrachloride	ND		15	1.5	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Chlorobenzene	ND		15	2.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Dibromochloromethane	ND		15	2.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Chloroethane	ND		15	3.5	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Chloroform	ND		15	0.95	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Chloromethane	ND		15	0.93	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
cis-1,2-Dichloroethene	31		15	2.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Cyclohexane	ND		15	2.1	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Bromodichloromethane	ND		15	2.1	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Dichlorodifluoromethane	ND		15	1.3	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Ethylbenzene	ND		15	1.1	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
1,2-Dibromoethane	ND		15	2.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Isopropylbenzene	20		15	2.3	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Methyl acetate	ND		77	9.3	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Methyl tert-butyl ether	ND		15	1.5	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Methylcyclohexane	ND		15	2.3	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Methylene Chloride	ND		15	7.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
m,p-Xylene	ND		31	2.6	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
n-Butylbenzene	ND		15	1.3	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
N-Propylbenzene	ND		15	1.2	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
o-Xylene	ND		15	2.0	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
sec-Butylbenzene	ND		15	1.3	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Tetrachloroethene	ND		15	2.1	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Toluene	ND		15	1.2	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
trans-1,2-Dichloroethene	47		15	1.6	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-1 (2-3')

Lab Sample ID: 480-115992-1

Date Collected: 04/10/17 09:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 81.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND		15	6.7	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Trichloroethene	24		15	3.4	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Trichlorofluoromethane	ND		15	1.4	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Vinyl chloride	ND		15	1.9	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Xylenes, Total	ND		31	2.6	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
cis-1,3-Dichloropropene	ND		15	2.2	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
Styrene	ND		15	0.77	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1
tert-Butylbenzene	49		15	1.6	ug/Kg	☼	04/14/17 09:02	04/14/17 12:54	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		64 - 126	04/14/17 09:02	04/14/17 12:54	1
4-Bromofluorobenzene (Surr)	113		72 - 126	04/14/17 09:02	04/14/17 12:54	1
Toluene-d8 (Surr)	97		71 - 125	04/14/17 09:02	04/14/17 12:54	1
Dibromofluoromethane (Surr)	100		60 - 140	04/14/17 09:02	04/14/17 12:54	1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1000	150	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Acenaphthylene	ND		1000	130	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Anthracene	ND		1000	250	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Benzo[a]anthracene	130	J	1000	100	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Benzo[a]pyrene	ND		1000	150	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Benzo[b]fluoranthene	180	J	1000	160	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Benzo[g,h,i]perylene	110	J	1000	110	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Benzo[k]fluoranthene	ND		1000	130	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Chrysene	ND		1000	230	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Dibenz(a,h)anthracene	ND		1000	180	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Fluoranthene	370	J	1000	110	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Fluorene	ND		1000	120	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Indeno[1,2,3-cd]pyrene	ND		1000	130	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Naphthalene	ND		1000	130	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Phenanthrene	150	J	1000	150	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5
Pyrene	290	J	1000	120	ug/Kg	☼	04/14/17 07:30	04/15/17 22:12	5

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	66		60 - 120	04/14/17 07:30	04/15/17 22:12	5
Nitrobenzene-d5 (Surr)	83		53 - 120	04/14/17 07:30	04/15/17 22:12	5
p-Terphenyl-d14 (Surr)	80		65 - 121	04/14/17 07:30	04/15/17 22:12	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.1		2.4		mg/Kg	☼	04/14/17 17:36	04/17/17 11:23	1
Barium	170		0.59		mg/Kg	☼	04/14/17 17:36	04/17/17 11:23	1
Cadmium	0.46		0.24		mg/Kg	☼	04/14/17 17:36	04/17/17 11:23	1
Chromium	57.3		0.59		mg/Kg	☼	04/14/17 17:36	04/17/17 11:23	1
Lead	78.1		1.2		mg/Kg	☼	04/14/17 17:36	04/17/17 11:23	1
Selenium	ND		4.7		mg/Kg	☼	04/14/17 17:36	04/17/17 11:23	1
Silver	ND		0.71		mg/Kg	☼	04/14/17 17:36	04/17/17 11:23	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-1 (2-3')

Date Collected: 04/10/17 09:30

Date Received: 04/11/17 17:12

Lab Sample ID: 480-115992-1

Matrix: Solid

Percent Solids: 81.2

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.097		0.022		mg/Kg	☼	04/14/17 07:50	04/14/17 11:59	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: 480-115992-2

Date Collected: 04/10/17 10:00

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		2400	680	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,1,2,2-Tetrachloroethane	ND		2400	400	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2400	1200	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,1,2-Trichloroethane	ND		2400	510	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,1-Dichloroethane	ND		2400	760	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,1-Dichloroethene	ND		2400	850	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,2,4-Trichlorobenzene	ND		2400	930	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,2,4-Trimethylbenzene	ND		2400	680	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,2-Dibromo-3-Chloropropane	ND	F1	2400	1200	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,2-Dichlorobenzene	ND		2400	620	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,2-Dichloroethane	ND		2400	1000	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,2-Dichloropropane	ND		2400	400	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,3,5-Trimethylbenzene	ND		2400	740	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,3-Dichlorobenzene	ND		2400	650	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,4-Dichlorobenzene	ND		2400	340	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
2-Butanone (MEK)	ND		12000	7300	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
2-Hexanone	ND		12000	5000	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
4-Isopropyltoluene	ND		2400	830	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
4-Methyl-2-pentanone (MIBK)	ND		12000	780	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Acetone	ND		12000	10000	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Benzene	ND		2400	470	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Bromoform	ND		2400	1200	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Bromomethane	ND	F2	2400	540	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Carbon disulfide	ND		2400	1100	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Carbon tetrachloride	ND		2400	620	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Chlorobenzene	ND		2400	320	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Dibromochloromethane	ND		2400	1200	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Chloroethane	ND		2400	510	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Chloroform	ND		2400	1700	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Chloromethane	ND		2400	580	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
cis-1,2-Dichloroethene	890	J	2400	680	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Cyclohexane	ND		2400	540	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Bromodichloromethane	ND		2400	490	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Dichlorodifluoromethane	ND		2400	1100	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Ethylbenzene	ND		2400	710	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
1,2-Dibromoethane	ND		2400	430	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Isopropylbenzene	ND		2400	370	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Methyl acetate	ND		12000	1200	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Methyl tert-butyl ether	ND		2400	930	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Methylcyclohexane	ND		2400	1100	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Methylene Chloride	ND	F2 F1	2400	480	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
m,p-Xylene	ND		4900	1400	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
n-Butylbenzene	ND		2400	710	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
N-Propylbenzene	ND		2400	640	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
o-Xylene	ND		2400	320	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
sec-Butylbenzene	ND		2400	900	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Tetrachloroethene	ND	F1	2400	330	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Toluene	ND		2400	660	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
trans-1,2-Dichloroethene	ND		2400	580	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: 480-115992-2

Date Collected: 04/10/17 10:00

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 86.9

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,3-Dichloropropene	ND	F1	2400	240	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Trichloroethene	120000		2400	680	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Trichlorofluoromethane	ND		2400	1100	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Vinyl chloride	ND		2400	820	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Xylenes, Total	ND		4900	1400	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
cis-1,3-Dichloropropene	ND		2400	590	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
Styrene	ND		2400	590	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20
tert-Butylbenzene	ND	F2	2400	680	ug/Kg	☼	04/17/17 14:39	04/18/17 07:08	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	104		53 - 146	04/17/17 14:39	04/18/17 07:08	20
4-Bromofluorobenzene (Surr)	105		49 - 148	04/17/17 14:39	04/18/17 07:08	20
Toluene-d8 (Surr)	99		50 - 149	04/17/17 14:39	04/18/17 07:08	20
Dibromofluoromethane (Surr)	107		60 - 140	04/17/17 14:39	04/18/17 07:08	20

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3900	570	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Acenaphthylene	ND	F2	3900	500	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Anthracene	ND	F2	3900	960	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Benzo[a]anthracene	3900	F1 F2	3900	390	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Benzo[a]pyrene	4000	F1 F2	3900	570	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Benzo[b]fluoranthene	8100	F2	3900	620	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Benzo[g,h,i]perylene	5100	F1 F2	3900	410	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Benzo[k]fluoranthene	2600	J F1 F2	3900	500	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Chrysene	7000	F1 F2	3900	870	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Dibenz[a,h]anthracene	1500	J F1 F2	3900	680	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Fluoranthene	10000	F2	3900	410	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Fluorene	ND		3900	460	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Indeno[1,2,3-cd]pyrene	4400	F1 F2	3900	480	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Naphthalene	ND		3900	500	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Phenanthrene	4900	F1 F2	3900	570	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20
Pyrene	7200	F1	3900	460	ug/Kg	☼	04/14/17 07:30	04/15/17 22:38	20

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	73		60 - 120	04/14/17 07:30	04/15/17 22:38	20
Nitrobenzene-d5 (Surr)	67		53 - 120	04/14/17 07:30	04/15/17 22:38	20
p-Terphenyl-d14 (Surr)	80		65 - 121	04/14/17 07:30	04/15/17 22:38	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	16.4		2.1		mg/Kg	☼	04/14/17 17:36	04/17/17 11:26	1
Barium	239		0.53		mg/Kg	☼	04/14/17 17:36	04/17/17 11:26	1
Cadmium	64.9		0.21		mg/Kg	☼	04/14/17 17:36	04/17/17 11:26	1
Chromium	524		0.53		mg/Kg	☼	04/14/17 17:36	04/17/17 11:26	1
Lead	696		1.1		mg/Kg	☼	04/14/17 17:36	04/17/17 11:26	1
Selenium	ND		4.2		mg/Kg	☼	04/14/17 17:36	04/17/17 11:26	1
Silver	ND		0.63		mg/Kg	☼	04/14/17 17:36	04/17/17 11:26	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Date Collected: 04/10/17 10:00

Date Received: 04/11/17 17:12

Lab Sample ID: 480-115992-2

Matrix: Solid

Percent Solids: 86.9

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.17		0.021		mg/Kg	☼	04/14/17 07:50	04/14/17 12:00	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-3 (2"-1')

Lab Sample ID: 480-115992-3

Date Collected: 04/10/17 10:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 68.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		1200	180	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Acenaphthylene	ND		1200	160	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Anthracene	ND		1200	300	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Benzo[a]anthracene	270	J	1200	120	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Benzo[a]pyrene	250	J	1200	180	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Benzo[b]fluoranthene	380	J	1200	190	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Benzo[g,h,i]perylene	220	J	1200	130	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Benzo[k]fluoranthene	ND		1200	160	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Chrysene	310	J	1200	270	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Dibenz(a,h)anthracene	ND		1200	210	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Fluoranthene	520	J	1200	130	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Fluorene	ND		1200	140	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Indeno[1,2,3-cd]pyrene	180	J	1200	150	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Naphthalene	ND		1200	160	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Phenanthrene	340	J	1200	180	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Pyrene	400	J	1200	140	ug/Kg	☼	04/14/17 07:30	04/15/17 23:04	5
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	65		60 - 120				04/14/17 07:30	04/15/17 23:04	5
Nitrobenzene-d5 (Surr)	63		53 - 120				04/14/17 07:30	04/15/17 23:04	5
p-Terphenyl-d14 (Surr)	75		65 - 121				04/14/17 07:30	04/15/17 23:04	5

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	24.3		3.0		mg/Kg	☼	04/14/17 17:36	04/17/17 11:30	1
Barium	437		0.74		mg/Kg	☼	04/14/17 17:36	04/17/17 11:30	1
Cadmium	1.0		0.30		mg/Kg	☼	04/14/17 17:36	04/17/17 11:30	1
Chromium	59.2		0.74		mg/Kg	☼	04/14/17 17:36	04/17/17 11:30	1
Lead	464		1.5		mg/Kg	☼	04/14/17 17:36	04/17/17 11:30	1
Selenium	ND		5.9		mg/Kg	☼	04/14/17 17:36	04/17/17 11:30	1
Silver	3.6		0.89		mg/Kg	☼	04/14/17 17:36	04/17/17 11:30	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.47	F1 F2	0.028		mg/Kg	☼	04/17/17 12:10	04/17/17 15:44	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-5 (2"-1.5')

Lab Sample ID: 480-115992-5

Date Collected: 04/10/17 13:00

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 88.4

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	3.6		2.3		mg/Kg	☼	04/14/17 17:36	04/17/17 11:33	1
Barium	310		1.2		mg/Kg	☼	04/14/17 17:36	04/18/17 03:53	2
Cadmium	2.0		0.23		mg/Kg	☼	04/14/17 17:36	04/17/17 11:33	1
Chromium	17.9		0.58		mg/Kg	☼	04/14/17 17:36	04/17/17 11:33	1
Lead	57.7		1.2		mg/Kg	☼	04/14/17 17:36	04/17/17 11:33	1
Selenium	ND		4.6		mg/Kg	☼	04/14/17 17:36	04/17/17 11:33	1
Silver	ND		0.69		mg/Kg	☼	04/14/17 17:36	04/17/17 11:33	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.024		0.023		mg/Kg	☼	04/14/17 07:50	04/14/17 12:02	1

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-6 (2"-1.5')

Lab Sample ID: 480-115992-6

Date Collected: 04/10/17 13:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 85.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	4000	J	9900	1400	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Acenaphthylene	ND		9900	1300	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Anthracene	8700	J	9900	2400	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Benzo[a]anthracene	10000		9900	990	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Benzo[a]pyrene	9100	J	9900	1400	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Benzo[b]fluoranthene	11000		9900	1600	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Benzo[g,h,i]perylene	5400	J	9900	1000	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Benzo[k]fluoranthene	5300	J	9900	1300	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Chrysene	10000		9900	2200	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Dibenz(a,h)anthracene	ND		9900	1700	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Fluoranthene	29000		9900	1000	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Fluorene	5700	J	9900	1200	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Indeno[1,2,3-cd]pyrene	4900	J	9900	1200	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Naphthalene	3100	J	9900	1300	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Phenanthrene	33000		9900	1400	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Pyrene	21000		9900	1200	ug/Kg	☼	04/14/17 07:30	04/15/17 23:30	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	68		60 - 120				04/14/17 07:30	04/15/17 23:30	50
Nitrobenzene-d5 (Surr)	60		53 - 120				04/14/17 07:30	04/15/17 23:30	50
p-Terphenyl-d14 (Surr)	71		65 - 121				04/14/17 07:30	04/15/17 23:30	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	6.9		2.4		mg/Kg	☼	04/14/17 17:36	04/17/17 11:37	1
Barium	149		0.59		mg/Kg	☼	04/14/17 17:36	04/17/17 11:37	1
Cadmium	1.6		0.24		mg/Kg	☼	04/14/17 17:36	04/17/17 11:37	1
Chromium	52.6		0.59		mg/Kg	☼	04/14/17 17:36	04/17/17 11:37	1
Lead	234		1.2		mg/Kg	☼	04/14/17 17:36	04/17/17 11:37	1
Selenium	ND		4.7		mg/Kg	☼	04/14/17 17:36	04/17/17 11:37	1
Silver	ND		0.71		mg/Kg	☼	04/14/17 17:36	04/17/17 11:37	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.50		0.023		mg/Kg	☼	04/17/17 12:10	04/17/17 15:50	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-8 (2'-1.5')

Lab Sample ID: 480-115992-8

Date Collected: 04/10/17 14:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 86.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		3900	570	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Acenaphthylene	ND		3900	500	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Anthracene	ND		3900	960	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Benzo[a]anthracene	1400	J	3900	390	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Benzo[a]pyrene	1300	J	3900	570	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Benzo[b]fluoranthene	1700	J	3900	620	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Benzo[g,h,i]perylene	790	J	3900	410	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Benzo[k]fluoranthene	750	J	3900	500	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Chrysene	1400	J	3900	870	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Dibenz(a,h)anthracene	ND		3900	690	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Fluoranthene	3300	J	3900	410	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Fluorene	ND		3900	460	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Indeno[1,2,3-cd]pyrene	810	J	3900	480	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Naphthalene	ND		3900	500	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Phenanthrene	2900	J	3900	570	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Pyrene	2300	J	3900	460	ug/Kg	☼	04/14/17 07:30	04/15/17 23:57	20
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	84		60 - 120				04/14/17 07:30	04/15/17 23:57	20
Nitrobenzene-d5 (Surr)	74		53 - 120				04/14/17 07:30	04/15/17 23:57	20
p-Terphenyl-d14 (Surr)	80		65 - 121				04/14/17 07:30	04/15/17 23:57	20

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	5.2		1.9		mg/Kg	☼	04/14/17 17:36	04/17/17 11:40	1
Barium	27.5		0.46		mg/Kg	☼	04/14/17 17:36	04/17/17 11:40	1
Cadmium	5.1		0.19		mg/Kg	☼	04/14/17 17:36	04/17/17 11:40	1
Chromium	150		0.46		mg/Kg	☼	04/14/17 17:36	04/17/17 11:40	1
Lead	23.7		0.93		mg/Kg	☼	04/14/17 17:36	04/17/17 11:40	1
Selenium	ND		3.7		mg/Kg	☼	04/14/17 17:36	04/17/17 11:40	1
Silver	ND		0.56		mg/Kg	☼	04/14/17 17:36	04/17/17 11:40	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.11		0.020		mg/Kg	☼	04/17/17 12:10	04/17/17 15:52	1

TestAmerica Buffalo

Client Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: HA-1 (0-6")

Lab Sample ID: 480-115992-9

Date Collected: 04/10/17 12:00

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 76.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		11000	1600	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Acenaphthylene	ND		11000	1400	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Anthracene	ND		11000	2700	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Benzo[a]anthracene	ND		11000	1100	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Benzo[a]pyrene	ND		11000	1600	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Benzo[b]fluoranthene	ND		11000	1800	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Benzo[g,h,i]perylene	ND		11000	1200	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Benzo[k]fluoranthene	ND		11000	1400	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Chrysene	ND		11000	2500	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Dibenz[a,h]anthracene	ND		11000	2000	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Fluoranthene	ND		11000	1200	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Fluorene	ND		11000	1300	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Indeno[1,2,3-cd]pyrene	ND		11000	1400	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Naphthalene	ND		11000	1400	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Phenanthrene	ND		11000	1600	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Pyrene	ND		11000	1300	ug/Kg	☼	04/14/17 07:30	04/16/17 00:23	50
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	71		60 - 120				04/14/17 07:30	04/16/17 00:23	50
Nitrobenzene-d5 (Surr)	56		53 - 120				04/14/17 07:30	04/16/17 00:23	50
p-Terphenyl-d14 (Surr)	74		65 - 121				04/14/17 07:30	04/16/17 00:23	50

Method: 6010C - Metals (ICP)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	30.8		2.8		mg/Kg	☼	04/14/17 17:36	04/17/17 11:43	1
Barium	318	F2	0.70		mg/Kg	☼	04/14/17 17:36	04/17/17 11:43	1
Cadmium	1.1		0.28		mg/Kg	☼	04/14/17 17:36	04/17/17 11:43	1
Chromium	15.1		0.70		mg/Kg	☼	04/14/17 17:36	04/17/17 11:43	1
Lead	455		1.4		mg/Kg	☼	04/14/17 17:36	04/17/17 11:43	1
Selenium	ND		5.6		mg/Kg	☼	04/14/17 17:36	04/17/17 11:43	1
Silver	7.5	F1 F2	0.84		mg/Kg	☼	04/14/17 17:36	04/17/17 11:43	1

Method: 7471B - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.14		0.026		mg/Kg	☼	04/17/17 12:10	04/17/17 15:53	1

TestAmerica Buffalo

Surrogate Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (64-126)	BFB (72-126)	TOL (71-125)	DBFM (60-140)
480-115992-1	SB-1 (2-3')	98	113	97	100
LCS 480-352005/1-A	Lab Control Sample	97	106	96	102
MB 480-352005/2-A	Method Blank	101	106	96	101

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		12DCE (53-146)	BFB (49-148)	TOL (50-149)	DBFM (60-140)
480-115992-2	SB-2 (0-2')	104	105	99	107
480-115992-2 MS	SB-2 (0-2')	98	106	103	102
480-115992-2 MSD	SB-2 (0-2')	99	107	102	103
LCS 480-352399/1-A	Lab Control Sample	105	112	106	111
MB 480-352399/2-A	Method Blank	111	116	113	116

Surrogate Legend

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

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)		
		FBP (60-120)	NBZ (53-120)	TPH (65-121)
480-115992-1	SB-1 (2-3')	66	83	80
480-115992-2	SB-2 (0-2')	73	67	80
480-115992-2 MS	SB-2 (0-2')	68	50 X	64 X
480-115992-2 MSD	SB-2 (0-2')	80	68	77
480-115992-3	SB-3 (2"-1')	65	63	75
480-115992-6	SB-6 (2"-1.5')	68	60	71
480-115992-8	SB-8 (2"-1.5')	84	74	80
480-115992-9	HA-1 (0-6")	71	56	74
LCS 480-351975/2-A	Lab Control Sample	81	76	88
MB 480-351975/1-A	Method Blank	80	72	90

Surrogate Legend

FBP = 2-Fluorobiphenyl
NBZ = Nitrobenzene-d5 (Surr)
TPH = p-Terphenyl-d14 (Surr)

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: MB 480-352005/2-A

Matrix: Solid

Analysis Batch: 351997

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
2-Hexanone	ND		25	2.5	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Acetone	ND		25	4.2	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Benzene	ND		5.0	0.25	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Bromoform	ND		5.0	2.5	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Bromomethane	ND		5.0	0.45	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Chloroethane	ND		5.0	1.1	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Chloroform	ND		5.0	0.31	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Chloromethane	ND		5.0	0.30	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Cyclohexane	ND		5.0	0.70	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Methyl acetate	ND		25	3.0	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
m,p-Xylene	ND		10	0.84	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
o-Xylene	ND		5.0	0.65	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Toluene	0.685	J	5.0	0.38	ug/Kg		04/14/17 09:02	04/14/17 12:18	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: MB 480-352005/2-A

Matrix: Solid

Analysis Batch: 351997

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352005

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Trichloroethene	ND		5.0	1.1	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Xylenes, Total	ND		10	0.84	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
Styrene	ND		5.0	0.25	ug/Kg		04/14/17 09:02	04/14/17 12:18	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		04/14/17 09:02	04/14/17 12:18	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	101		64 - 126	04/14/17 09:02	04/14/17 12:18	1
4-Bromofluorobenzene (Surr)	106		72 - 126	04/14/17 09:02	04/14/17 12:18	1
Toluene-d8 (Surr)	96		71 - 125	04/14/17 09:02	04/14/17 12:18	1
Dibromofluoromethane (Surr)	101		60 - 140	04/14/17 09:02	04/14/17 12:18	1

Lab Sample ID: LCS 480-352005/1-A

Matrix: Solid

Analysis Batch: 351997

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	50.2		ug/Kg		100	77 - 121
1,1,1,2-Tetrachloroethane	50.0	44.2		ug/Kg		88	80 - 120
1,1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.9		ug/Kg		96	60 - 140
1,1,2-Trichloroethane	50.0	45.7		ug/Kg		91	78 - 122
1,1-Dichloroethane	50.0	47.4		ug/Kg		95	73 - 126
1,1-Dichloroethene	50.0	48.0		ug/Kg		96	59 - 125
1,2,4-Trichlorobenzene	50.0	45.5		ug/Kg		91	64 - 120
1,2,4-Trimethylbenzene	50.0	44.9		ug/Kg		90	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	47.2		ug/Kg		94	63 - 124
1,2-Dichlorobenzene	50.0	45.0		ug/Kg		90	75 - 120
1,2-Dichloroethane	50.0	47.9		ug/Kg		96	77 - 122
1,2-Dichloropropane	50.0	47.2		ug/Kg		94	75 - 124
1,3,5-Trimethylbenzene	50.0	44.8		ug/Kg		90	74 - 120
1,3-Dichlorobenzene	50.0	44.8		ug/Kg		90	74 - 120
1,4-Dichlorobenzene	50.0	44.6		ug/Kg		89	73 - 120
2-Butanone (MEK)	250	242		ug/Kg		97	70 - 134
2-Hexanone	250	237		ug/Kg		95	59 - 130
4-Isopropyltoluene	50.0	45.1		ug/Kg		90	74 - 120
4-Methyl-2-pentanone (MIBK)	250	231		ug/Kg		92	65 - 133
Acetone	250	241		ug/Kg		96	61 - 137
Benzene	50.0	46.9		ug/Kg		94	79 - 127
Bromoform	50.0	56.1		ug/Kg		112	68 - 126
Bromomethane	50.0	40.9		ug/Kg		82	37 - 149
Carbon disulfide	50.0	47.2		ug/Kg		94	64 - 131
Carbon tetrachloride	50.0	51.3		ug/Kg		103	75 - 135
Chlorobenzene	50.0	45.2		ug/Kg		90	76 - 124

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: LCS 480-352005/1-A

Matrix: Solid

Analysis Batch: 351997

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352005

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Dibromochloromethane	50.0	52.5		ug/Kg		105	76 - 125
Chloroethane	50.0	43.8		ug/Kg		88	69 - 135
Chloroform	50.0	48.3		ug/Kg		97	80 - 120
Chloromethane	50.0	42.1		ug/Kg		84	63 - 127
cis-1,2-Dichloroethene	50.0	46.7		ug/Kg		93	81 - 120
Cyclohexane	50.0	46.3		ug/Kg		93	65 - 120
Bromodichloromethane	50.0	51.3		ug/Kg		103	80 - 122
Dichlorodifluoromethane	50.0	35.4		ug/Kg		71	57 - 142
Ethylbenzene	50.0	45.8		ug/Kg		92	80 - 120
1,2-Dibromoethane	50.0	45.9		ug/Kg		92	78 - 120
Isopropylbenzene	50.0	44.2		ug/Kg		88	72 - 120
Methyl acetate	250	241		ug/Kg		96	55 - 136
Methyl tert-butyl ether	50.0	48.5		ug/Kg		97	63 - 125
Methylcyclohexane	50.0	45.1		ug/Kg		90	60 - 140
Methylene Chloride	50.0	45.9		ug/Kg		92	61 - 127
m,p-Xylene	50.0	45.4		ug/Kg		91	70 - 130
Naphthalene	50.0	45.2		ug/Kg		90	38 - 137
n-Butylbenzene	50.0	44.5		ug/Kg		89	70 - 120
N-Propylbenzene	50.0	44.0		ug/Kg		88	70 - 130
o-Xylene	50.0	45.0		ug/Kg		90	70 - 130
sec-Butylbenzene	50.0	44.2		ug/Kg		88	74 - 120
Tetrachloroethene	50.0	46.3		ug/Kg		93	74 - 122
Toluene	50.0	44.6		ug/Kg		89	74 - 128
trans-1,2-Dichloroethene	50.0	47.2		ug/Kg		94	78 - 126
trans-1,3-Dichloropropene	50.0	48.7		ug/Kg		97	73 - 123
Trichloroethene	50.0	46.5		ug/Kg		93	77 - 129
Trichlorofluoromethane	50.0	48.3		ug/Kg		97	65 - 146
Vinyl chloride	50.0	42.6		ug/Kg		85	61 - 133
cis-1,3-Dichloropropene	50.0	49.0		ug/Kg		98	80 - 120
Styrene	50.0	44.6		ug/Kg		89	80 - 120
tert-Butylbenzene	50.0	43.1		ug/Kg		86	73 - 120

Surrogate	LCS LCS		Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	97		64 - 126
4-Bromofluorobenzene (Surr)	106		72 - 126
Toluene-d8 (Surr)	96		71 - 125
Dibromofluoromethane (Surr)	102		60 - 140

Lab Sample ID: MB 480-352399/2-A

Matrix: Solid

Analysis Batch: 352435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352399

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1-Trichloroethane	ND		100	28	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,1-Dichloroethane	ND		100	31	ug/Kg		04/17/17 14:39	04/17/17 23:48	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: MB 480-352399/2-A

Matrix: Solid

Analysis Batch: 352435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		100	35	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,2-Dichloroethane	ND		100	41	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,2-Dichloropropane	ND		100	16	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
2-Butanone (MEK)	ND		500	300	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
2-Hexanone	ND		500	210	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
4-Isopropyltoluene	ND		100	34	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Acetone	ND		500	410	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Benzene	ND		100	19	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Bromoform	ND		100	50	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Bromomethane	ND		100	22	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Carbon disulfide	ND		100	46	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Carbon tetrachloride	ND		100	26	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Chlorobenzene	ND		100	13	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Dibromochloromethane	ND		100	48	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Chloroethane	ND		100	21	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Chloroform	ND		100	69	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Chloromethane	ND		100	24	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Cyclohexane	ND		100	22	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Bromodichloromethane	ND		100	20	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Ethylbenzene	ND		100	29	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
1,2-Dibromoethane	ND		100	18	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Isopropylbenzene	ND		100	15	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Methyl acetate	ND		500	48	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Methylcyclohexane	ND		100	47	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Methylene Chloride	ND		100	20	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
m,p-Xylene	ND		200	55	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
n-Butylbenzene	ND		100	29	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
N-Propylbenzene	ND		100	26	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
o-Xylene	ND		100	13	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
sec-Butylbenzene	ND		100	37	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Tetrachloroethene	ND		100	13	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Toluene	ND		100	27	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Trichloroethene	ND		100	28	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Trichlorofluoromethane	ND		100	47	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Vinyl chloride	ND		100	34	ug/Kg		04/17/17 14:39	04/17/17 23:48	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: MB 480-352399/2-A

Matrix: Solid

Analysis Batch: 352435

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352399

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Xylenes, Total	ND		200	55	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
Styrene	ND		100	24	ug/Kg		04/17/17 14:39	04/17/17 23:48	1
tert-Butylbenzene	ND		100	28	ug/Kg		04/17/17 14:39	04/17/17 23:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		53 - 146	04/17/17 14:39	04/17/17 23:48	1
4-Bromofluorobenzene (Surr)	116		49 - 148	04/17/17 14:39	04/17/17 23:48	1
Toluene-d8 (Surr)	113		50 - 149	04/17/17 14:39	04/17/17 23:48	1
Dibromofluoromethane (Surr)	116		60 - 140	04/17/17 14:39	04/17/17 23:48	1

Lab Sample ID: LCS 480-352399/1-A

Matrix: Solid

Analysis Batch: 352435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	5.10	4.48		ug/Kg		88	68 - 130
1,1,2,2-Tetrachloroethane	5.10	4.56		ug/Kg		90	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	5.10	5.32		ug/Kg		105	10 - 179
1,1,2-Trichloroethane	5.10	4.58		ug/Kg		90	80 - 120
1,1-Dichloroethane	5.10	4.97		ug/Kg		97	78 - 121
1,1-Dichloroethene	5.10	5.14		ug/Kg		101	48 - 133
1,2,4-Trichlorobenzene	5.10	5.10		ug/Kg		100	70 - 140
1,2,4-Trimethylbenzene	5.10	4.63		ug/Kg		91	77 - 127
1,2-Dibromo-3-Chloropropane	5.10	3.38		ug/Kg		66	56 - 122
1,2-Dichlorobenzene	5.10	4.76		ug/Kg		93	78 - 125
1,2-Dichloroethane	5.10	4.50		ug/Kg		88	74 - 127
1,2-Dichloropropane	5.10	5.31		ug/Kg		104	80 - 120
1,3,5-Trimethylbenzene	5.10	4.70		ug/Kg		92	79 - 120
1,3-Dichlorobenzene	5.10	4.76		ug/Kg		93	80 - 120
1,4-Dichlorobenzene	5.10	4.80		ug/Kg		94	80 - 120
2-Butanone (MEK)	25.5	25.5		ug/Kg		100	54 - 149
2-Hexanone	25.5	22.9		ug/Kg		90	59 - 127
4-Isopropyltoluene	5.10	4.73		ug/Kg		93	80 - 120
4-Methyl-2-pentanone (MIBK)	25.5	22.0		ug/Kg		87	74 - 120
Acetone	25.5	24.3		ug/Kg		95	47 - 141
Benzene	5.10	5.08		ug/Kg		100	77 - 125
Bromoform	5.10	4.02		ug/Kg		79	48 - 125
Bromomethane	5.10	3.03		ug/Kg		60	39 - 149
Carbon disulfide	5.10	4.57		ug/Kg		90	40 - 136
Carbon tetrachloride	5.10	4.23		ug/Kg		83	54 - 135
Chlorobenzene	5.10	4.82		ug/Kg		95	76 - 126
Dibromochloromethane	5.10	4.24		ug/Kg		83	64 - 120
Chloroethane	5.10	3.28		ug/Kg		64	23 - 150
Chloroform	5.10	4.66		ug/Kg		91	78 - 120
Chloromethane	5.10	5.51		ug/Kg		108	61 - 124
cis-1,2-Dichloroethene	5.10	4.91		ug/Kg		96	79 - 124

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: LCS 480-352399/1-A

Matrix: Solid

Analysis Batch: 352435

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352399

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cyclohexane	5.10	5.47		ug/Kg		107	49 - 129
Bromodichloromethane	5.10	4.55		ug/Kg		89	71 - 121
Dichlorodifluoromethane	5.10	5.06		ug/Kg		99	10 - 150
Ethylbenzene	5.10	4.71		ug/Kg		92	78 - 124
1,2-Dibromoethane	5.10	4.66		ug/Kg		92	80 - 120
Isopropylbenzene	5.10	4.62		ug/Kg		91	76 - 120
Methyl acetate	25.5	21.5		ug/Kg		84	71 - 123
Methyl tert-butyl ether	5.10	4.51		ug/Kg		89	67 - 137
Methylcyclohexane	5.10	5.27		ug/Kg		103	50 - 130
Methylene Chloride	5.10	5.35		ug/Kg		105	75 - 118
m,p-Xylene	5.10	4.71		ug/Kg		92	77 - 125
Naphthalene	5.10	4.29		ug/Kg		84	65 - 142
n-Butylbenzene	5.10	4.94		ug/Kg		97	80 - 120
N-Propylbenzene	5.10	4.69		ug/Kg		92	76 - 120
o-Xylene	5.10	4.74		ug/Kg		93	80 - 124
sec-Butylbenzene	5.10	4.84		ug/Kg		95	79 - 120
Tetrachloroethene	5.10	5.61		ug/Kg		110	73 - 133
Toluene	5.10	4.88		ug/Kg		96	75 - 124
trans-1,2-Dichloroethene	5.10	5.15		ug/Kg		101	74 - 129
trans-1,3-Dichloropropene	5.10	4.31		ug/Kg		85	73 - 120
Trichloroethene	5.10	5.09		ug/Kg		100	75 - 131
Trichlorofluoromethane	5.10	5.10		ug/Kg		100	29 - 158
Vinyl chloride	5.10	4.84		ug/Kg		95	59 - 124
cis-1,3-Dichloropropene	5.10	4.86		ug/Kg		95	75 - 121
Styrene	5.10	4.67		ug/Kg		92	80 - 120
tert-Butylbenzene	5.10	5.05		ug/Kg		99	78 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	105		53 - 146
4-Bromofluorobenzene (Surr)	112		49 - 148
Toluene-d8 (Surr)	106		50 - 149
Dibromofluoromethane (Surr)	111		60 - 140

Lab Sample ID: 480-115992-2 MS

Matrix: Solid

Analysis Batch: 352435

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

Prep Type: Total/NA

Prep Batch: 352399

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		2870	2530		ug/Kg	☼	88	64 - 120
1,1,1,2,2-Tetrachloroethane	ND		2870	2470		ug/Kg	☼	86	75 - 120
1,1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2870	2450		ug/Kg	☼	85	40 - 120
1,1,2-Trichloroethane	ND		2870	2840		ug/Kg	☼	99	70 - 130
1,1-Dichloroethane	ND		2870	2880		ug/Kg	☼	100	82 - 138
1,1-Dichloroethene	ND		2870	2780		ug/Kg	☼	97	50 - 147
1,2,4-Trichlorobenzene	ND		2870	2770		ug/Kg	☼	96	40 - 150
1,2,4-Trimethylbenzene	ND		2870	2680		ug/Kg	☼	93	78 - 134
1,2-Dibromo-3-Chloropropane	ND	F1	2870	1540	J F1	ug/Kg	☼	54	60 - 110

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: 480-115992-2 MS

Matrix: Solid

Analysis Batch: 352435

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

Prep Type: Total/NA

Prep Batch: 352399

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dichlorobenzene	ND		2870	2800		ug/Kg	☼	98	80 - 132
1,2-Dichloroethane	ND		2870	2780		ug/Kg	☼	97	78 - 129
1,2-Dichloropropane	ND		2870	3020		ug/Kg	☼	106	76 - 125
1,3,5-Trimethylbenzene	ND		2870	2540		ug/Kg	☼	89	40 - 150
1,3-Dichlorobenzene	ND		2870	2610		ug/Kg	☼	91	63 - 134
1,4-Dichlorobenzene	ND		2870	2750		ug/Kg	☼	96	60 - 134
2-Butanone (MEK)	ND		14300	14000		ug/Kg	☼	97	54 - 149
2-Hexanone	ND		14300	11800	J	ug/Kg	☼	83	70 - 127
4-Isopropyltoluene	ND		2870	2570		ug/Kg	☼	90	82 - 120
4-Methyl-2-pentanone (MIBK)	ND		14300	12300		ug/Kg	☼	86	74 - 120
Acetone	ND		14300	16500		ug/Kg	☼	115	47 - 141
Benzene	ND		2870	2860		ug/Kg	☼	100	77 - 125
Bromoform	ND		2870	2350	J	ug/Kg	☼	82	48 - 125
Bromomethane	ND	F2	2870	2170	J	ug/Kg	☼	76	39 - 149
Carbon disulfide	ND		2870	2560		ug/Kg	☼	89	40 - 136
Carbon tetrachloride	ND		2870	2500		ug/Kg	☼	87	54 - 135
Chlorobenzene	ND		2870	2760		ug/Kg	☼	96	76 - 126
Dibromochloromethane	ND		2870	2290	J	ug/Kg	☼	80	64 - 120
Chloroethane	ND		2870	2080	J	ug/Kg	☼	73	23 - 150
Chloroform	ND		2870	2810		ug/Kg	☼	98	78 - 120
Chloromethane	ND		2870	3240		ug/Kg	☼	113	61 - 124
cis-1,2-Dichloroethene	890	J	2870	4120		ug/Kg	☼	113	79 - 124
Cyclohexane	ND		2870	3120		ug/Kg	☼	109	49 - 129
Bromodichloromethane	ND		2870	2830		ug/Kg	☼	99	71 - 121
Dichlorodifluoromethane	ND		2870	2400		ug/Kg	☼	84	10 - 150
Ethylbenzene	ND		2870	2550		ug/Kg	☼	89	78 - 124
1,2-Dibromoethane	ND		2870	2590		ug/Kg	☼	91	81 - 120
Isopropylbenzene	ND		2870	2560		ug/Kg	☼	89	76 - 120
Methyl acetate	ND		14300	14900		ug/Kg	☼	104	71 - 123
Methyl tert-butyl ether	ND		2870	2570		ug/Kg	☼	90	67 - 137
Methylcyclohexane	ND		2870	3150		ug/Kg	☼	110	50 - 130
Methylene Chloride	ND	F2 F1	2870	3550	F1	ug/Kg	☼	124	75 - 120
m,p-Xylene	ND		2870	2810	J	ug/Kg	☼	98	77 - 125
Naphthalene	ND		2870	2800		ug/Kg	☼	98	65 - 142
n-Butylbenzene	ND		2870	2900		ug/Kg	☼	101	81 - 120
N-Propylbenzene	ND		2870	2620		ug/Kg	☼	91	76 - 120
o-Xylene	ND		2870	2740		ug/Kg	☼	95	80 - 124
sec-Butylbenzene	ND		2870	2790		ug/Kg	☼	97	79 - 120
Tetrachloroethene	ND	F1	2870	4300	F1	ug/Kg	☼	150	73 - 133
Toluene	ND		2870	2630		ug/Kg	☼	92	75 - 124
trans-1,2-Dichloroethene	ND		2870	3080		ug/Kg	☼	108	74 - 129
trans-1,3-Dichloropropene	ND	F1	2870	1920	J F1	ug/Kg	☼	67	73 - 120
Trichloroethene	120000		2870	176000	4	ug/Kg	☼	1833	75 - 131
Trichlorofluoromethane	ND		2870	2470		ug/Kg	☼	86	29 - 158
Vinyl chloride	ND		2870	2950		ug/Kg	☼	103	59 - 124
cis-1,3-Dichloropropene	ND		2870	2530		ug/Kg	☼	88	75 - 121
Styrene	ND		2870	2450		ug/Kg	☼	85	84 - 120
tert-Butylbenzene	ND	F2	2870	2420		ug/Kg	☼	84	78 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: 480-115992-2 MS

Matrix: Solid

Analysis Batch: 352435

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

Prep Type: Total/NA

Prep Batch: 352399

Surrogate	MS %Recovery	MS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	98		53 - 146
4-Bromofluorobenzene (Surr)	106		49 - 148
Toluene-d8 (Surr)	103		50 - 149
Dibromofluoromethane (Surr)	102		60 - 140

Lab Sample ID: 480-115992-2 MSD

Matrix: Solid

Analysis Batch: 352435

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

Prep Type: Total/NA

Prep Batch: 352399

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		2870	2880		ug/Kg	☼	100	64 - 120	13	20
1,1,1,2-Tetrachloroethane	ND		2870	2700		ug/Kg	☼	94	75 - 120	9	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2870	2760		ug/Kg	☼	96	40 - 120	12	20
1,1,2-Trichloroethane	ND		2870	2880		ug/Kg	☼	101	70 - 130	2	20
1,1-Dichloroethane	ND		2870	2920		ug/Kg	☼	102	82 - 138	1	20
1,1-Dichloroethene	ND		2870	2820		ug/Kg	☼	98	50 - 147	1	20
1,2,4-Trichlorobenzene	ND		2870	3260		ug/Kg	☼	114	40 - 150	17	20
1,2,4-Trimethylbenzene	ND		2870	2670		ug/Kg	☼	93	78 - 134	0	20
1,2-Dibromo-3-Chloropropane	ND	F1	2870	ND	F1	ug/Kg	☼	0	60 - 110	NC	20
1,2-Dichlorobenzene	ND		2870	2840		ug/Kg	☼	99	80 - 132	1	20
1,2-Dichloroethane	ND		2870	2800		ug/Kg	☼	98	78 - 129	1	20
1,2-Dichloropropane	ND		2870	3220		ug/Kg	☼	112	76 - 125	6	20
1,3,5-Trimethylbenzene	ND		2870	2860		ug/Kg	☼	100	40 - 150	12	20
1,3-Dichlorobenzene	ND		2870	2880		ug/Kg	☼	100	63 - 134	9	20
1,4-Dichlorobenzene	ND		2870	2760		ug/Kg	☼	96	60 - 134	1	20
2-Butanone (MEK)	ND		14300	13900		ug/Kg	☼	97	54 - 149	0	20
2-Hexanone	ND		14300	14100		ug/Kg	☼	98	70 - 127	17	20
4-Isopropyltoluene	ND		2870	2730		ug/Kg	☼	95	82 - 120	6	20
4-Methyl-2-pentanone (MIBK)	ND		14300	13800		ug/Kg	☼	96	74 - 120	11	20
Acetone	ND		14300	15500		ug/Kg	☼	108	47 - 141	6	20
Benzene	ND		2870	3160		ug/Kg	☼	110	77 - 125	10	20
Bromoform	ND		2870	2420		ug/Kg	☼	84	48 - 125	3	20
Bromomethane	ND	F2	2870	3070	F2	ug/Kg	☼	107	39 - 149	35	20
Carbon disulfide	ND		2870	2790		ug/Kg	☼	97	40 - 136	9	20
Carbon tetrachloride	ND		2870	2460		ug/Kg	☼	86	54 - 135	1	20
Chlorobenzene	ND		2870	3000		ug/Kg	☼	105	76 - 126	8	20
Dibromochloromethane	ND		2870	2670		ug/Kg	☼	93	64 - 120	15	20
Chloroethane	ND		2870	1890	J	ug/Kg	☼	66	23 - 150	10	20
Chloroform	ND		2870	3030		ug/Kg	☼	106	78 - 120	7	20
Chloromethane	ND		2870	3050		ug/Kg	☼	106	61 - 124	6	20
cis-1,2-Dichloroethene	890	J	2870	4020		ug/Kg	☼	109	79 - 124	2	20
Cyclohexane	ND		2870	3140		ug/Kg	☼	110	49 - 129	1	20
Bromodichloromethane	ND		2870	2530		ug/Kg	☼	88	71 - 121	11	20
Dichlorodifluoromethane	ND		2870	2270	J	ug/Kg	☼	79	10 - 150	5	20
Ethylbenzene	ND		2870	2970		ug/Kg	☼	104	78 - 124	15	20
1,2-Dibromoethane	ND		2870	2610		ug/Kg	☼	91	81 - 120	1	20
Isopropylbenzene	ND		2870	2650		ug/Kg	☼	92	76 - 120	3	20

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: 480-115992-2 MSD

Matrix: Solid

Analysis Batch: 352435

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

Prep Type: Total/NA

Prep Batch: 352399

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	ND		14300	16800		ug/Kg	✱	118	71 - 123	12	20
Methyl tert-butyl ether	ND		2870	2810		ug/Kg	✱	98	67 - 137	9	20
Methylcyclohexane	ND		2870	2800		ug/Kg	✱	98	50 - 130	12	20
Methylene Chloride	ND	F2 F1	2870	2200	J F2	ug/Kg	✱	77	75 - 120	47	20
m,p-Xylene	ND		2870	2800	J	ug/Kg	✱	98	77 - 125	0	20
Naphthalene	ND		2870	2980		ug/Kg	✱	104	65 - 142	6	20
n-Butylbenzene	ND		2870	2970		ug/Kg	✱	104	81 - 120	3	20
N-Propylbenzene	ND		2870	2760		ug/Kg	✱	96	76 - 120	5	20
o-Xylene	ND		2870	3050		ug/Kg	✱	106	80 - 124	11	20
sec-Butylbenzene	ND		2870	2850		ug/Kg	✱	100	79 - 120	2	20
Tetrachloroethene	ND	F1	2870	3920	F1	ug/Kg	✱	137	73 - 133	9	20
Toluene	ND		2870	2990		ug/Kg	✱	104	75 - 124	13	20
trans-1,2-Dichloroethene	ND		2870	3250		ug/Kg	✱	113	74 - 129	5	20
trans-1,3-Dichloropropene	ND	F1	2870	2150	J	ug/Kg	✱	75	73 - 120	11	20
Trichloroethene	120000		2870	152000	4	ug/Kg	✱	985	75 - 131	15	20
Trichlorofluoromethane	ND		2870	2670		ug/Kg	✱	93	29 - 158	8	20
Vinyl chloride	ND		2870	2780		ug/Kg	✱	97	59 - 124	6	20
cis-1,3-Dichloropropene	ND		2870	2390	J	ug/Kg	✱	83	75 - 121	6	20
Styrene	ND		2870	2540		ug/Kg	✱	89	84 - 120	4	20
tert-Butylbenzene	ND	F2	2870	3210	F2	ug/Kg	✱	112	78 - 120	28	20
Surrogate	MSD %Recovery	MSD Qualifier	Limits								
1,2-Dichloroethane-d4 (Surr)	99		53 - 146								
4-Bromofluorobenzene (Surr)	107		49 - 148								
Toluene-d8 (Surr)	102		50 - 149								
Dibromofluoromethane (Surr)	103		60 - 140								

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

Lab Sample ID: MB 480-351975/1-A

Matrix: Solid

Analysis Batch: 352223

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 351975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	ND		170	25	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Acenaphthylene	ND		170	22	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Anthracene	ND		170	42	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Benzo[a]anthracene	ND		170	17	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Benzo[a]pyrene	ND		170	25	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Benzo[b]fluoranthene	ND		170	27	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Benzo[g,h,i]perylene	ND		170	18	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Benzo[k]fluoranthene	ND		170	22	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Chrysene	ND		170	38	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Dibenz(a,h)anthracene	ND		170	30	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Fluoranthene	ND		170	18	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Fluorene	ND		170	20	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Indeno[1,2,3-cd]pyrene	ND		170	21	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Naphthalene	ND		170	22	ug/Kg		04/14/17 07:30	04/15/17 20:28	1

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: MB 480-351975/1-A

Matrix: Solid

Analysis Batch: 352223

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 351975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Phenanthrene	ND		170	25	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Pyrene	ND		170	20	ug/Kg		04/14/17 07:30	04/15/17 20:28	1
Surrogate	MB %Recovery	MB Qualifier	Limits				Prepared	Analyzed	Dil Fac
2-Fluorobiphenyl	80		60 - 120				04/14/17 07:30	04/15/17 20:28	1
Nitrobenzene-d5 (Surr)	72		53 - 120				04/14/17 07:30	04/15/17 20:28	1
p-Terphenyl-d14 (Surr)	90		65 - 121				04/14/17 07:30	04/15/17 20:28	1

Lab Sample ID: LCS 480-351975/2-A

Matrix: Solid

Analysis Batch: 352223

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 351975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	1640	1430		ug/Kg		87	62 - 120
Acenaphthylene	1640	1380		ug/Kg		84	58 - 121
Anthracene	1640	1540		ug/Kg		94	62 - 120
Benzo[a]anthracene	1640	1460		ug/Kg		89	65 - 120
Benzo[a]pyrene	1640	1570		ug/Kg		96	64 - 120
Benzo[b]fluoranthene	1640	1620		ug/Kg		99	64 - 120
Benzo[g,h,i]perylene	1640	1740		ug/Kg		106	45 - 145
Benzo[k]fluoranthene	1640	1520		ug/Kg		92	65 - 120
Chrysene	1640	1440		ug/Kg		88	64 - 120
Dibenz(a,h)anthracene	1640	1770		ug/Kg		107	54 - 132
Fluoranthene	1640	1590		ug/Kg		97	62 - 120
Fluorene	1640	1460		ug/Kg		89	63 - 120
Indeno[1,2,3-cd]pyrene	1640	1700		ug/Kg		104	56 - 134
Naphthalene	1640	1300		ug/Kg		79	55 - 120
Phenanthrene	1640	1540		ug/Kg		94	60 - 120
Pyrene	1640	1510		ug/Kg		92	61 - 133
Surrogate	LCS %Recovery	LCS Qualifier	Limits				
2-Fluorobiphenyl	81		60 - 120				
Nitrobenzene-d5 (Surr)	76		53 - 120				
p-Terphenyl-d14 (Surr)	88		65 - 121				

Lab Sample ID: 480-115992-2 MS

Matrix: Solid

Analysis Batch: 352223

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

Prep Type: Total/NA

Prep Batch: 351975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Acenaphthene	ND		1870	1300	J	ug/Kg	☼	70	60 - 120
Acenaphthylene	ND	F2	1870	1330	J	ug/Kg	☼	71	58 - 121
Anthracene	ND	F2	1870	1560	J	ug/Kg	☼	83	62 - 120
Benzo[a]anthracene	3900	F1 F2	1870	3920	F1	ug/Kg	☼	-1	65 - 120
Benzo[a]pyrene	4000	F1 F2	1870	3700	J F1	ug/Kg	☼	-15	64 - 120
Benzo[b]fluoranthene	8100	F2	1870	6370	4	ug/Kg	☼	-95	64 - 120
Benzo[g,h,i]perylene	5100	F1 F2	1870	4230	F1	ug/Kg	☼	-45	45 - 145
Benzo[k]fluoranthene	2600	J F1 F2	1870	2680	J F1	ug/Kg	☼	2	65 - 120

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: 480-115992-2 MS

Matrix: Solid

Analysis Batch: 352223

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

Prep Type: Total/NA

Prep Batch: 351975

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chrysene	7000	F1 F2	1870	4900	F1	ug/Kg	✱	-111	64 - 120
Dibenz(a,h)anthracene	1500	J F1 F2	1870	2440	J F1	ug/Kg	✱	48	54 - 132
Fluoranthene	10000	F2	1870	7590	4	ug/Kg	✱	-154	62 - 120
Fluorene	ND		1870	1400	J	ug/Kg	✱	75	63 - 120
Indeno[1,2,3-cd]pyrene	4400	F1 F2	1870	3830	F1	ug/Kg	✱	-29	56 - 134
Naphthalene	ND		1870	1320	J	ug/Kg	✱	71	46 - 120
Phenanthrene	4900	F1 F2	1870	4170	F1	ug/Kg	✱	-38	60 - 122
Pyrene	7200	F1	1870	5530	F1	ug/Kg	✱	-89	61 - 133

Surrogate	MS %Recovery	MS Qualifier	Limits
2-Fluorobiphenyl	68		60 - 120
Nitrobenzene-d5 (Surr)	50	X	53 - 120
p-Terphenyl-d14 (Surr)	64	X	65 - 121

Lab Sample ID: 480-115992-2 MSD

Matrix: Solid

Analysis Batch: 352223

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

Prep Type: Total/NA

Prep Batch: 351975

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Acenaphthene	ND		1890	1590	J	ug/Kg	✱	84	60 - 120	20	35
Acenaphthylene	ND	F2	1890	1650	J F2	ug/Kg	✱	87	58 - 121	22	18
Anthracene	ND	F2	1890	2040	J F2	ug/Kg	✱	108	62 - 120	27	15
Benzo[a]anthracene	3900	F1 F2	1890	5310	F2	ug/Kg	✱	72	65 - 120	30	15
Benzo[a]pyrene	4000	F1 F2	1890	5040	F1 F2	ug/Kg	✱	56	64 - 120	31	15
Benzo[b]fluoranthene	8100	F2	1890	9100	4 F2	ug/Kg	✱	50	64 - 120	35	15
Benzo[g,h,i]perylene	5100	F1 F2	1890	5920	F2	ug/Kg	✱	46	45 - 145	33	15
Benzo[k]fluoranthene	2600	J F1 F2	1890	3710	J F1 F2	ug/Kg	✱	57	65 - 120	32	22
Chrysene	7000	F1 F2	1890	6900	F1 F2	ug/Kg	✱	-4	64 - 120	34	15
Dibenz(a,h)anthracene	1500	J F1 F2	1890	3130	J F2	ug/Kg	✱	84	54 - 132	25	15
Fluoranthene	10000	F2	1890	10600	4 F2	ug/Kg	✱	6	62 - 120	33	15
Fluorene	ND		1890	1630	J	ug/Kg	✱	86	63 - 120	15	15
Indeno[1,2,3-cd]pyrene	4400	F1 F2	1890	5520	F2	ug/Kg	✱	61	56 - 134	36	15
Naphthalene	ND		1890	1560	J	ug/Kg	✱	82	46 - 120	17	29
Phenanthrene	4900	F1 F2	1890	5880	F1 F2	ug/Kg	✱	53	60 - 122	34	15
Pyrene	7200	F1	1890	7650	F1	ug/Kg	✱	24	61 - 133	32	35

Surrogate	MSD %Recovery	MSD Qualifier	Limits
2-Fluorobiphenyl	80		60 - 120
Nitrobenzene-d5 (Surr)	68		53 - 120
p-Terphenyl-d14 (Surr)	77		65 - 121

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Method: 6010C - Metals (ICP)

Lab Sample ID: MB 480-352112/1-A

Matrix: Solid

Analysis Batch: 352407

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352112

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	ND		2.1		mg/Kg		04/14/17 17:36	04/17/17 11:03	1
Barium	ND		0.51		mg/Kg		04/14/17 17:36	04/17/17 11:03	1
Cadmium	ND		0.21		mg/Kg		04/14/17 17:36	04/17/17 11:03	1
Chromium	ND		0.51		mg/Kg		04/14/17 17:36	04/17/17 11:03	1
Lead	ND		1.0		mg/Kg		04/14/17 17:36	04/17/17 11:03	1
Selenium	ND		4.1		mg/Kg		04/14/17 17:36	04/17/17 11:03	1
Silver	ND		0.62		mg/Kg		04/14/17 17:36	04/17/17 11:03	1

Lab Sample ID: LCSSRM 480-352112/2-A

Matrix: Solid

Analysis Batch: 352407

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352112

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	145	124.7		mg/Kg		86.0	70.3 - 136.6
Barium	209	178.9		mg/Kg		85.6	73.7 - 126.8
Cadmium	87.6	72.61		mg/Kg		82.9	73.3 - 126.7
Chromium	143	125.0		mg/Kg		87.4	69.9 - 129.4
Lead	146	144.7		mg/Kg		99.1	73.3 - 126.7
Selenium	178	152.5		mg/Kg		85.7	68.0 - 131.5
Silver	31.3	26.07		mg/Kg		83.3	65.2 - 134.5

Lab Sample ID: 480-115992-9 MS

Matrix: Solid

Analysis Batch: 352407

Client Sample ID: HA-1 (0-6")

Prep Type: Total/NA

Prep Batch: 352112

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Arsenic	30.8		48.0	73.16		mg/Kg	☼	88	75 - 125
Barium	318	F2	48.0	247.2	4	mg/Kg	☼	-147	75 - 125
Cadmium	1.1		48.0	45.62		mg/Kg	☼	93	75 - 125
Chromium	15.1		48.0	62.27		mg/Kg	☼	98	75 - 125
Lead	455		48.0	602.4	4	mg/Kg	☼	307	75 - 125
Selenium	ND		48.0	42.92		mg/Kg	☼	89	75 - 125
Silver	7.5	F1 F2	12.0	17.32		mg/Kg	☼	82	75 - 125

Lab Sample ID: 480-115992-9 MSD

Matrix: Solid

Analysis Batch: 352407

Client Sample ID: HA-1 (0-6")

Prep Type: Total/NA

Prep Batch: 352112

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Arsenic	30.8		50.5	79.10		mg/Kg	☼	96	75 - 125	8	20
Barium	318	F2	50.5	307.1	4 F2	mg/Kg	☼	-21	75 - 125	22	20
Cadmium	1.1		50.5	46.44		mg/Kg	☼	90	75 - 125	2	20
Chromium	15.1		50.5	67.21		mg/Kg	☼	103	75 - 125	8	20

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: 480-115992-9 MSD

Matrix: Solid

Analysis Batch: 352407

Client Sample ID: HA-1 (0-6")

Prep Type: Total/NA

Prep Batch: 352112

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lead	455		50.5	679.2	4	mg/Kg	✱	444	75 - 125	12	20
Selenium	ND		50.5	43.11		mg/Kg	✱	85	75 - 125	0	20
Silver	7.5	F1 F2	12.6	28.08	F1 F2	mg/Kg	✱	163	75 - 125	47	20

Method: 7471B - Mercury (CVAA)

Lab Sample ID: MB 480-351968/1-A

Matrix: Solid

Analysis Batch: 352106

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 351968

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019		mg/Kg		04/14/17 07:50	04/14/17 11:53	1

Lab Sample ID: LCDSRM 480-351968/3-A ^10

Matrix: Solid

Analysis Batch: 352106

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 351968

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	12.6	11.11		mg/Kg		88.2	44.4 - 128.6	1	20

Lab Sample ID: LCSSRM 480-351968/2-A ^10

Matrix: Solid

Analysis Batch: 352106

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 351968

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	12.6	11.18		mg/Kg		88.7	44.4 - 128.6		

Lab Sample ID: MB 480-352324/1-A

Matrix: Solid

Analysis Batch: 352519

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 352324

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.019		mg/Kg		04/17/17 12:10	04/17/17 15:40	1

Lab Sample ID: LCDSRM 480-352324/3-A ^10

Matrix: Solid

Analysis Batch: 352519

Client Sample ID: Lab Control Sample Dup

Prep Type: Total/NA

Prep Batch: 352324

Analyte	Spike Added	LCDSRM Result	LCDSRM Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	12.6	11.57		mg/Kg		91.8	44.4 - 128.6	1	20

TestAmerica Buffalo

QC Sample Results

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Lab Sample ID: LCSSRM 480-352324/2-A ^10

Matrix: Solid

Analysis Batch: 352519

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 352324

Analyte	Spike Added	LCSSRM Result	LCSSRM Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	12.6	11.45		mg/Kg		90.9	44.4 - 128.6

Lab Sample ID: 480-115992-3 MS

Matrix: Solid

Analysis Batch: 352519

Client Sample ID: SB-3 (2"-1')

Prep Type: Total/NA

Prep Batch: 352324

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.47	F1 F2	0.456	0.983		mg/Kg	☼	112	80 - 120

Lab Sample ID: 480-115992-3 MSD

Matrix: Solid

Analysis Batch: 352519

Client Sample ID: SB-3 (2"-1')

Prep Type: Total/NA

Prep Batch: 352324

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.47	F1 F2	0.474	0.534	F1 F2	mg/Kg	☼	13	80 - 120	59	20

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

GC/MS VOA

Analysis Batch: 351997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2-3')	Total/NA	Solid	8260C	352005
MB 480-352005/2-A	Method Blank	Total/NA	Solid	8260C	352005
LCS 480-352005/1-A	Lab Control Sample	Total/NA	Solid	8260C	352005

Prep Batch: 352005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2-3')	Total/NA	Solid	5035A	
MB 480-352005/2-A	Method Blank	Total/NA	Solid	5035A	
LCS 480-352005/1-A	Lab Control Sample	Total/NA	Solid	5035A	

Prep Batch: 352399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-2	SB-2 (0-2')	Total/NA	Solid	5035A	
MB 480-352399/2-A	Method Blank	Total/NA	Solid	5035A	
LCS 480-352399/1-A	Lab Control Sample	Total/NA	Solid	5035A	
480-115992-2 MS	SB-2 (0-2')	Total/NA	Solid	5035A	
480-115992-2 MSD	SB-2 (0-2')	Total/NA	Solid	5035A	

Analysis Batch: 352435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-2	SB-2 (0-2')	Total/NA	Solid	8260C	352399
MB 480-352399/2-A	Method Blank	Total/NA	Solid	8260C	352399
LCS 480-352399/1-A	Lab Control Sample	Total/NA	Solid	8260C	352399
480-115992-2 MS	SB-2 (0-2')	Total/NA	Solid	8260C	352399
480-115992-2 MSD	SB-2 (0-2')	Total/NA	Solid	8260C	352399

GC/MS Semi VOA

Prep Batch: 351975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2-3')	Total/NA	Solid	3550C	
480-115992-2	SB-2 (0-2')	Total/NA	Solid	3550C	
480-115992-3	SB-3 (2"-1')	Total/NA	Solid	3550C	
480-115992-6	SB-6 (2"-1.5')	Total/NA	Solid	3550C	
480-115992-8	SB-8 (2'-1.5')	Total/NA	Solid	3550C	
480-115992-9	HA-1 (0-6")	Total/NA	Solid	3550C	
MB 480-351975/1-A	Method Blank	Total/NA	Solid	3550C	
LCS 480-351975/2-A	Lab Control Sample	Total/NA	Solid	3550C	
480-115992-2 MS	SB-2 (0-2')	Total/NA	Solid	3550C	
480-115992-2 MSD	SB-2 (0-2')	Total/NA	Solid	3550C	

Analysis Batch: 352223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2-3')	Total/NA	Solid	8270D	351975
480-115992-2	SB-2 (0-2')	Total/NA	Solid	8270D	351975
480-115992-3	SB-3 (2"-1')	Total/NA	Solid	8270D	351975
480-115992-6	SB-6 (2"-1.5')	Total/NA	Solid	8270D	351975
480-115992-8	SB-8 (2'-1.5')	Total/NA	Solid	8270D	351975
480-115992-9	HA-1 (0-6")	Total/NA	Solid	8270D	351975
MB 480-351975/1-A	Method Blank	Total/NA	Solid	8270D	351975

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

GC/MS Semi VOA (Continued)

Analysis Batch: 352223 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 480-351975/2-A	Lab Control Sample	Total/NA	Solid	8270D	351975
480-115992-2 MS	SB-2 (0-2')	Total/NA	Solid	8270D	351975
480-115992-2 MSD	SB-2 (0-2')	Total/NA	Solid	8270D	351975

Metals

Prep Batch: 351968

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2-3')	Total/NA	Solid	7471B	
480-115992-2	SB-2 (0-2')	Total/NA	Solid	7471B	
480-115992-5	SB-5 (2"-1.5')	Total/NA	Solid	7471B	
MB 480-351968/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-351968/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-351968/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	

Analysis Batch: 352106

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2-3')	Total/NA	Solid	7471B	351968
480-115992-2	SB-2 (0-2')	Total/NA	Solid	7471B	351968
480-115992-5	SB-5 (2"-1.5')	Total/NA	Solid	7471B	351968
MB 480-351968/1-A	Method Blank	Total/NA	Solid	7471B	351968
LCDSRM 480-351968/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	351968
LCSSRM 480-351968/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	351968

Prep Batch: 352112

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2-3')	Total/NA	Solid	3050B	
480-115992-2	SB-2 (0-2')	Total/NA	Solid	3050B	
480-115992-3	SB-3 (2"-1')	Total/NA	Solid	3050B	
480-115992-5	SB-5 (2"-1.5')	Total/NA	Solid	3050B	
480-115992-6	SB-6 (2"-1.5')	Total/NA	Solid	3050B	
480-115992-8	SB-8 (2'-1.5')	Total/NA	Solid	3050B	
480-115992-9	HA-1 (0-6")	Total/NA	Solid	3050B	
MB 480-352112/1-A	Method Blank	Total/NA	Solid	3050B	
LCSSRM 480-352112/2-A	Lab Control Sample	Total/NA	Solid	3050B	
480-115992-9 MS	HA-1 (0-6")	Total/NA	Solid	3050B	
480-115992-9 MSD	HA-1 (0-6")	Total/NA	Solid	3050B	

Prep Batch: 352324

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-3	SB-3 (2"-1')	Total/NA	Solid	7471B	
480-115992-6	SB-6 (2"-1.5')	Total/NA	Solid	7471B	
480-115992-8	SB-8 (2'-1.5')	Total/NA	Solid	7471B	
480-115992-9	HA-1 (0-6")	Total/NA	Solid	7471B	
MB 480-352324/1-A	Method Blank	Total/NA	Solid	7471B	
LCDSRM 480-352324/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	
LCSSRM 480-352324/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	
480-115992-3 MS	SB-3 (2"-1')	Total/NA	Solid	7471B	
480-115992-3 MSD	SB-3 (2"-1')	Total/NA	Solid	7471B	

TestAmerica Buffalo

QC Association Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Metals (Continued)

Analysis Batch: 352407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2'-3')	Total/NA	Solid	6010C	352112
480-115992-2	SB-2 (0-2')	Total/NA	Solid	6010C	352112
480-115992-3	SB-3 (2"-1')	Total/NA	Solid	6010C	352112
480-115992-5	SB-5 (2"-1.5')	Total/NA	Solid	6010C	352112
480-115992-6	SB-6 (2"-1.5')	Total/NA	Solid	6010C	352112
480-115992-8	SB-8 (2'-1.5')	Total/NA	Solid	6010C	352112
480-115992-9	HA-1 (0-6")	Total/NA	Solid	6010C	352112
MB 480-352112/1-A	Method Blank	Total/NA	Solid	6010C	352112
LCSSRM 480-352112/2-A	Lab Control Sample	Total/NA	Solid	6010C	352112
480-115992-9 MS	HA-1 (0-6")	Total/NA	Solid	6010C	352112
480-115992-9 MSD	HA-1 (0-6")	Total/NA	Solid	6010C	352112

Analysis Batch: 352519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-3	SB-3 (2"-1')	Total/NA	Solid	7471B	352324
480-115992-6	SB-6 (2"-1.5')	Total/NA	Solid	7471B	352324
480-115992-8	SB-8 (2'-1.5')	Total/NA	Solid	7471B	352324
480-115992-9	HA-1 (0-6")	Total/NA	Solid	7471B	352324
MB 480-352324/1-A	Method Blank	Total/NA	Solid	7471B	352324
LCDSRM 480-352324/3-A ^10	Lab Control Sample Dup	Total/NA	Solid	7471B	352324
LCSSRM 480-352324/2-A ^10	Lab Control Sample	Total/NA	Solid	7471B	352324
480-115992-3 MS	SB-3 (2"-1')	Total/NA	Solid	7471B	352324
480-115992-3 MSD	SB-3 (2"-1')	Total/NA	Solid	7471B	352324

Analysis Batch: 352566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-5	SB-5 (2"-1.5')	Total/NA	Solid	6010C	352112

General Chemistry

Analysis Batch: 351445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-115992-1	SB-1 (2'-3')	Total/NA	Solid	Moisture	
480-115992-2	SB-2 (0-2')	Total/NA	Solid	Moisture	
480-115992-3	SB-3 (2"-1')	Total/NA	Solid	Moisture	
480-115992-5	SB-5 (2"-1.5')	Total/NA	Solid	Moisture	
480-115992-6	SB-6 (2"-1.5')	Total/NA	Solid	Moisture	
480-115992-8	SB-8 (2'-1.5')	Total/NA	Solid	Moisture	
480-115992-9	HA-1 (0-6")	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-1 (2-3')

Date Collected: 04/10/17 09:30

Date Received: 04/11/17 17:12

Lab Sample ID: 480-115992-1

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	351445	04/11/17 23:21	CMK	TAL BUF

Client Sample ID: SB-1 (2-3')

Date Collected: 04/10/17 09:30

Date Received: 04/11/17 17:12

Lab Sample ID: 480-115992-1

Matrix: Solid

Percent Solids: 81.2

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			352005	04/14/17 09:02	JAS	TAL BUF
Total/NA	Analysis	8260C		1	351997	04/14/17 12:54	JAS	TAL BUF
Total/NA	Prep	3550C			351975	04/14/17 07:30	RJS	TAL BUF
Total/NA	Analysis	8270D		5	352223	04/15/17 22:12	PJQ	TAL BUF
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		1	352407	04/17/17 11:23	SLB	TAL BUF
Total/NA	Prep	7471B			351968	04/14/17 07:50	JRK	TAL BUF
Total/NA	Analysis	7471B		1	352106	04/14/17 11:59	JRK	TAL BUF

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

Date Collected: 04/10/17 10:00

Date Received: 04/11/17 17:12

Lab Sample ID: 480-115992-2

Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	351445	04/11/17 23:21	CMK	TAL BUF

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

Date Collected: 04/10/17 10:00

Date Received: 04/11/17 17:12

Lab Sample ID: 480-115992-2

Matrix: Solid

Percent Solids: 86.9

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A			352399	04/17/17 14:39	NEA	TAL BUF
Total/NA	Analysis	8260C		20	352435	04/18/17 07:08	NEA	TAL BUF
Total/NA	Prep	3550C			351975	04/14/17 07:30	RJS	TAL BUF
Total/NA	Analysis	8270D		20	352223	04/15/17 22:38	PJQ	TAL BUF
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		1	352407	04/17/17 11:26	SLB	TAL BUF
Total/NA	Prep	7471B			351968	04/14/17 07:50	JRK	TAL BUF
Total/NA	Analysis	7471B		1	352106	04/14/17 12:00	JRK	TAL BUF

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-3 (2"-1')

Lab Sample ID: 480-115992-3

Date Collected: 04/10/17 10:30

Matrix: Solid

Date Received: 04/11/17 17:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	351445	04/11/17 23:21	CMK	TAL BUF

Client Sample ID: SB-3 (2"-1')

Lab Sample ID: 480-115992-3

Date Collected: 04/10/17 10:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 68.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			351975	04/14/17 07:30	RJS	TAL BUF
Total/NA	Analysis	8270D		5	352223	04/15/17 23:04	PJQ	TAL BUF
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		1	352407	04/17/17 11:30	SLB	TAL BUF
Total/NA	Prep	7471B			352324	04/17/17 12:10	JRK	TAL BUF
Total/NA	Analysis	7471B		1	352519	04/17/17 15:44	JRK	TAL BUF

Client Sample ID: SB-5 (2"-1.5')

Lab Sample ID: 480-115992-5

Date Collected: 04/10/17 13:00

Matrix: Solid

Date Received: 04/11/17 17:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	351445	04/11/17 23:21	CMK	TAL BUF

Client Sample ID: SB-5 (2"-1.5')

Lab Sample ID: 480-115992-5

Date Collected: 04/10/17 13:00

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 88.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		1	352407	04/17/17 11:33	SLB	TAL BUF
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		2	352566	04/18/17 03:53	LMH	TAL BUF
Total/NA	Prep	7471B			351968	04/14/17 07:50	JRK	TAL BUF
Total/NA	Analysis	7471B		1	352106	04/14/17 12:02	JRK	TAL BUF

Client Sample ID: SB-6 (2"-1.5')

Lab Sample ID: 480-115992-6

Date Collected: 04/10/17 13:30

Matrix: Solid

Date Received: 04/11/17 17:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	351445	04/11/17 23:21	CMK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: SB-6 (2"-1.5')

Lab Sample ID: 480-115992-6

Date Collected: 04/10/17 13:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 85.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			351975	04/14/17 07:30	RJS	TAL BUF
Total/NA	Analysis	8270D		50	352223	04/15/17 23:30	PJQ	TAL BUF
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		1	352407	04/17/17 11:37	SLB	TAL BUF
Total/NA	Prep	7471B			352324	04/17/17 12:10	JRK	TAL BUF
Total/NA	Analysis	7471B		1	352519	04/17/17 15:50	JRK	TAL BUF

Client Sample ID: SB-8 (2'-1.5')

Lab Sample ID: 480-115992-8

Date Collected: 04/10/17 14:30

Matrix: Solid

Date Received: 04/11/17 17:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	351445	04/11/17 23:21	CMK	TAL BUF

Client Sample ID: SB-8 (2'-1.5')

Lab Sample ID: 480-115992-8

Date Collected: 04/10/17 14:30

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 86.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			351975	04/14/17 07:30	RJS	TAL BUF
Total/NA	Analysis	8270D		20	352223	04/15/17 23:57	PJQ	TAL BUF
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		1	352407	04/17/17 11:40	SLB	TAL BUF
Total/NA	Prep	7471B			352324	04/17/17 12:10	JRK	TAL BUF
Total/NA	Analysis	7471B		1	352519	04/17/17 15:52	JRK	TAL BUF

Client Sample ID: HA-1 (0-6")

Lab Sample ID: 480-115992-9

Date Collected: 04/10/17 12:00

Matrix: Solid

Date Received: 04/11/17 17:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	351445	04/11/17 23:21	CMK	TAL BUF

Client Sample ID: HA-1 (0-6")

Lab Sample ID: 480-115992-9

Date Collected: 04/10/17 12:00

Matrix: Solid

Date Received: 04/11/17 17:12

Percent Solids: 76.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3550C			351975	04/14/17 07:30	RJS	TAL BUF
Total/NA	Analysis	8270D		50	352223	04/16/17 00:23	PJQ	TAL BUF
Total/NA	Prep	3050B			352112	04/14/17 17:36	MVZ	TAL BUF
Total/NA	Analysis	6010C		1	352407	04/17/17 11:43	SLB	TAL BUF
Total/NA	Prep	7471B			352324	04/17/17 12:10	JRK	TAL BUF

TestAmerica Buffalo

Lab Chronicle

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Client Sample ID: HA-1 (0-6")
Date Collected: 04/10/17 12:00
Date Received: 04/11/17 17:12

Lab Sample ID: 480-115992-9
Matrix: Solid
Percent Solids: 76.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	7471B		1	352519	04/17/17 15:53	JRK	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 - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Laboratory: TestAmerica Buffalo

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

Authority	Program	EPA Region	Identification Number	Expiration Date
New York	NELAP	2	10026	03-31-18

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

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

Method Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

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

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

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

Sample Summary

Client: Benchmark Env. Eng. & Science, PLLC
Project/Site: Benchmark - 1485-1491 Niagara St.

TestAmerica Job ID: 480-115992-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-115992-1	SB-1 (2-3')	Solid	04/10/17 09:30	04/11/17 17:12
480-115992-2	SB-2 (0-2')	Solid	04/10/17 10:00	04/11/17 17:12
480-115992-3	SB-3 (2"-1')	Solid	04/10/17 10:30	04/11/17 17:12
480-115992-5	SB-5 (2"-1.5')	Solid	04/10/17 13:00	04/11/17 17:12
480-115992-6	SB-6 (2"-1.5')	Solid	04/10/17 13:30	04/11/17 17:12
480-115992-8	SB-8 (2'-1.5')	Solid	04/10/17 14:30	04/11/17 17:12
480-115992-9	HA-1 (0-6")	Solid	04/10/17 12:00	04/11/17 17:12

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

Client Contact Company Name: TURNKEY ERM RESTORATION Address: 2558 HUNTERS TRAIL City/State/Zip: BUFFALO, NY, 14218 Phone: 716-713-3937 Fax: Project Name: 1485-1491 Niagara Street Site: P O # T0417-017-001-001-003						Project Manager: Brian Maybeck Tel/Fax: 716-844-6444 Analysis Turnaround Time ☐ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below _____ ☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day						Site Contact: Nick Sullivan Date: 4/16/17 Lab Contact: Brian Fisher Carrier:						COC No: 1 of 3 COCs Sampler: For Lab Use Only: We La Jo  480-115992 COC									
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y / N)	Perform MS / MSD (Y / N)																			
SB-1 (2'-3')		4/16/17	9:30	G	Soil	2	X	X	TCL+CP-SI VOC																		
SB-2 (0'-2')			10:00			2	X	X	PAH'S																		
SB-3 (2"-1')			10:30			1	X	X																			
SB-4 (0'-6")			11:30			1	X	X																			
SB-5 (0'-1.5')			13:00			1	X	X																			
SB-6 (2" (1.5')			13:30			1	X	X																			
SB-7 (0'-2")			14:00			1	X	X																			
SB-8 (6" (1.5')			14:30			1	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:														Therm ID No.: #2- Cooler Temp: (°C) Obs'd: 37 Cor'd:													
Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]														Received by: [Signature] Received by: [Signature] Received in Laboratory by: [Signature]													
Custody Seal No.: Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]														Company: TURNKEY ERM RESTORATION Company: TAL Company: TAL													
Date/Time: 4/11/17 17:15 Date/Time: 4/11/17 17:12 Date/Time: 4/11/17 17:12														Date/Time: 4/11/17 16:15 Date/Time: 4/11/17 17:12 Date/Time: 4/11/17 17:12													

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

Client Contact Company Name: <u>Turnkey Env. Restoration</u> Address: <u>2558 Hamburg Ave</u> City/State/Zip: <u>Buffalo, NY, 14218</u> Phone: <u>716-713-3937</u> Fax: _____ Project Name: <u>1485-1441 Niagara Street</u> Site: _____ P O # <u>10417 ~ 017-001-001-003</u>		Project Manager: <u>Brady Mayhew</u> Tel/Fax: <u>716-944-1699</u> Analysis Turnaround Time ☐ CALENDAR DAYS ☐ WORKING DAYS TAT if different from Below _____ ☐ 2 weeks ☒ 1 week ☐ 2 days ☐ 1 day		Site Contact: <u>Dick Syvill</u> Lab Contact: <u>Orion Feltz</u> Date: <u>4/16/17</u> Carrier: _____ COC No: <u>2</u> of <u>3</u> COCs	
Sample Identification HA-1 (0-6") HA-2 (0-6")		Sample Sample Date: <u>4/16/17 12:00</u> Sample Time: <u>12:00</u> Sample Type (C=Comp, G=Grab): <u>G</u> Matrix: <u>Soil</u> # of Cont.: <u>1</u>		Filtered Sample (Y/N) _____ Perform MS / MSD (Y/N) _____ For Lab Use Only: Walk-in Client: _____ Lab Sampling: _____ Job / SDG No.: _____ Sample Specific Notes: <u>Hold</u>	
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					
Special Instructions/QC Requirements & Comments:					
Relinquished by: <u>[Signature]</u> Date/Time: <u>4/17/17 16:15</u>		Received by: <u>[Signature]</u> Date/Time: <u>4/17/17 17:12</u>		Company: <u>TAL</u>	
Relinquished by: <u>[Signature]</u> Date/Time: <u>4/17/17 17:12</u>		Received by: <u>[Signature]</u> Date/Time: _____		Company: <u>TAL</u>	
Relinquished by: _____ Date/Time: _____		Received in Laboratory by: _____ Date/Time: _____		Company: _____	

Login Sample Receipt Checklist

Client: Benchmark Env. Eng. & Science, PLLC

Job Number: 480-115992-1

Login Number: 115992

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



ANALYTICAL REPORT

Lab Number:	L1714384
Client:	Turnkey Environmental Restoration, LLC 2558 Hamburg Turnpike Suite 300 Buffalo, NY 14218
ATTN:	Bryan Mayback
Phone:	(716) 856-0599
Project Name:	1485-1491 NIAGARA ST
Project Number:	T0417-017-001
Report Date:	05/12/17

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), NJ NELAP (MA935), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-14-00197).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: 1485-1491 NIAGARA ST
Project Number: T0417-017-001

Lab Number: L1714384
Report Date: 05/12/17

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1714384-01	TMW-1	WATER	BUFFALO, NY	05/01/17 14:00	05/04/17
L1714384-02	TMW-2	WATER	BUFFALO, NY	05/01/17 15:00	05/04/17
L1714384-03	TMW-3	WATER	BUFFALO, NY	05/03/17 16:30	05/04/17

Project Name: 1485-1491 NIAGARA ST
Project Number: T0417-017-001

Lab Number: L1714384
Report Date: 05/12/17

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: 1485-1491 NIAGARA ST
Project Number: T0417-017-001

Lab Number: L1714384
Report Date: 05/12/17

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Volatile Organics

L1714384-01 through -03 were collected in a pre-preserved vial; however, the pH of the sample was determined to be greater than two. Samples that have a pH of greater than two should be analyzed within 7 days of collection; therefore, the sample was analyzed with the method required holding time exceeded.

L1714384-01: Differences were noted between the results of the original analysis and the re-analysis on dilution which have been attributed to vial discrepancies. Further re-analysis could not be performed due to the existing vials being compromised.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Kara Lindquist

Title: Technical Director/Representative

Date: 05/12/17

ORGANICS

VOLATILES

Project Name: 1485-1491 NIAGARA ST**Lab Number:** L1714384**Project Number:** T0417-017-001**Report Date:** 05/12/17**SAMPLE RESULTS**

Lab ID: L1714384-01 D2

Date Collected: 05/01/17 14:00

Client ID: TMW-1

Date Received: 05/04/17

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Matrix: Water

Analytical Method: 1,8260C

Analytical Date: 05/11/17 18:36

Analyst: NL

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
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Volatile Organics by GC/MS - Westborough Lab

Tetrachloroethene	9600		ug/l	200	72.	400
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Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	102		70-130
Dibromofluoromethane	97		70-130

Project Name: 1485-1491 NIAGARA ST
Project Number: T0417-017-001

Lab Number: L1714384
Report Date: 05/12/17

SAMPLE RESULTS

Lab ID: L1714384-01 D
Client ID: TMW-1
Sample Location: BUFFALO, NY

Date Collected: 05/01/17 14:00
Date Received: 05/04/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/17 02:55
Analyst: NL

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	250	70.	100
1,1-Dichloroethane	ND		ug/l	250	70.	100
Chloroform	ND		ug/l	250	70.	100
Carbon tetrachloride	ND		ug/l	50	13.	100
1,2-Dichloropropane	ND		ug/l	100	14.	100
Dibromochloromethane	ND		ug/l	50	15.	100
1,1,2-Trichloroethane	ND		ug/l	150	50.	100
Tetrachloroethene	23000	E	ug/l	50	18.	100
Chlorobenzene	ND		ug/l	250	70.	100
Trichlorofluoromethane	ND		ug/l	250	70.	100
1,2-Dichloroethane	ND		ug/l	50	13.	100
1,1,1-Trichloroethane	ND		ug/l	250	70.	100
Bromodichloromethane	ND		ug/l	50	19.	100
trans-1,3-Dichloropropene	ND		ug/l	50	16.	100
cis-1,3-Dichloropropene	ND		ug/l	50	14.	100
Bromoform	ND		ug/l	200	65.	100
1,1,2,2-Tetrachloroethane	ND		ug/l	50	17.	100
Benzene	ND		ug/l	50	16.	100
Toluene	ND		ug/l	250	70.	100
Ethylbenzene	ND		ug/l	250	70.	100
Chloromethane	ND		ug/l	250	70.	100
Bromomethane	ND		ug/l	250	70.	100
Vinyl chloride	18	J	ug/l	100	7.1	100
Chloroethane	ND		ug/l	250	70.	100
1,1-Dichloroethene	ND		ug/l	50	17.	100
trans-1,2-Dichloroethene	120	J	ug/l	250	70.	100
Trichloroethene	2000		ug/l	50	18.	100
1,2-Dichlorobenzene	ND		ug/l	250	70.	100
1,3-Dichlorobenzene	ND		ug/l	250	70.	100
1,4-Dichlorobenzene	ND		ug/l	250	70.	100

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

SAMPLE RESULTS

Lab ID: L1714384-01 D

Date Collected: 05/01/17 14:00

Client ID: TMW-1

Date Received: 05/04/17

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	250	70.	100
p/m-Xylene	ND		ug/l	250	70.	100
o-Xylene	ND		ug/l	250	70.	100
cis-1,2-Dichloroethene	810		ug/l	250	70.	100
Styrene	ND		ug/l	250	70.	100
Dichlorodifluoromethane	ND		ug/l	500	100	100
Acetone	ND		ug/l	500	150	100
Carbon disulfide	ND		ug/l	500	100	100
2-Butanone	ND		ug/l	500	190	100
4-Methyl-2-pentanone	ND		ug/l	500	100	100
2-Hexanone	ND		ug/l	500	100	100
Bromochloromethane	ND		ug/l	250	70.	100
1,2-Dibromoethane	ND		ug/l	200	65.	100
n-Butylbenzene	ND		ug/l	250	70.	100
sec-Butylbenzene	ND		ug/l	250	70.	100
1,2-Dibromo-3-chloropropane	ND		ug/l	250	70.	100
Isopropylbenzene	ND		ug/l	250	70.	100
p-Isopropyltoluene	ND		ug/l	250	70.	100
n-Propylbenzene	ND		ug/l	250	70.	100
1,2,3-Trichlorobenzene	ND		ug/l	250	70.	100
1,2,4-Trichlorobenzene	ND		ug/l	250	70.	100
1,3,5-Trimethylbenzene	ND		ug/l	250	70.	100
1,2,4-Trimethylbenzene	ND		ug/l	250	70.	100
Methyl Acetate	ND		ug/l	200	23.	100
Cyclohexane	ND		ug/l	1000	27.	100
1,4-Dioxane	ND		ug/l	25000	6100	100
Freon-113	ND		ug/l	250	70.	100
Methyl cyclohexane	ND		ug/l	1000	40.	100

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	106		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	104		70-130
Dibromofluoromethane	97		70-130

Project Name: 1485-1491 NIAGARA ST
Project Number: T0417-017-001

Lab Number: L1714384
Report Date: 05/12/17

SAMPLE RESULTS

Lab ID: L1714384-02
Client ID: TMW-2
Sample Location: BUFFALO, NY

Date Collected: 05/01/17 15:00
Date Received: 05/04/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/11/17 17:26
Analyst: NL

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	2.5	0.70	1
1,1-Dichloroethane	ND		ug/l	2.5	0.70	1
Chloroform	ND		ug/l	2.5	0.70	1
Carbon tetrachloride	ND		ug/l	0.50	0.13	1
1,2-Dichloropropane	ND		ug/l	1.0	0.14	1
Dibromochloromethane	ND		ug/l	0.50	0.15	1
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50	1
Tetrachloroethene	3.0		ug/l	0.50	0.18	1
Chlorobenzene	ND		ug/l	2.5	0.70	1
Trichlorofluoromethane	ND		ug/l	2.5	0.70	1
1,2-Dichloroethane	ND		ug/l	0.50	0.13	1
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70	1
Bromodichloromethane	ND		ug/l	0.50	0.19	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14	1
Bromoform	ND		ug/l	2.0	0.65	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17	1
Benzene	ND		ug/l	0.50	0.16	1
Toluene	ND		ug/l	2.5	0.70	1
Ethylbenzene	ND		ug/l	2.5	0.70	1
Chloromethane	ND		ug/l	2.5	0.70	1
Bromomethane	ND		ug/l	2.5	0.70	1
Vinyl chloride	ND		ug/l	1.0	0.07	1
Chloroethane	ND		ug/l	2.5	0.70	1
1,1-Dichloroethene	ND		ug/l	0.50	0.17	1
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70	1
Trichloroethene	8.8		ug/l	0.50	0.18	1
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70	1
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70	1

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

SAMPLE RESULTS

Lab ID: L1714384-02

Date Collected: 05/01/17 15:00

Client ID: TMW-2

Date Received: 05/04/17

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	2.5	0.70	1
p/m-Xylene	ND		ug/l	2.5	0.70	1
o-Xylene	ND		ug/l	2.5	0.70	1
cis-1,2-Dichloroethene	1.3	J	ug/l	2.5	0.70	1
Styrene	ND		ug/l	2.5	0.70	1
Dichlorodifluoromethane	ND		ug/l	5.0	1.0	1
Acetone	16		ug/l	5.0	1.5	1
Carbon disulfide	ND		ug/l	5.0	1.0	1
2-Butanone	ND		ug/l	5.0	1.9	1
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0	1
2-Hexanone	ND		ug/l	5.0	1.0	1
Bromochloromethane	ND		ug/l	2.5	0.70	1
1,2-Dibromoethane	ND		ug/l	2.0	0.65	1
n-Butylbenzene	ND		ug/l	2.5	0.70	1
sec-Butylbenzene	ND		ug/l	2.5	0.70	1
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70	1
Isopropylbenzene	ND		ug/l	2.5	0.70	1
p-Isopropyltoluene	ND		ug/l	2.5	0.70	1
n-Propylbenzene	ND		ug/l	2.5	0.70	1
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70	1
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70	1
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70	1
Methyl Acetate	ND		ug/l	2.0	0.23	1
Cyclohexane	ND		ug/l	10	0.27	1
1,4-Dioxane	ND		ug/l	250	61.	1
Freon-113	ND		ug/l	2.5	0.70	1
Methyl cyclohexane	ND		ug/l	10	0.40	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	98		70-130
4-Bromofluorobenzene	99		70-130
Dibromofluoromethane	97		70-130

Project Name: 1485-1491 NIAGARA ST
Project Number: T0417-017-001

Lab Number: L1714384
Report Date: 05/12/17

SAMPLE RESULTS

Lab ID: L1714384-03 D
Client ID: TMW-3
Sample Location: BUFFALO, NY

Date Collected: 05/03/17 16:30
Date Received: 05/04/17
Field Prep: Not Specified

Matrix: Water
Analytical Method: 1,8260C
Analytical Date: 05/12/17 03:20
Analyst: NL

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	100	28.	40
1,1-Dichloroethane	ND		ug/l	100	28.	40
Chloroform	ND		ug/l	100	28.	40
Carbon tetrachloride	ND		ug/l	20	5.4	40
1,2-Dichloropropane	ND		ug/l	40	5.5	40
Dibromochloromethane	ND		ug/l	20	6.0	40
1,1,2-Trichloroethane	ND		ug/l	60	20.	40
Tetrachloroethene	36		ug/l	20	7.2	40
Chlorobenzene	ND		ug/l	100	28.	40
Trichlorofluoromethane	ND		ug/l	100	28.	40
1,2-Dichloroethane	ND		ug/l	20	5.3	40
1,1,1-Trichloroethane	ND		ug/l	100	28.	40
Bromodichloromethane	ND		ug/l	20	7.7	40
trans-1,3-Dichloropropene	ND		ug/l	20	6.6	40
cis-1,3-Dichloropropene	ND		ug/l	20	5.8	40
Bromoform	ND		ug/l	80	26.	40
1,1,2,2-Tetrachloroethane	ND		ug/l	20	6.7	40
Benzene	ND		ug/l	20	6.4	40
Toluene	ND		ug/l	100	28.	40
Ethylbenzene	ND		ug/l	100	28.	40
Chloromethane	ND		ug/l	100	28.	40
Bromomethane	ND		ug/l	100	28.	40
Vinyl chloride	ND		ug/l	40	2.8	40
Chloroethane	ND		ug/l	100	28.	40
1,1-Dichloroethene	ND		ug/l	20	6.8	40
trans-1,2-Dichloroethene	ND		ug/l	100	28.	40
Trichloroethene	5100		ug/l	20	7.0	40
1,2-Dichlorobenzene	ND		ug/l	100	28.	40
1,3-Dichlorobenzene	ND		ug/l	100	28.	40
1,4-Dichlorobenzene	ND		ug/l	100	28.	40

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

SAMPLE RESULTS

Lab ID: L1714384-03 D

Date Collected: 05/03/17 16:30

Client ID: TMW-3

Date Received: 05/04/17

Sample Location: BUFFALO, NY

Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methyl tert butyl ether	ND		ug/l	100	28.	40
p/m-Xylene	ND		ug/l	100	28.	40
o-Xylene	ND		ug/l	100	28.	40
cis-1,2-Dichloroethene	380		ug/l	100	28.	40
Styrene	ND		ug/l	100	28.	40
Dichlorodifluoromethane	ND		ug/l	200	40.	40
Acetone	ND		ug/l	200	58.	40
Carbon disulfide	ND		ug/l	200	40.	40
2-Butanone	ND		ug/l	200	78.	40
4-Methyl-2-pentanone	ND		ug/l	200	40.	40
2-Hexanone	ND		ug/l	200	40.	40
Bromochloromethane	ND		ug/l	100	28.	40
1,2-Dibromoethane	ND		ug/l	80	26.	40
n-Butylbenzene	ND		ug/l	100	28.	40
sec-Butylbenzene	ND		ug/l	100	28.	40
1,2-Dibromo-3-chloropropane	ND		ug/l	100	28.	40
Isopropylbenzene	ND		ug/l	100	28.	40
p-Isopropyltoluene	ND		ug/l	100	28.	40
n-Propylbenzene	ND		ug/l	100	28.	40
1,2,3-Trichlorobenzene	ND		ug/l	100	28.	40
1,2,4-Trichlorobenzene	ND		ug/l	100	28.	40
1,3,5-Trimethylbenzene	ND		ug/l	100	28.	40
1,2,4-Trimethylbenzene	ND		ug/l	100	28.	40
Methyl Acetate	ND		ug/l	80	9.4	40
Cyclohexane	ND		ug/l	400	11.	40
1,4-Dioxane	ND		ug/l	10000	2400	40
Freon-113	ND		ug/l	100	28.	40
Methyl cyclohexane	ND		ug/l	400	16.	40

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	104		70-130
4-Bromofluorobenzene	105		70-130
Dibromofluoromethane	98		70-130

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/11/17 09:53
 Analyst: NL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1002619-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/11/17 09:53
 Analyst: NL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1002619-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/11/17 09:53
 Analyst: NL

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1002619-5					

Tentatively Identified Compounds

No Tentatively Identified Compounds ND ug/l

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	100		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	100		70-130
Dibromofluoromethane	96		70-130

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/11/17 21:06
 Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1002980-5					
Methylene chloride	ND		ug/l	2.5	0.70
1,1-Dichloroethane	ND		ug/l	2.5	0.70
Chloroform	ND		ug/l	2.5	0.70
Carbon tetrachloride	ND		ug/l	0.50	0.13
1,2-Dichloropropane	ND		ug/l	1.0	0.14
Dibromochloromethane	ND		ug/l	0.50	0.15
1,1,2-Trichloroethane	ND		ug/l	1.5	0.50
Tetrachloroethene	ND		ug/l	0.50	0.18
Chlorobenzene	ND		ug/l	2.5	0.70
Trichlorofluoromethane	ND		ug/l	2.5	0.70
1,2-Dichloroethane	ND		ug/l	0.50	0.13
1,1,1-Trichloroethane	ND		ug/l	2.5	0.70
Bromodichloromethane	ND		ug/l	0.50	0.19
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.16
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.14
Bromoform	ND		ug/l	2.0	0.65
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.17
Benzene	ND		ug/l	0.50	0.16
Toluene	ND		ug/l	2.5	0.70
Ethylbenzene	ND		ug/l	2.5	0.70
Chloromethane	ND		ug/l	2.5	0.70
Bromomethane	ND		ug/l	2.5	0.70
Vinyl chloride	ND		ug/l	1.0	0.07
Chloroethane	ND		ug/l	2.5	0.70
1,1-Dichloroethene	ND		ug/l	0.50	0.17
trans-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Trichloroethene	ND		ug/l	0.50	0.18
1,2-Dichlorobenzene	ND		ug/l	2.5	0.70
1,3-Dichlorobenzene	ND		ug/l	2.5	0.70

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/11/17 21:06
 Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1002980-5					
1,4-Dichlorobenzene	ND		ug/l	2.5	0.70
Methyl tert butyl ether	ND		ug/l	2.5	0.70
p/m-Xylene	ND		ug/l	2.5	0.70
o-Xylene	ND		ug/l	2.5	0.70
cis-1,2-Dichloroethene	ND		ug/l	2.5	0.70
Styrene	ND		ug/l	2.5	0.70
Dichlorodifluoromethane	ND		ug/l	5.0	1.0
Acetone	ND		ug/l	5.0	1.5
Carbon disulfide	ND		ug/l	5.0	1.0
2-Butanone	ND		ug/l	5.0	1.9
4-Methyl-2-pentanone	ND		ug/l	5.0	1.0
2-Hexanone	ND		ug/l	5.0	1.0
Bromochloromethane	ND		ug/l	2.5	0.70
1,2-Dibromoethane	ND		ug/l	2.0	0.65
n-Butylbenzene	ND		ug/l	2.5	0.70
sec-Butylbenzene	ND		ug/l	2.5	0.70
1,2-Dibromo-3-chloropropane	ND		ug/l	2.5	0.70
Isopropylbenzene	ND		ug/l	2.5	0.70
p-Isopropyltoluene	ND		ug/l	2.5	0.70
n-Propylbenzene	ND		ug/l	2.5	0.70
1,2,3-Trichlorobenzene	ND		ug/l	2.5	0.70
1,2,4-Trichlorobenzene	ND		ug/l	2.5	0.70
1,3,5-Trimethylbenzene	ND		ug/l	2.5	0.70
1,2,4-Trimethylbenzene	ND		ug/l	2.5	0.70
Methyl Acetate	ND		ug/l	2.0	0.23
Cyclohexane	ND		ug/l	10	0.27
1,4-Dioxane	ND		ug/l	250	61.
Freon-113	ND		ug/l	2.5	0.70
Methyl cyclohexane	ND		ug/l	10	0.40

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 05/11/17 21:06
 Analyst: KD

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,03 Batch: WG1002980-5					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	104		70-130
Toluene-d8	102		70-130
4-Bromofluorobenzene	106		70-130
Dibromofluoromethane	97		70-130

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1485-1491 NIAGARA ST

Project Number: T0417-017-001

Lab Number: L1714384

Report Date: 05/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1002619-3 WG1002619-4								
Methylene chloride	91		93		70-130	2		20
1,1-Dichloroethane	96		98		70-130	2		20
Chloroform	97		98		70-130	1		20
Carbon tetrachloride	98		95		63-132	3		20
1,2-Dichloropropane	97		100		70-130	3		20
Dibromochloromethane	85		90		63-130	6		20
1,1,2-Trichloroethane	110		95		70-130	15		20
Tetrachloroethene	90		99		70-130	10		20
Chlorobenzene	94		100		75-130	6		20
Trichlorofluoromethane	81		84		62-150	4		20
1,2-Dichloroethane	95		93		70-130	2		20
1,1,1-Trichloroethane	95		96		67-130	1		20
Bromodichloromethane	98		96		67-130	2		20
trans-1,3-Dichloropropene	88		74		70-130	17		20
cis-1,3-Dichloropropene	98		95		70-130	3		20
Bromoform	74		90		54-136	20		20
1,1,2,2-Tetrachloroethane	73		99		67-130	30	Q	20
Benzene	100		100		70-130	0		20
Toluene	110		100		70-130	10		20
Ethylbenzene	100		110		70-130	10		20
Chloromethane	84		76		64-130	10		20
Bromomethane	81		57		39-139	35	Q	20
Vinyl chloride	79		78		55-140	1		20

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 1485-1491 NIAGARA ST

Project Number: T0417-017-001

Lab Number: L1714384

Report Date: 05/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1002619-3 WG1002619-4								
Chloroethane	90		68		55-138	28	Q	20
1,1-Dichloroethene	85		89		61-145	5		20
trans-1,2-Dichloroethene	96		100		70-130	4		20
Trichloroethene	100		100		70-130	0		20
1,2-Dichlorobenzene	97		100		70-130	3		20
1,3-Dichlorobenzene	100		100		70-130	0		20
1,4-Dichlorobenzene	99		100		70-130	1		20
Methyl tert butyl ether	93		93		63-130	0		20
p/m-Xylene	85		110		70-130	26	Q	20
o-Xylene	85		110		70-130	26	Q	20
cis-1,2-Dichloroethene	97		100		70-130	3		20
Styrene	90		110		70-130	20		20
Dichlorodifluoromethane	47		53		36-147	12		20
Acetone	120		100		58-148	18		20
Carbon disulfide	78		83		51-130	6		20
2-Butanone	75		83		63-138	10		20
4-Methyl-2-pentanone	90		84		59-130	7		20
2-Hexanone	88		83		57-130	6		20
Bromochloromethane	94		100		70-130	6		20
1,2-Dibromoethane	82		96		70-130	16		20
n-Butylbenzene	110		110		53-136	0		20
sec-Butylbenzene	110		110		70-130	0		20
1,2-Dibromo-3-chloropropane	72		79		41-144	9		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1485-1491 NIAGARA ST

Project Number: T0417-017-001

Lab Number: L1714384

Report Date: 05/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1002619-3 WG1002619-4								
Isopropylbenzene	84		110		70-130	27	Q	20
p-Isopropyltoluene	110		110		70-130	0		20
n-Propylbenzene	100		110		69-130	10		20
1,2,3-Trichlorobenzene	80		100		70-130	22	Q	20
1,2,4-Trichlorobenzene	90		96		70-130	6		20
1,3,5-Trimethylbenzene	100		110		64-130	10		20
1,2,4-Trimethylbenzene	110		110		70-130	0		20
Methyl Acetate	80		86		70-130	7		20
Cyclohexane	93		94		70-130	1		20
1,4-Dioxane	98		102		56-162	4		20
Freon-113	86		89		70-130	3		20
Methyl cyclohexane	97		99		70-130	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		98		70-130
Toluene-d8	110		100		70-130
4-Bromofluorobenzene	90		102		70-130
Dibromofluoromethane	94		96		70-130

Lab Control Sample Analysis **Batch Quality Control**

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1002980-3 WG1002980-4								
Methylene chloride	100		95		70-130	5		20
1,1-Dichloroethane	110		100		70-130	10		20
Chloroform	110		100		70-130	10		20
Carbon tetrachloride	100		97		63-132	3		20
1,2-Dichloropropane	110		100		70-130	10		20
Dibromochloromethane	88		86		63-130	2		20
1,1,2-Trichloroethane	100		100		70-130	0		20
Tetrachloroethene	110		96		70-130	14		20
Chlorobenzene	110		100		75-130	10		20
Trichlorofluoromethane	110		98		62-150	12		20
1,2-Dichloroethane	100		100		70-130	0		20
1,1,1-Trichloroethane	110		98		67-130	12		20
Bromodichloromethane	100		100		67-130	0		20
trans-1,3-Dichloropropene	87		84		70-130	4		20
cis-1,3-Dichloropropene	91		87		70-130	4		20
Bromoform	81		78		54-136	4		20
1,1,2,2-Tetrachloroethane	100		100		67-130	0		20
Benzene	110		100		70-130	10		20
Toluene	110		100		70-130	10		20
Ethylbenzene	110		100		70-130	10		20
Chloromethane	77		71		64-130	8		20
Bromomethane	81		73		39-139	10		20
Vinyl chloride	87		82		55-140	6		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1485-1491 NIAGARA ST

Project Number: T0417-017-001

Lab Number: L1714384

Report Date: 05/12/17

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1002980-3 WG1002980-4								
Chloroethane	120		100		55-138	18		20
1,1-Dichloroethene	97		90		61-145	7		20
trans-1,2-Dichloroethene	100		95		70-130	5		20
Trichloroethene	100		97		70-130	3		20
1,2-Dichlorobenzene	100		98		70-130	2		20
1,3-Dichlorobenzene	100		99		70-130	1		20
1,4-Dichlorobenzene	100		100		70-130	0		20
Methyl tert butyl ether	91		91		63-130	0		20
p/m-Xylene	115		100		70-130	14		20
o-Xylene	110		100		70-130	10		20
cis-1,2-Dichloroethene	110		98		70-130	12		20
Styrene	115		105		70-130	9		20
Dichlorodifluoromethane	47		46		36-147	2		20
Acetone	92		87		58-148	6		20
Carbon disulfide	120		84		51-130	35	Q	20
2-Butanone	93		95		63-138	2		20
4-Methyl-2-pentanone	74		76		59-130	3		20
2-Hexanone	81		85		57-130	5		20
Bromochloromethane	98		95		70-130	3		20
1,2-Dibromoethane	99		96		70-130	3		20
n-Butylbenzene	120		110		53-136	9		20
sec-Butylbenzene	120		100		70-130	18		20
1,2-Dibromo-3-chloropropane	75		74		41-144	1		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: 1485-1491 NIAGARA ST

Lab Number: L1714384

Project Number: T0417-017-001

Report Date: 05/12/17

Parameter	LCS %Recovery	Qual	LCS %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,03 Batch: WG1002980-3 WG1002980-4								
Isopropylbenzene	120		100		70-130	18		20
p-Isopropyltoluene	120		100		70-130	18		20
n-Propylbenzene	120		110		69-130	9		20
1,2,3-Trichlorobenzene	93		97		70-130	4		20
1,2,4-Trichlorobenzene	97		97		70-130	0		20
1,3,5-Trimethylbenzene	120		100		64-130	18		20
1,2,4-Trimethylbenzene	120		110		70-130	9		20
Methyl Acetate	91		93		70-130	2		20
Cyclohexane	110		98		70-130	12		20
1,4-Dioxane	108		112		56-162	4		20
Freon-113	100		92		70-130	8		20
Methyl cyclohexane	120		98		70-130	20		20

Surrogate	LCS %Recovery	Qual	LCS %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	105		105		70-130
Toluene-d8	102		102		70-130
4-Bromofluorobenzene	103		104		70-130
Dibromofluoromethane	99		98		70-130

Project Name: 1485-1491 NIAGARA ST**Project Number:** T0417-017-001**Lab Number:** L1714384**Report Date:** 05/12/17**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Cooler Information Custody Seal**Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1714384-01A	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-01B	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-01C	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-02A	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-02B	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-02C	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-03A	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-03B	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)
L1714384-03C	Vial HCl preserved	A	N/A	3.0	Y	Absent	NYTCL-8260-R2(14)

*Values in parentheses indicate holding time in days

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GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the

Report Format: DU Report with 'J' Qualifiers



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Data Qualifiers

- reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers



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REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 10

Department: **Quality Assurance**

Published Date: 1/16/2017 11:00:05 AM

Title: **Certificate/Approval Program Summary**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624:** m/p-xylene, o-xylene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.**EPA 300:** DW: Bromide**EPA 6860:** NPW and SCM: Perchlorate**EPA 9010:** NPW and SCM: Amenable Cyanide Distillation**EPA 9012B:** NPW: Total Cyanide**EPA 9050A:** NPW: Specific Conductance**SM3500:** NPW: Ferrous Iron**SM4500:** NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.**SM5310C:** DW: Dissolved Organic Carbon**Mansfield Facility****SM 2540D:** TSS**EPA 3005A** NPW**EPA 8082A:** NPW: PCB: 1, 5, 31, 87,101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

Biological Tissue Matrix: EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH, EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO3-F, EPA 353.2:** Nitrate-N, **EPA 351.1, SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D.****EPA 624:** Volatile Halocarbons & Aromatics,**EPA 608:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E.****Mansfield Facility:****Drinking Water****EPA 200.7:** Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. **EPA 200.8:** Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. **EPA 245.1 Hg.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn.**EPA 245.1 Hg.****SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

 NEW YORK CHAIN OF CUSTODY Westborough, MA 01581 8 Walkup Dr. TEL: 508-898-9220 FAX: 508-898-9193 Mansfield, MA 02048 320 Forbes Blvd TEL: 508-822-9300 FAX: 508-822-3288		Service Centers Mahwah, NJ 07430: 35 Whitney Rd, Suite 5 Albany, NY 12205: 14 Walker Way Tonawanda, NY 14150: 275 Cooper Ave, Suite 105		Page 1 of 1		Date Rec'd in Lab 5/5/17		ALPHA Job # 1714384																																																																																																																																																																																																											
		Project Information Project Name: 1485-1491 Niagara Street Project Location: Buffalo, NY Project # T0417-017-001 (Use Project name as Project #) ☐ Project Manager: Brian Mayback ALPHAQuote #: Turn-Around Time Standard ☒ Due Date: Rush (only if pre approved) ☐ # of Days:				Deliverables ☐ ASP-A ☐ ASP-B ☐ EQUIS (1 File) ☐ EQUIS (4 File) ☐ Other		Billing Information ☐ Same as Client Info PO #																																																																																																																																																																																																											
		Client Information Client: TURNKEY ENV. RESTORATION Address: 3558 Hambury Place Buffalo, NY, 14218 Phone: 716-713-3927 Fax: Email: BMayback@TurnkeyInc.com				Regulatory Requirement ☐ NY TOGS ☐ NY Part 375 ☐ AWQ Standards ☐ NY CP-51 ☐ NY Restricted Use ☐ Other ☐ NY Unrestricted Use ☐ NYC Sewer Discharge		Disposal Site Information Please identify below location of applicable disposal facilities. Disposal Facility: ☐ NJ ☐ NY ☐ Other:																																																																																																																																																																																																											
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