February 26, 2018

Mr. Nicholas Sinatra
169 West Utica, LLC
617 Main Street, Suite 200
Buffalo, New York 14203

Re: Supplemental Site Investigation
Former Central Dry Cleaners Site
165-169 West Utica Street Site
Buffalo, New York

Dear Mr. Sinatra:
As requested, TurnKey Environmental Restoration, LLC (TurnKey) has completed a supplemental investigation at the subject property, addressed at 165–169 West Utica Street, Buffalo New York (Site). A description of the investigation and discussion of the findings is presented in the sections below.

Site Description and Background

The Site is comprised of an approximate 1.13-acre parcel addressed at 165-169 West Utica Street, in the City of Buffalo, New York (see Figures 1 and 2), The majority of the Site is covered by a former dry cleaning operation building and includes asphalt parking areas and gravel covered parking areas.

A September 2017 Limited Phase II Environmental Investigation performed by TurnKey revealed the presence of elevated VOCs, PAHs, and metals in the soil at the Site.

Based on the results of the Ltd. Phase II Investigation the following conclusions and recommendations were provided by TurnKey:

- Elevated PID above background were detected in all 12 of the soil borings completed across the Site, with highest reading of 218 ppm.
- Elevated VOCs, primarily dry cleaning related compounds, were detected on Site exceeding RSCOs, CSCOs, and ISCOs.
- Elevated PAHs exceeding ISCOs were detected in 4 of the 6 sample locations. Elevated total PAHs above the 500 ppm guidance were detected at several locations on-Site.

- Elevated metals, including arsenic and lead, were detected above their RSCO, CSOCs, and ISCOs.
- Based on the findings of this investigation, additional Site investigation and remediation appears warranted prior to Site redevelopment. We understand that 169 West Utica, LLC is considering redeveloping the property; based on environmental impacts noted during this investigation, the Site may be eligible for the New York Brownfield Cleanup Program.

Supplemental Site Investigation

A Supplemental Site Investigation was completed in January 2018. The supplemental investigation included interior soil borings to assess potential dry cleaning related contamination beneath the existing building; and, installation and sampling of two (2) groundwater monitoring wells, identified as MW-1 and MW-2 (see Figure 2).

Interior Investigation

Eight (8) interior soils borings, identified as SB-12 through SB-20, were completed using a hydraulically driven direct push drill rig with 4-foot continuous macro-core samplers. Samples were retrieved from the boring locations in clear PVC sleeves to allow for field characterization of the subsurface lithology and collection of soil samples. TurnKey personnel scanned each core sample for total volatile organic vapors with a photoionization detector (PID) and recorded visual and/or olfactory observations.

A core drill was used to bore through the concrete floor at each location, prior to soil boring advancement. It should be noted that equipment refusal was encountered at approximately 1-2 feet below ground surface (fbgs) at SB-12, SB-14, SB-16, SB-17, and SB-18, as designated with 'R" on Figure 2.

In general, the eight (8) interior borings indicated the presence of fill and gravel beneath the approximately 3-5-inch thick concrete floor slab. Elevated PID readings and olfactory odors were noted in all interior boring locations, with PID readings as high as 265 ppm (SB-14). Field summary of soil boring findings is detailed on Table 1.

Groundwater Investigation

TurnKey mobilized a drill rig capable of advancing hollow-stem augers to the necessary depth to install groundwater monitoring wells. MW-1 was advanced assumed downgradient of the former recovery still area and SB-7, and MW-2 was advanced along the western property boundary. In order to collect data on deeper subsurface conditions than the Ltd. Phase II was able to achieve, standard drilling technique was modified to continuous spoon the upper 20 feet prior to auger advancement.

Subsurface conditions can be described as fill material seen during the previous investigation to approximately 4-5 fbgs, with underlying well graded sand and fine gravel from 5-35 fbgs. Field evidence of elevated PID readings and odors were noted at approximately 20-12 fbgs

for both wells, with readings as high as 567 ppm (MW-1). Groundwater was encountered at approximately 23 fbgs, with final well depth of 35 fbgs (see well logs in Appendix A). Soil samples were collected from the elevated PID depth interval for both wells. Analytical results are discussed below.

After well installation was complete, TurnKey developed the groundwater wells, containerizing development water on-Site in 55-gallon drums. After well development, groundwater samples for VOCs were collected and submitted to laboratory for analysis. Soil and groundwater samples were collected in laboratory-provided sampling containers, cooled to 4°C in the field, and transported under Chain of Custody to Test America Laboratories, Inc., located in Amherst New York for analysis of Target Compounds List (TCL) plus New York State Department of Environmental Conservation (NYSDEC) CP-51 List volatile organic compounds (VOCs). A copy of the laboratory analytical data package is included electronically in Attachment B.

Analytical Results

In total, eight (8) soil/fill samples were submitted for laboratory analysis, including six (6) interior soil boring locations and two (2) exterior monitoring wells; and, two (2) groundwater samples. Soil analytical results are summarized on Table 2 with a comparison to 6NYCRR Part 375 Soil Cleanup Objectives (SCOs); and groundwater analytical results are summarized on Table 3, with comparison to NYSDEC Water Quality Standards (TOGS 1.1.1).

Soil Analytical Results

Elevated tetrachloroethene (PCE) was detected exceeding Industrial Use SCOs (ISCOs) at one location (SB-14) beneath the building. Elevated TCE was also detected exceeding Unrestricted Use (USCOs) and Residential Use (RSCOs) at several other locations under the buidling (see Table 2). Several petroleum-related VOCs were detected above USCOs, including MW-1 soil sample, likely related to the former Stoddard solvent use on-Site.

Groundwater Analytical Results

Elevated VOCs were detected above Groundwater Quality Standards (GWQS) in both MW-1 and MW-2 (see Table 3). Petroleum-related VOCs, likely related to historic Stoddard solvent usage on-Site, were detected at higher concentrations at MW-1 (4,045 ug/L) than MW-2 (262 ug/L) along the western boundary.

Summary and Recommendations

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

- Evidence of dry cleaning related contamination is present beneath the existing building exceeding ISCOs that will require additional investigation and remediation.
- Elevated VOCs were detected in on-Site groundwater exceeding GWQS that will require additional investigation and remediation.

Recommendations

- Based on the findings of this investigation, additional Site investigation and remediation is recommended prior to Site redevelopment. We understand that 169 West Utica, LLC is considering redeveloping the property; and based on findings of the investigation, the Site may be eligible for the New York Brownfield Cleanup Program.

Please do not hesitate to contact us if you have any questions.

Sincerely,
TurnKey Environmental Restoration, LLC

Nathan T. Munley
Project Manager

0239-017-002

Declaration /Limitations

This report has been prepared for the exclusive use of 169 West Utica, LLC. The contents of this report are limited to information available at the time of the site investigation activities and to data referenced herein, and assume all referenced historic information sources to be true and accurate. The findings herein may be relied upon only at the discretion of 169 West Utica, LLC. Use of or reliance upon this report or its findings by any other person or entity is prohibited without written permission of TurnKey Environmental Restoration, LLC.

TABLES

TABLE 1

SUMMARY OF SOIL BORING FINDINGS

165-169 WEST UTICA STREET SITE

169 WEST UTICA, LLC

Location	Date	Fill Present	Visually Impacted Soil/Fill?	Olfactory Odor	Interval of Observed Impact (fbgs)	PID Scan (ppm) Depth - Reading (fbgs)	Sample Interval	Depth (fbgs) and Soil Description
Soil Boring Locations								
SB-13	01/19/18	No	Yes, Black	Yes	8"-1.5'	29.0	no	**0.0-0.66 Concrete** **.25-1 Fill:** Black, moist mostly fill (block, ash, glass, brick cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive
SB-14	01/19/18	No	No	Yes	.5-1'	265	.5-1'	**0.0-0.25 Concrete** **.25-1 Fill:** Black, moist mostly fill (ash, glass, brick, cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive
SB-15	01/19/18	No	No	Slight	1'-7'	1 - 20 3 - 80 5 - 20 7 - 20	3-4'	**0.0-0.25 Concrete** **.25-1 Fill:** Black, moist mostly fill (ash, glass, brick cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive
SB-16	01/19/18	No	No	Slight	.5-8'	1 - 11.8 4- 26.2 5 - 20 7 - 27.8	7-8'	**0.0-0.41 Concrete** **.25-1 Fill:** Black, moist mostly fill (ash, glass, brick cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive
SB-17	01/19/18	Yes	Yes	Yes	1-1.5'	1 - 5 1.2 - 16.7 1.5 - 2.2	N/A	**0.0-0.41 Concrete** **.25-1 Fill:** Black, moist mostly fill (ash, glass, brick cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive
SB-18	01/19/18	Yes	Yes	Yes	.5-7.5'	1 - 10.2 3 - .7 6 - 22.5 7 - 12	4-8'	**0.0-0.41 Concrete** **.25-1 Fill:** Black, moist mostly fill (ash, glass, brick cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive
SB-19	01/19/18	Yes	Yes	No	.5-1'	1 - 2.2	N/A	**0.0-0.41 Concrete** **.25-1 Fill:** Black, moist mostly fill (ash, glass, brick cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive
SB-20	01/19/18	Yes	Yes	Yes	.5-1'	.5 - 221 1 - 55 2 - 17 4 - 7.2	.5-1'	**0.0-0.41 Concrete** **.25-1 Fill:** Black, moist mostly fill (ash, glass, brick cinders) some fine sand, medium dense, few medium plasticity fines, medium dense **1-10.5 Well graded sand:** Tan, moist, mostly well graded sands with few subrounded gravel, few medium plasticity fines, medium dense, massive

Notes:

Definitions:

fbgs = feet below ground surface
PID = photoionization detector
ppm = parts per million
N/A = Non applicable

TABLE 2

SUMMARY OF SUBSURFACE SOIL/FILL ANALYTICAL RESULTS

FORMER CENTRAL DRY CLEANERS SITE
165 WEST UTICA STREET
BUFFALO, NEW YORK

PARAMETER [1]	Unrestricted Use SCOs [2]	Residential Use SCOs [2]	Commercial Use SCOs [2]	Industrial Use SCOs [2]	SAMPLE LOCATION (DEPTH)												
					SB-1 (4-6')	SB-2 (0.5-3')	SB-5 (0.25-2')	SB-7 (0.33-2')	SB-11 (0.25-2')	SB-12 (0.25-1')	SB-14 (0.41-1')	SB-15 (3-4')	SB-16 (7-8')	SB-18 (4-6')	SB-20 (0.5-1')	MW-1 (24-26')	MW-2 (24-26')
					07/19/2017						01/09/2018					01/26/2018	01/29/2018
Volatile Organic Compounds (VOCs) - mg/Kg [3]																	
1,1-Dichloroethene	**0.33**	**100**	**500**	**1,000**	ND	--	--	**43 D**	--	--	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	**3.6**	**47**	**190**	**380**	0.0002	--	--	ND	--	--	ND	ND	ND	0.0019 J,VS	0.2 VS	**130**	1.3
1,2-Dichloroethane	**0.02**	**2.3**	**30**	**60**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.00034 J,VS	ND	ND
1,3,5-Trimethylbenzene	**8.4**	**47**	**190**	**380**	ND	--	--	ND	--	--	ND	ND	ND	0.001 J,VS	0.1 VS	**43**	0.48
4-Isopropyltoluene	**--**	**--**	**--**	**--**	ND	--	--	ND	--	--	ND	ND	ND	0.00076 J,VS	0.042 VS	12	0.099 J
Acetone	**0.05**	**100**	**500**	**1,000**	0.0033 J	--	--	ND	--	--	ND	ND	ND	ND	**0.065 VS**	ND	ND
Benzene	**0.06**	**2.9**	**44**	**89**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.00046 J,VS	ND	ND
Carbon disulfide	**--**	**--**	**--**	**--**	ND	--	--	38 J D	--	--	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	**0.25**	**59**	**500**	**1,000**	ND	--	--	**120 D**	--	--	ND	ND	ND	ND	0.074 VS	ND	ND
Cyclohexane	**--**	**--**	**--**	**--**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.0013 J,VS	ND	ND
Ethylbenzene	**1**	**30**	**390**	**780**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.0024 J,VS	**1.2**	ND
Isopropylbenzene (Cumene)	**--**	**--**	**--**	**--**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.0048 J,VS	3.4	ND
Methylcyclohexane	**--**	**--**	**--**	**--**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.0029 J,VS	ND	ND
Methylene chloride	**0.05**	**51**	**500**	**1,000**	0.0029 J	--	--	ND	--	--	**5.7 B,J**	**0.086 B,J**	**0.076 B,J**	ND	0.008 VS	**0.63**	ND
n-Butylbenzene	**12**	**100**	**500**	**1,000**	ND	--	--	ND	--	--	ND	ND	ND	ND	ND	**18**	0.14
n-Propylbenzene	**3.9**	**100**	**500**	**1,000**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.014 VS	**12**	ND
sec-Butylbenzene	**11**	**100**	**500**	**1,000**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.024 VS	10	0.077 J
tert-Butylbenzene	**5.9**	**100**	**500**	**1,000**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.0031 J,VS	ND	ND
Tetrachloroethene	**1.3**	**5.5**	**150**	**300**	0.0026	--	--	**4500 D**	--	--	**420**	**7.2**	**1.9**	0.029 VS	**3**	ND	ND
Toluene	**0.7**	**100**	**500**	**1,000**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.018 VS	ND	ND
trans-1,2-Dichloroethene	**0.19**	**100**	**500**	**1,000**	ND	--	--	ND	--	--	ND	ND	ND	ND	0.0024 J,VS	ND	ND
Trichloroethene	**0.47**	**10**	**200**	**400**	ND	--	--	**210 D**	--	--	ND	ND	ND	ND	0.027 VS	ND	ND
Vinyl chloride	**0.02**	**0.21**	**13**	**27**	ND	--	--	**18 J D**	--	--	ND	ND	ND	ND	ND	ND	ND
Total Xylenes	**0.26**	**100**	**500**	**1000**	ND	--	--	ND		--	ND	ND	ND	ND	0.024 VS	**9.7**	ND
Semi-Volatile Organic Compounds (SVOCs) - mg/Kg [3]																	
2-Methylnaphthalene	**--**	**--**	**--**	**--**	0.093 J	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
Acenaphthene	**20**	**100**	**500**	**1,000**	0.21	**63 D2**	0.11 J	ND	0.47 J D	**140 D2**	--	--	--	--	--	--	--
Acenaphthylene	**100**	**100**	**500**	**1,000**	0.38	1.8 D	ND	ND	4.8 D	5.8 D	--	--	--	--	--	--	--
Anthracene	**100**	**100**	**500**	**1,000**	0.73	84 D2	0.2	ND	3.8 D	**180 D2**	--	--	--	--	--	--	--
Benzo(a)anthracene	**1**	**1**	**5.6**	**11**	**3.4**	**150 D2**	0.44	ND	**22 D**	**300 D2**	--	--	--	--	--	--	--
Benzo(a)pyrene	**1**	**1**	**1**	**1**	**3.1**	**150 D2**	0.39	ND	**23 D**	**300 D2**	--	--	--	--	--	--	--
Benzo(b)fluoranthene	**1**	**1**	**5.6**	**11**	**4.5**	**200 D2**	0.49	ND	**28 D**	**380 D2**	--	--	--	--	--	--	--
Benzo(ghi)perylene	**100**	**100**	**500**	**1,000**	2.2	90 D2	0.23	ND	13 D	**170 D2**	--	--	--	--	--	--	--
Benzo(k)fluoranthene	**0.8**	**1**	**56**	**110**	**1.4**	**70 D2**	0.18	ND	**9.8 D**	**49 D**	--	--	--	--	--	--	--
Carbazole	**--**	**--**	**--**	**--**	0.36	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
Chrysene	**1**	**1**	**56**	**110**	**3.4**	**140 D2**	0.43	ND	**22 D**	**290 D2**	--	--	--	--	--	--	--
Dibenzo(a,h)anthracene	**0.33**	**0.33**	**0.56**	**1**	**0.54**	**20 D**	0.062 J	ND	**3.2 D**	**41 D**	--	--	--	--	--	--	--
Dibenzofuran	**7**	**14**	**350**	**1,000**	0.15 J	ND	ND	ND	ND	ND	--	--	--	--	--	--	--
Diethyl phthalate	**--**	**--**	**--**	**--**	ND	ND	ND	0.66 J D	ND	ND	--	--	--	--	--	--	--
Di-n-butyl phthalate	**--**	**--**	**--**	**--**	ND	ND	ND	0.77 J D	ND	ND	--	--	--	--	--	--	--
Fluoranthene	**100**	**100**	**500**	**1,000**	7.3	**400 D2**	1	ND	37 D	**780 D2**	--	--	--	--	--	--	--
Fluorene	**30**	**100**	**500**	**1,000**	0.21	**66 D2**	0.1 J	ND	0.92 J D	**150 D2**	--	--	--	--	--	--	--
Indeno(1,2,3-cd)pyrene	**0.5**	**0.5**	**5.6**	**11**	**2.4**	**100 D2**	0.25	ND	**14 D**	**200 D2**	--	--	--	--	--	--	--
Naphthalene	**12**	**100**	**500**	**1,000**	0.16 J	**25 D**	0.03 J	0.99 J D	0.57 J D	**70 D**	--	--	--	--	--	--	--
Phenanthrene	**100**	**100**	**500**	**1,000**	3.3	**380 D2**	0.94	ND	18 D	**810 D2**	--	--	--	--	--	--	--
Pyrene	**100**	**100**	**500**	**1,000**	6.1	**290 D2**	0.85	ND	30 D	**580 D2**	--	--	--	--	--	--	--
Total PAHs	**--**	**100**	**500**	**--**	39.33	**2229.8**	5.702	0.99	**230.56**	**4445.8**	--	--	--	--	--	--	--
Metals - mg/Kg																	
Arsenic	**13**	**16**	**16**	**16**	10.5	3.91	9.24	3.87	**24.8**	6.78	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Barium	**350**	**350**	**400**	**10,000**	104	60	32.1	79.1	218	136	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Cadmium	**2.5**	**2.5**	**9.3**	**60**	0.475	0.218 J	0.64	0.729	0.87	**4.36**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Chromium	**30**	**36**	**1,500**	**6,800**	13.8	4.65	11	11.8	17.9	**87.9**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Lead	**63**	**400**	**1,000**	**3,900**	**338**	49.9	**98.5**	14.2	**856**	**399**	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Mercury	**0.18**	**0.81**	**2.8**	**6**	**0.42**	0.03 J	**0.52**	**1.3**	**0.63**	0.03 J	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Selenium	**3.9**	**36**	**1,500**	**6,800**	0.364 J	ND	1.96	0.286 J	**7.4**	0.48 J	**--**	**--**	**--**	**--**	**--**	**--**	**--**
Silver	**2**	**36**	**1,500**	**6,800**	0.312 J	ND	ND	ND	0.132 J	0.594	**--**	**--**	**--**	**--**	**--**	**--**	**--**

Notes:

1. Only those parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per 6NYCRR Part 375 Soil Cleanup Objectives (SCOs).
3. Sample results were reported by the laboratory in ug/kg and converted to mg/kg for comparisons to SCOs

Definitions:

ND = Parameter not detected above laboratory detection limit.
"--" = No value available for the parameter. Or parameter not analysed for.
J = Estimated value; result is less than the sample quantitation limit but greater than zero.
D = Compounds were identified in an analyisis at the secondary dilution factor.
D2 = Compounds were identified in an analyisis at the third dilution factor.

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

TABLE 3

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS

FORMER CENTRAL DRY CLEANERS SITE
165 WEST UTICA STREET
BUFFALO, NEW YORK

Parameters [1]	Class GA GWQS[2]	Sample Location	
		MW-1	MW-2
		1/31/18	
Volatile Organic Compounds (VOCs) - ug/L			
1,2,4-Trimethylbenzene	5	2200	160
1,3,5-Trimethylbenzene	5	450	50
Ethylbenzene	5	68	ND
Isopropylbenzene	5	75	6.2
n-Butylbenzene	5	110	4.2
n-Propylbenzene	5	180	9.6
Xylene (total)	5	400	14
p-Isopropyltoluene	5	95	4.1
sec-Butylbenzene	5	67	ND
total petro-VOCs	--	4,045	262
cVOCs			
Cis-1,2-Dichloroethene	5	750	18
Tetrachloroethene	5	ND	33
total cVOCs	--	750	51

Notes:

1. Only parameters detected at a minimum of one sample location are presented in this table; all other compounds were reported as non-detect.
2. Values per NYSDEC TOGS 1.1.1 Class GA Groundwater Quality Standards.

Qualifiers:

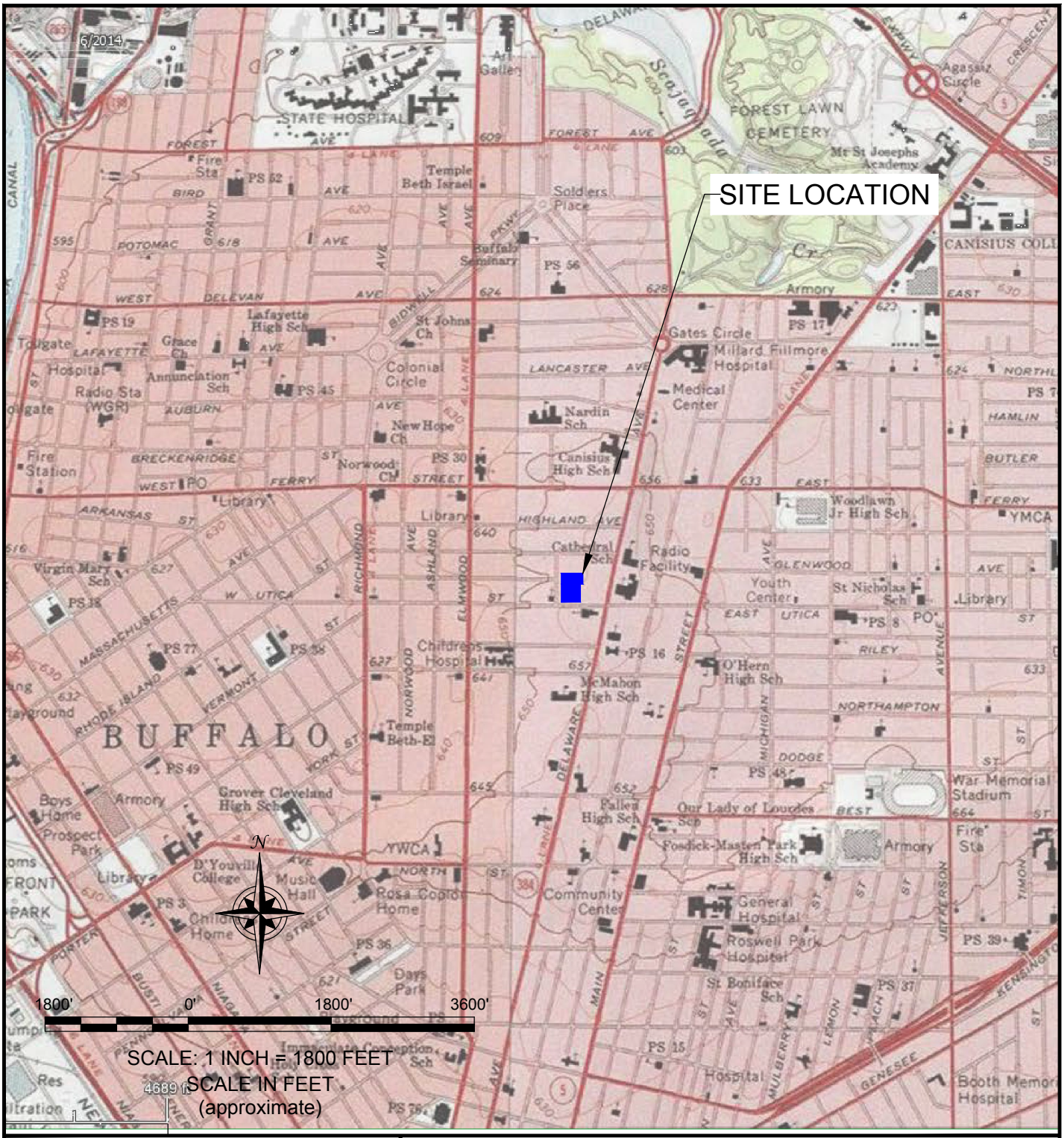
ND = Parameter not detected above laboratory detection limit.
J = Estimated Value - Below calibration range

= Result exceeds GWQS.

FIGURES

F:\CAD\TurnKey\Sinatra\165 West Utica - Cadet Cleaners\BCP Application\Figure 1; Site Location and Vicinity Map.dwg

FIGURE 1



TURNKEY ENVIRONMENTAL RESTORATION, LLC

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

SITE LOCATION AND VICINITY

SUPPLEMENTAL PHASE II ENVIRONMENTAL SITE INVESTIGATION

FORMER CENTRAL DRY CLEANERS SITE

BUFFALO, NEW YORK

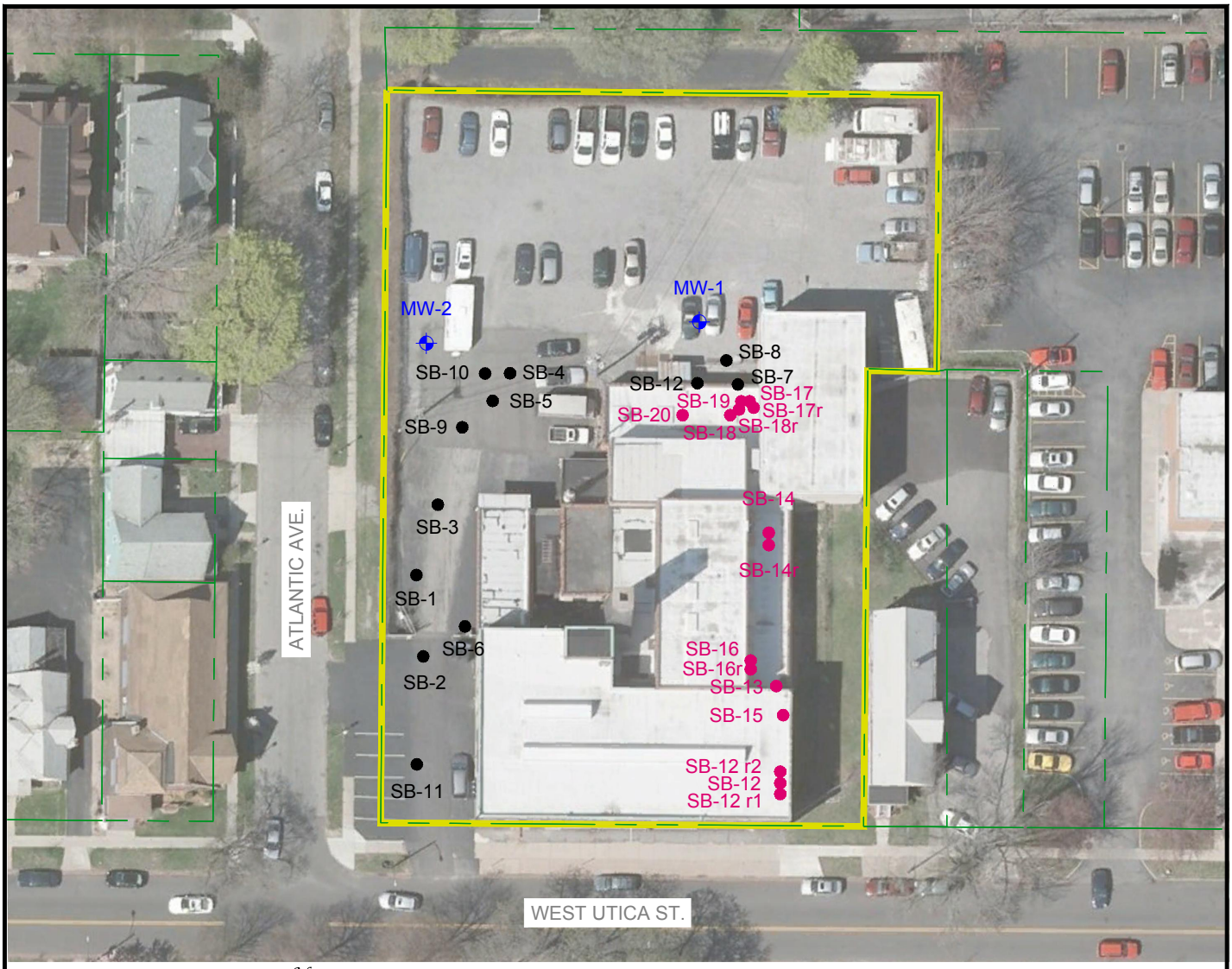
PREPARED FOR

169 WEST UTICA, LLC

PROJECT NO.:	T0239-017-002
DATE:	JULY 2017
DRAFTED BY:	CEH

F:\CAD\TurnKey\Sinatra\165 West Utica - Cadet Cleaners\BCP Application\Figure 2; Site Plan (Aerial) rev.dwg

FIGURE 2



N

60' 0' 60' 120'

SCALE: 1 INCH = 60 FEET
SCALE IN FEET
(approximate)

LEGEND:

- PROPERTY BOUNDARY
- PARCEL BOUNDARY
- MW-2 — MONITORING WELL LOCATION (SUPPLEMENTAL INVESTIGATION, JAN. 2018)
- SB-12 — SOIL BORING LOCATION (JULY 2017)
- SB-13 — SOIL BORING LOCATION (SUPPLEMENTAL INVESTIGATION, JAN. 2018)

BENCHMARK ENVIRONMENTAL ENGINEERING & SCIENCE, PLLC
TURNKEY ENVIRONMENTAL RESTORATION, LLC
2558 HAMBURG TURNPIKE, SUITE 300, BUFFALO, NY 14218, (716) 856-0599

PROJECT NO.: T0239-017-002

DATE: JULY 2017

DRAFTED BY: CMC

INVESTIGATION LOCATIONS

SUPPLEMENTAL PHASE II ENVIRONMENTAL SITE INVESTIGATION

FORMER CENTRAL DRY CLEANERS SITE

BUFFALO, NEW YORK

PREPARED FOR

169 WEST UTICA, LLC

ATTACHMENT 1

GROUNDWATER BORING LOG

Project No: 0239-017-002

Borehole Number: MW-1

Project: 165-169 West Utica Street Site

A.K.A.:

Client: 471 Elmwood Group, LLC

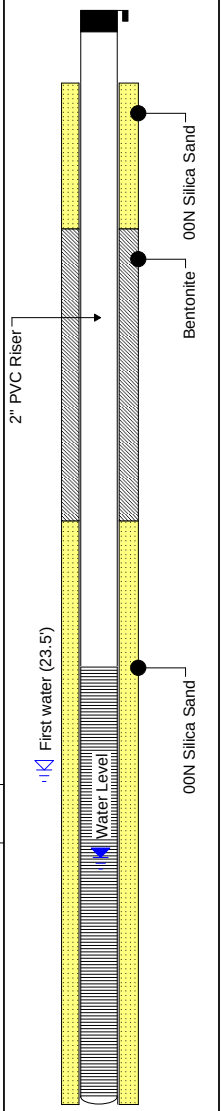
Logged By: NAS

Site Location: Buffalo, NY

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
0.0	0.0	***Gravel*** Grey, moist, mostly subangular gravel	1	25	1.5		0.0		
2.0		***Fill*** Black, moist, mostly fine sand, some subangular gravel, little cinders, ash, no odors	2	50	2		0.0		
-4.0	4.0	***Fill*** Tan, moist, mostly fine sand, little medium sand, few subrounded gravel, little fill white soap like material	3	47	1.5		0.0		
7.0		***Well graded sand*** Tan, moist, mostly well graded sand, trace subrounded gravel, very dense, no odors	4	43	1.5		0.0		
			5	58	2		0.0		
			6	56	1.8		0.0		
12.0			7	43	2		0.2		
			8	64	2		0.0		
			9	86	2		0.0		
17.0			10	43	2		0.8		
-20.0	20.0	***Well graded sand with gravel*** Grey, moist to wet (23.5'), mostly well graded sand, some subrounded gravel, strong odors	11	48	2		95.0		
22.0			12	64	1.75		127.0		
			13	43	2		567.0	Sampled (24-26')	
27.0			14	36	1.5		382.0		
			15	53	1.5		8.7		
			16	56	1.8		4.0		
32.0			17	43	2		2.0		
-35.0	35.0	End of Borehole	18	45	2				
37.0									



Drilled By: Earth Dimensions, Inc.
Drill Rig Type: Diedrich D120
Drill Method: 4 1/4- Inch HSA, w/ continous SS
Comments:
Drill Date(s): 1/26/2018

Hole Size: 8 1/4-inch
Stick-up: 2.25'
Datum: NAVD 88

Sheet: 1 of 1

Project No: 0239-017-002

Borehole Number: MW-2

Project: 165-169 West Utica Street Site

A.K.A.:

Client: 471 Elmwood Group, LLC

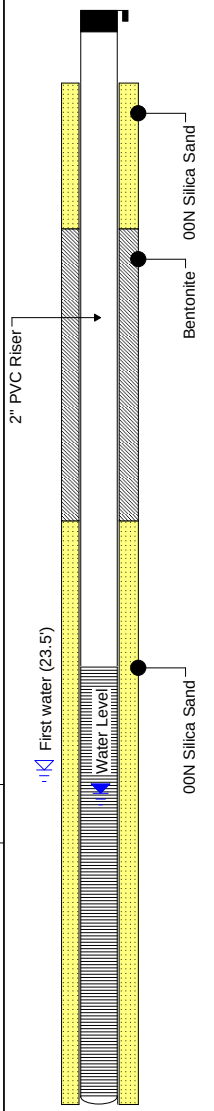
Logged By: NAS

Site Location: Buffalo, NY

Checked By: NTM

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

SUBSURFACE PROFILE			SAMPLE						
Depth (fbgs)	Elev. /Depth	Description (ASTM D2488: Visual-Manual Procedure)	Sample No.	SPT N-Value	Recovery (ft)	Symbol	PID VOCs (ppm)	Lab Sample	Well Completion Details or Remarks
0.0	0.0	Ground Surface							
0.0	0.0	***Gravel*** Grey, moist, mostly subangular gravel					0.0		
2.0		***Fill*** Black, moist, mostly fine sand, some subangular gravel, little cinders, ash, no odors					0.0		
7.0		***Well graded sand*** Tan, moist, mostly well graded sand, trace subrounded gravel, very dense, no odors					0.0		
12.0							0.0		
17.0							0.0		
20.0	-20.0						0.0		
22.0		***Well graded sand with gravel*** Grey, moist to wet (23.5'), mostly well graded sand, little subrounded gravel, strong odors	1	48	2		433.0		
			2	64	1.75		553.0		
			3	43	2		73.0	Sampled (24-26')	
27.0			4	36	1.5		1.4		
			5	53	1.5				
32.0									
35.0	-35.0	End of Borehole							
37.0									



Drilled By: Earth Dimensions, Inc.
Drill Rig Type: Diedrich D120
Drill Method: 4 1/4- Inch HSA, standard drill to 20' w/ continous SS to 28
Comments:
Drill Date(s): 1/29/2018

Hole Size: 8 1/4-inch
Stick-up: 2.5'
Datum: NAVD 88

Sheet: 1 of 1

ATTACHMENT 2

LABORATORY ANALYTICAL DATA PACKAGE
(ELECTRONICALLY)

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: 480-130382-1
Client Project/Site: Benchmark - 165 West Utica

For:
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Attn: Nate Munley

Joseph V. Giacomazza

Authorized for release by:
1/30/2018 2:11:43 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

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

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

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

Table of Contents

Definitions/Glossary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Qualifiers

GC/MS VOA

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

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

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

Job ID: 480-130382-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-130382-1

Comments
No additional comments.

Receipt
The samples were received on 1/19/2018 4:32 PM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.8º C.

GC/MS VOA
Method(s) 8260C: The laboratory control sample (LCS) for preparation batch 480-397178 and analytical batch 480-397378 recovered outside control limits for the following analyte: 1,2-Dibromo-3-Chloropropane. 1,2-Dibromo-3-Chloropropane has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction was not performed. These results have been reported and qualified.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: SB-14 (480-130382-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: SB-20 (480-130382-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following volatiles sample was diluted due to foaming at the time of purging during the original sample analysis: SB-20 (480-130382-5). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples as analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: SB-14 (480-130382-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following samples were analyzed using medium level soil analysis to bring the concentration of target analytes within the calibration range: SB-15 (480-130382-2) and SB-16 (480-130382-3). Elevated reporting limits (RLs) are provided.

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-20 (480-130382-5), (480-130382-A-5-H MS) and (480-130382-A-5-I 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.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Client Sample ID: SB-14 (5"-1') — Lab Sample ID: 480-130382-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	5700	J B	6300	1300	ug/Kg	50	☼	8260C	Total/NA
Tetrachloroethene	420000		6300	850	ug/Kg	50	☼	8260C	Total/NA

Client Sample ID: SB-15 (3-4') — Lab Sample ID: 480-130382-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	86	J B	110	22	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	7200		110	15	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-(7-8') — Lab Sample ID: 480-130382-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Methylene Chloride	76	J B	110	21	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	1900		110	14	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-18 (4-6') — Lab Sample ID: 480-130382-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1.9	J vs	5.3	1.0	ug/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	1.0	J vs	5.3	0.34	ug/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	0.76	J vs	5.3	0.42	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene	29	vs	5.3	0.71	ug/Kg	1	☼	8260C	Total/NA

Client Sample ID: SB-20 (.5-1') — Lab Sample ID: 480-130382-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	200	vs	6.2	1.2	ug/Kg	1	☼	8260C	Total/NA
1,2-Dichloroethane	0.34	J vs	6.2	0.31	ug/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	100	vs	6.2	0.40	ug/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	42	vs	6.2	0.50	ug/Kg	1	☼	8260C	Total/NA
Acetone	65	vs	31	5.2	ug/Kg	1	☼	8260C	Total/NA
Benzene	0.46	J vs	6.2	0.31	ug/Kg	1	☼	8260C	Total/NA
cis-1,2-Dichloroethene	74	vs	6.2	0.80	ug/Kg	1	☼	8260C	Total/NA
Cyclohexane	1.3	J vs	6.2	0.87	ug/Kg	1	☼	8260C	Total/NA
Ethylbenzene	2.4	J vs	6.2	0.43	ug/Kg	1	☼	8260C	Total/NA
Isopropylbenzene	4.8	J vs	6.2	0.94	ug/Kg	1	☼	8260C	Total/NA
Methylcyclohexane	2.9	J vs	6.2	0.95	ug/Kg	1	☼	8260C	Total/NA
Methylene Chloride	8.0	vs	6.2	2.9	ug/Kg	1	☼	8260C	Total/NA
m,p-Xylene	14	vs	12	1.0	ug/Kg	1	☼	8260C	Total/NA
N-Propylbenzene	14	vs	6.2	0.50	ug/Kg	1	☼	8260C	Total/NA
o-Xylene	9.8	vs	6.2	0.81	ug/Kg	1	☼	8260C	Total/NA
sec-Butylbenzene	24	vs	6.2	0.54	ug/Kg	1	☼	8260C	Total/NA
Toluene	18	vs	6.2	0.47	ug/Kg	1	☼	8260C	Total/NA
trans-1,2-Dichloroethene	2.4	J vs	6.2	0.64	ug/Kg	1	☼	8260C	Total/NA
Trichloroethene	27	vs	6.2	1.4	ug/Kg	1	☼	8260C	Total/NA
Xylenes, Total	24	vs	12	1.0	ug/Kg	1	☼	8260C	Total/NA
tert-Butylbenzene	3.1	J vs	6.2	0.65	ug/Kg	1	☼	8260C	Total/NA
Tetrachloroethene - DL	3000		550	74	ug/Kg	4	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: SB-14 (5"-1')
Date Collected: 01/19/18 11:00
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-1
Matrix: Solid
Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		6300	1800	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,1,2,2-Tetrachloroethane	ND		6300	1000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6300	3200	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,1,2-Trichloroethane	ND		6300	1300	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,1-Dichloroethane	ND		6300	2000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,1-Dichloroethene	ND		6300	2200	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,2,4-Trichlorobenzene	ND		6300	2400	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,2,4-Trimethylbenzene	ND		6300	1800	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,2-Dibromo-3-Chloropropane	ND	*	6300	3200	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,2-Dibromoethane	ND		6300	1100	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,2-Dichlorobenzene	ND		6300	1600	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,2-Dichloroethane	ND		6300	2600	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,2-Dichloropropane	ND		6300	1000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,3,5-Trimethylbenzene	ND		6300	1900	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,3-Dichlorobenzene	ND		6300	1700	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
1,4-Dichlorobenzene	ND		6300	890	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
2-Butanone (MEK)	ND		32000	19000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
2-Hexanone	ND		32000	13000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
4-Isopropyltoluene	ND		6300	2100	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
4-Methyl-2-pentanone (MIBK)	ND		32000	2000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Acetone	ND		32000	26000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Benzene	ND		6300	1200	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Bromodichloromethane	ND		6300	1300	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Bromoform	ND		6300	3200	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Bromomethane	ND		6300	1400	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Carbon disulfide	ND		6300	2900	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Carbon tetrachloride	ND		6300	1600	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Chlorobenzene	ND		6300	840	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Chloroethane	ND		6300	1300	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Chloroform	ND		6300	4300	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Chloromethane	ND		6300	1500	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
cis-1,2-Dichloroethene	ND		6300	1700	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
cis-1,3-Dichloropropene	ND		6300	1500	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Cyclohexane	ND		6300	1400	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Dibromochloromethane	ND		6300	3100	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Dichlorodifluoromethane	ND		6300	2800	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Ethylbenzene	ND		6300	1800	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Isopropylbenzene	ND		6300	950	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
m,p-Xylene	ND		13000	3500	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Methyl acetate	ND		32000	3000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Methyl tert-butyl ether	ND		6300	2400	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Methylcyclohexane	ND		6300	3000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Methylene Chloride	**5700**	**J B**	6300	1300	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
n-Butylbenzene	ND		6300	1800	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
N-Propylbenzene	ND		6300	1700	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
o-Xylene	ND		6300	820	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
sec-Butylbenzene	ND		6300	2300	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Styrene	ND		6300	1500	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
tert-Butylbenzene	ND		6300	1800	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50

Client Sample ID: SB-14 (5"-1')
Date Collected: 01/19/18 11:00
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-1
Matrix: Solid
Percent Solids: 84.8

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	420000		6300	850	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Toluene	ND		6300	1700	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
trans-1,2-Dichloroethene	ND		6300	1500	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
trans-1,3-Dichloropropene	ND		6300	620	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Trichloroethene	ND		6300	1800	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Trichlorofluoromethane	ND		6300	3000	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Vinyl chloride	ND		6300	2100	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50
Xylenes, Total	ND		13000	3500	ug/Kg	☼	01/24/18 15:04	01/25/18 22:14	50

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*73000*	*T J*	*ug/Kg*	☼	*10.56*		*01/24/18 15:04*	*01/25/18 22:14*	*50*
Unknown	*47000*	*T J*	*ug/Kg*	☼	*10.60*		*01/24/18 15:04*	*01/25/18 22:14*	*50*
Unknown	*74000*	*T J*	*ug/Kg*	☼	*10.88*		*01/24/18 15:04*	*01/25/18 22:14*	*50*
Unknown	*46000*	*T J*	*ug/Kg*	☼	*10.99*		*01/24/18 15:04*	*01/25/18 22:14*	*50*
Naphthalene, decahydro-	*120000*	*T J N*	*ug/Kg*	☼	*11.08*	*91-17-8*	*01/24/18 15:04*	*01/25/18 22:14*	*50*
Unknown	*86000*	*T J*	*ug/Kg*	☼	*11.25*		*01/24/18 15:04*	*01/25/18 22:14*	*50*
Unknown	*100000*	*T J*	*ug/Kg*	☼	*11.35*		*01/24/18 15:04*	*01/25/18 22:14*	*50*
9-Methylbicyclo[3.3.1]nonane	*53000*	*T J N*	*ug/Kg*	☼	*11.59*	*25107-01-1*	*01/24/18 15:04*	*01/25/18 22:14*	*50*
trans-Decalin, 2-methyl-	*85000*	*T J N*	*ug/Kg*	☼	*11.65*	*1000152-47-3*	*01/24/18 15:04*	*01/25/18 22:14*	*50*
Unknown	*58000*	*T J*	*ug/Kg*	☼	*11.84*		*01/24/18 15:04*	*01/25/18 22:14*	*50*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*53 - 146*	*01/24/18 15:04*	*01/25/18 22:14*	*50*
4-Bromofluorobenzene (Surr)	*107*		*49 - 148*	*01/24/18 15:04*	*01/25/18 22:14*	*50*
Dibromofluoromethane (Surr)	*101*		*60 - 140*	*01/24/18 15:04*	*01/25/18 22:14*	*50*
Toluene-d8 (Surr)	*104*		*50 - 149*	*01/24/18 15:04*	*01/25/18 22:14*	*50*

Client Sample ID: SB-15 (3-4')
Date Collected: 01/19/18 12:00
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-2
Matrix: Solid
Percent Solids: 91.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		110	31	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,1,2,2-Tetrachloroethane	ND		110	18	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		110	56	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,1,2-Trichloroethane	ND		110	24	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,1-Dichloroethane	ND		110	35	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,1-Dichloroethene	ND		110	39	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,2,4-Trichlorobenzene	ND		110	43	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,2,4-Trimethylbenzene	ND		110	31	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,2-Dibromo-3-Chloropropane	ND	*	110	56	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,2-Dibromoethane	ND		110	20	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,2-Dichlorobenzene	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,2-Dichloroethane	ND		110	46	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,2-Dichloropropane	ND		110	18	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,3,5-Trimethylbenzene	ND		110	34	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,3-Dichlorobenzene	ND		110	30	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
1,4-Dichlorobenzene	ND		110	16	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
2-Butanone (MEK)	ND		560	330	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
2-Hexanone	ND		560	230	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
4-Isopropyltoluene	ND		110	38	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
4-Methyl-2-pentanone (MIBK)	ND		560	36	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Acetone	ND		560	460	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Benzene	ND		110	21	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Bromodichloromethane	ND		110	23	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Bromoform	ND		110	56	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Bromomethane	ND		110	25	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Carbon disulfide	ND		110	51	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Carbon tetrachloride	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Chlorobenzene	ND		110	15	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Chloroethane	ND		110	23	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Chloroform	ND		110	77	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Chloromethane	ND		110	27	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
cis-1,2-Dichloroethene	ND		110	31	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
cis-1,3-Dichloropropene	ND		110	27	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Cyclohexane	ND		110	25	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Dibromochloromethane	ND		110	54	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Dichlorodifluoromethane	ND		110	49	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Ethylbenzene	ND		110	33	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Isopropylbenzene	ND		110	17	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
m,p-Xylene	ND		230	62	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Methyl acetate	ND		560	54	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Methyl tert-butyl ether	ND		110	43	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Methylcyclohexane	ND		110	53	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Methylene Chloride	**86**	**J B**	110	22	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
n-Butylbenzene	ND		110	33	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
N-Propylbenzene	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
o-Xylene	ND		110	15	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
sec-Butylbenzene	ND		110	41	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Styrene	ND		110	27	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
tert-Butylbenzene	ND		110	31	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Client Sample ID: SB-15 (3-4')
Date Collected: 01/19/18 12:00
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-2
Matrix: Solid
Percent Solids: 91.3

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	7200		110	15	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Toluene	ND		110	30	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
trans-1,2-Dichloroethene	ND		110	27	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
trans-1,3-Dichloropropene	ND		110	11	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Trichloroethene	ND		110	31	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Trichlorofluoromethane	ND		110	53	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Vinyl chloride	ND		110	38	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1
Xylenes, Total	ND		230	62	ug/Kg	☼	01/24/18 15:04	01/25/18 22:38	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*	*01/24/18 15:04*	*01/25/18 22:38*	*1*
4-Bromofluorobenzene (Surr)	*105*		*49 - 148*	*01/24/18 15:04*	*01/25/18 22:38*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*01/24/18 15:04*	*01/25/18 22:38*	*1*
Toluene-d8 (Surr)	*104*		*50 - 149*	*01/24/18 15:04*	*01/25/18 22:38*	*1*

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Client Sample ID: SB-(7-8')
Date Collected: 01/19/18 12:30
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-3
Matrix: Solid
Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,1,2,2-Tetrachloroethane	ND		110	17	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		110	53	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,1,2-Trichloroethane	ND		110	22	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,1-Dichloroethane	ND		110	32	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,1-Dichloroethene	ND		110	36	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,2,4-Trichlorobenzene	ND		110	40	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,2,4-Trimethylbenzene	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,2-Dibromo-3-Chloropropane	ND	*	110	53	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,2-Dibromoethane	ND		110	18	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,2-Dichlorobenzene	ND		110	27	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,2-Dichloroethane	ND		110	43	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,2-Dichloropropane	ND		110	17	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,3,5-Trimethylbenzene	ND		110	32	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,3-Dichlorobenzene	ND		110	28	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
1,4-Dichlorobenzene	ND		110	15	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
2-Butanone (MEK)	ND		530	310	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
2-Hexanone	ND		530	220	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
4-Isopropyltoluene	ND		110	35	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
4-Methyl-2-pentanone (MIBK)	ND		530	34	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Acetone	ND		530	430	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Benzene	ND		110	20	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Bromodichloromethane	ND		110	21	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Bromoform	ND		110	53	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Bromomethane	ND		110	23	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Carbon disulfide	ND		110	48	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Carbon tetrachloride	ND		110	27	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Chlorobenzene	ND		110	14	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Chloroethane	ND		110	22	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Chloroform	ND		110	72	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Chloromethane	ND		110	25	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
cis-1,2-Dichloroethene	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
cis-1,3-Dichloropropene	ND		110	25	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Cyclohexane	ND		110	23	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Dibromochloromethane	ND		110	51	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Dichlorodifluoromethane	ND		110	46	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Ethylbenzene	ND		110	31	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Isopropylbenzene	ND		110	16	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
m,p-Xylene	ND		210	58	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Methyl acetate	ND		530	50	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Methyl tert-butyl ether	ND		110	40	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Methylcyclohexane	ND		110	49	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Methylene Chloride	**76**	**J B**	110	21	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
n-Butylbenzene	ND		110	31	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
N-Propylbenzene	ND		110	28	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
o-Xylene	ND		110	14	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
sec-Butylbenzene	ND		110	39	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Styrene	ND		110	25	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
tert-Butylbenzene	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Client Sample ID: SB-(7-8')
Date Collected: 01/19/18 12:30
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-3
Matrix: Solid
Percent Solids: 96.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	1900		110	14	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Toluene	ND		110	28	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
trans-1,2-Dichloroethene	ND		110	25	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
trans-1,3-Dichloropropene	ND		110	10	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Trichloroethene	ND		110	29	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Trichlorofluoromethane	ND		110	49	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Vinyl chloride	ND		110	35	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1
Xylenes, Total	ND		210	58	ug/Kg	☼	01/24/18 15:04	01/25/18 23:01	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*	*01/24/18 15:04*	*01/25/18 23:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*49 - 148*	*01/24/18 15:04*	*01/25/18 23:01*	*1*
Dibromofluoromethane (Surr)	*94*		*60 - 140*	*01/24/18 15:04*	*01/25/18 23:01*	*1*
Toluene-d8 (Surr)	*104*		*50 - 149*	*01/24/18 15:04*	*01/25/18 23:01*	*1*

Client Sample ID: SB-18 (4-6')

Date Collected: 01/19/18 14:30
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-4

Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	5.3	0.38	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,1,2,2-Tetrachloroethane	ND	vs	5.3	0.86	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	5.3	1.2	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,1,2-Trichloroethane	ND	vs	5.3	0.69	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,1-Dichloroethane	ND	vs	5.3	0.64	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,1-Dichloroethene	ND	vs	5.3	0.65	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,2,4-Trichlorobenzene	ND	vs	5.3	0.32	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,2,4-Trimethylbenzene	**1.9**	**J vs**	5.3	1.0	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,2-Dibromo-3-Chloropropane	ND	vs	5.3	2.6	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,2-Dibromoethane	ND	vs	5.3	0.68	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,2-Dichlorobenzene	ND	vs	5.3	0.41	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,2-Dichloroethane	ND	vs	5.3	0.26	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,2-Dichloropropane	ND	vs	5.3	2.6	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,3,5-Trimethylbenzene	**1.0**	**J vs**	5.3	0.34	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,3-Dichlorobenzene	ND	vs	5.3	0.27	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
1,4-Dichlorobenzene	ND	vs	5.3	0.74	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
2-Butanone (MEK)	ND	vs	26	1.9	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
2-Hexanone	ND	vs	26	2.6	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
4-Isopropyltoluene	**0.76**	**J vs**	5.3	0.42	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
4-Methyl-2-pentanone (MIBK)	ND	vs	26	1.7	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Acetone	ND	vs	26	4.4	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Benzene	ND	vs	5.3	0.26	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Bromodichloromethane	ND	vs	5.3	0.71	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Bromoform	ND	vs	5.3	2.6	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Bromomethane	ND	vs	5.3	0.47	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Carbon disulfide	ND	vs	5.3	2.6	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Carbon tetrachloride	ND	vs	5.3	0.51	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Chlorobenzene	ND	vs	5.3	0.70	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Chloroethane	ND	vs	5.3	1.2	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Chloroform	ND	vs	5.3	0.33	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Chloromethane	ND	vs	5.3	0.32	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
cis-1,2-Dichloroethene	ND	vs	5.3	0.67	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
cis-1,3-Dichloropropene	ND	vs	5.3	0.76	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Cyclohexane	ND	vs	5.3	0.74	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Dibromochloromethane	ND	vs	5.3	0.67	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Dichlorodifluoromethane	ND	vs	5.3	0.44	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Ethylbenzene	ND	vs	5.3	0.36	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Isopropylbenzene	ND	vs	5.3	0.80	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
m,p-Xylene	ND	vs	11	0.89	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Methyl acetate	ND	vs	26	3.2	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Methyl tert-butyl ether	ND	vs	5.3	0.52	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Methylcyclohexane	ND	vs	5.3	0.80	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Methylene Chloride	ND	vs	5.3	2.4	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
n-Butylbenzene	ND	vs	5.3	0.46	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
N-Propylbenzene	ND	vs	5.3	0.42	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
o-Xylene	ND	vs	5.3	0.69	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
sec-Butylbenzene	ND	vs	5.3	0.46	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Styrene	ND	vs	5.3	0.26	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
tert-Butylbenzene	ND	vs	5.3	0.55	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Client Sample ID: SB-18 (4-6')
Date Collected: 01/19/18 14:30
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-4
Matrix: Solid
Percent Solids: 94.4

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**29**	**vs**	5.3	0.71	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Toluene	ND	vs	5.3	0.40	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
trans-1,2-Dichloroethene	ND	vs	5.3	0.54	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
trans-1,3-Dichloropropene	ND	vs	5.3	2.3	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Trichloroethene	ND	vs	5.3	1.2	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Trichlorofluoromethane	ND	vs	5.3	0.50	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Vinyl chloride	ND	vs	5.3	0.64	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1
Xylenes, Total	ND	vs	11	0.89	ug/Kg	☼	01/23/18 08:49	01/23/18 20:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*64 - 126*	*01/23/18 08:49*	*01/23/18 20:11*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 126*	*01/23/18 08:49*	*01/23/18 20:11*	*1*
Dibromofluoromethane (Surr)	*103*		*60 - 140*	*01/23/18 08:49*	*01/23/18 20:11*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*01/23/18 08:49*	*01/23/18 20:11*	*1*

Client Sample ID: SB-20 (.5-1')

Date Collected: 01/19/18 15:20
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-5

Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND	vs	6.2	0.45	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,1,2,2-Tetrachloroethane	ND	vs	6.2	1.0	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND	vs	6.2	1.4	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,1,2-Trichloroethane	ND	vs	6.2	0.81	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,1-Dichloroethane	ND	vs	6.2	0.76	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,1-Dichloroethene	ND	vs	6.2	0.76	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,2,4-Trichlorobenzene	ND	vs	6.2	0.38	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,2,4-Trimethylbenzene	**200**	**vs**	6.2	1.2	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,2-Dibromo-3-Chloropropane	ND	vs	6.2	3.1	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,2-Dichlorobenzene	ND	vs	6.2	0.49	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,2-Dichloroethane	**0.34**	**J vs**	6.2	0.31	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,2-Dichloropropane	ND	vs	6.2	3.1	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,3,5-Trimethylbenzene	**100**	**vs**	6.2	0.40	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,3-Dichlorobenzene	ND	vs	6.2	0.32	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,4-Dichlorobenzene	ND	vs	6.2	0.87	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
2-Butanone (MEK)	ND	vs	31	2.3	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
2-Hexanone	ND	vs	31	3.1	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
4-Isopropyltoluene	**42**	**vs**	6.2	0.50	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
4-Methyl-2-pentanone (MIBK)	ND	vs	31	2.0	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Acetone	**65**	**vs**	31	5.2	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Benzene	**0.46**	**J vs**	6.2	0.31	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Bromoform	ND	vs	6.2	3.1	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Bromomethane	ND	vs	6.2	0.56	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Carbon disulfide	ND	vs	6.2	3.1	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Carbon tetrachloride	ND	vs	6.2	0.60	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Chlorobenzene	ND	vs	6.2	0.82	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Dibromochloromethane	ND	vs	6.2	0.80	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Chloroethane	ND	vs	6.2	1.4	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Chloroform	ND	vs	6.2	0.39	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Chloromethane	ND	vs	6.2	0.38	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
cis-1,2-Dichloroethene	**74**	**vs**	6.2	0.80	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Cyclohexane	**1.3**	**J vs**	6.2	0.87	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Bromodichloromethane	ND	vs	6.2	0.83	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Dichlorodifluoromethane	ND	vs	6.2	0.51	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Ethylbenzene	**2.4**	**J vs**	6.2	0.43	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
1,2-Dibromoethane	ND	vs	6.2	0.80	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Isopropylbenzene	**4.8**	**J vs**	6.2	0.94	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Methyl acetate	ND	vs	31	3.8	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Methyl tert-butyl ether	ND	vs	6.2	0.61	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Methylcyclohexane	**2.9**	**J vs**	6.2	0.95	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Methylene Chloride	**8.0**	**vs**	6.2	2.9	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
m,p-Xylene	**14**	**vs**	12	1.0	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
n-Butylbenzene	ND	vs	6.2	0.54	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
N-Propylbenzene	**14**	**vs**	6.2	0.50	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
o-Xylene	**9.8**	**vs**	6.2	0.81	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
sec-Butylbenzene	**24**	**vs**	6.2	0.54	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Toluene	**18**	**vs**	6.2	0.47	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
trans-1,2-Dichloroethene	**2.4**	**J vs**	6.2	0.64	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
trans-1,3-Dichloropropene	ND	vs	6.2	2.7	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1

Client Sample ID: SB-20 (.5-1')
Date Collected: 01/19/18 15:20
Date Received: 01/19/18 16:32

Lab Sample ID: 480-130382-5
Matrix: Solid
Percent Solids: 79.0

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**27**	**vs**	6.2	1.4	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Trichlorofluoromethane	ND	vs	6.2	0.59	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Vinyl chloride	ND	vs	6.2	0.76	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Xylenes, Total	**24**	**vs**	12	1.0	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
cis-1,3-Dichloropropene	ND	vs	6.2	0.90	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
Styrene	ND	vs	6.2	0.31	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1
tert-Butylbenzene	**3.1**	**J vs**	6.2	0.65	ug/Kg	☼	01/23/18 08:49	01/23/18 20:37	1

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Unknown	*610*	*T J*	*ug/Kg*	☼	*8.51*		*01/23/18 08:49*	*01/23/18 20:37*	*1*
Cyclohexane, (1-methylethyl)-	*230*	*T J N*	*ug/Kg*	☼	*8.73*	*696-29-7*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
Cyclohexane, propyl-	*540*	*T J N*	*ug/Kg*	☼	*8.83*	*1678-92-8*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
Octane, 3,6-dimethyl-	*250*	*T J N*	*ug/Kg*	☼	*9.18*	*15869-94-0*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
Unknown	*430*	*T J*	*ug/Kg*	☼	*9.33*		*01/23/18 08:49*	*01/23/18 20:37*	*1*
Decane	*1400*	*T J N*	*ug/Kg*	☼	*9.53*	*124-18-5*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
Unknown	*290*	*T J*	*ug/Kg*	☼	*9.72*		*01/23/18 08:49*	*01/23/18 20:37*	*1*
Unknown	*660*	*T J*	*ug/Kg*	☼	*9.83*		*01/23/18 08:49*	*01/23/18 20:37*	*1*
Undecane	*950*	*T J N*	*ug/Kg*	☼	*10.66*	*1120-21-4*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
Benzene, 2-ethyl-1,4-dimethyl-	*260*	*T J N*	*ug/Kg*	☼	*10.87*	*1758-88-9*	*01/23/18 08:49*	*01/23/18 20:37*	*1*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*64 - 126*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
4-Bromofluorobenzene (Surr)	*86*		*72 - 126*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
Toluene-d8 (Surr)	*93*		*71 - 125*	*01/23/18 08:49*	*01/23/18 20:37*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*01/23/18 08:49*	*01/23/18 20:37*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**3000**		550	74	ug/Kg	☼	01/25/18 15:41	01/26/18 18:09	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Nonane	*3100*	*T J N*	*ug/Kg*	☼	*8.63*	*111-84-2*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Octane, 2,6-dimethyl-	*3900*	*T J N*	*ug/Kg*	☼	*9.15*	*2051-30-1*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Unknown	*4900*	*T J*	*ug/Kg*	☼	*9.30*		*01/25/18 15:41*	*01/26/18 18:09*	*4*
Unknown	*3200*	*T J*	*ug/Kg*	☼	*9.47*		*01/25/18 15:41*	*01/26/18 18:09*	*4*
Nonane, 4-methyl-	*2600*	*T J N*	*ug/Kg*	☼	*9.54*	*17301-94-9*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Decane, 4-methyl-	*5900*	*T J N*	*ug/Kg*	☼	*10.33*	*2847-72-5*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Unknown	*2700*	*T J*	*ug/Kg*	☼	*10.63*		*01/25/18 15:41*	*01/26/18 18:09*	*4*
Decane, 3-methyl-	*2800*	*T J N*	*ug/Kg*	☼	*10.88*	*13151-34-3*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Undecane	*10000*	*T J N*	*ug/Kg*	☼	*11.18*	*1120-21-4*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Dodecane	*2500*	*T J N*	*ug/Kg*	☼	*12.14*	*112-40-3*	*01/25/18 15:41*	*01/26/18 18:09*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*97*		*53 - 146*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Dibromofluoromethane (Surr)	*96*		*60 - 140*	*01/25/18 15:41*	*01/26/18 18:09*	*4*
Toluene-d8 (Surr)	*101*		*50 - 149*	*01/25/18 15:41*	*01/26/18 18:09*	*4*

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(53-146)	(49-148)	(60-140)	(50-149)
480-130382-1	SB-14 (5"-1')	102	107	101	104
480-130382-2	SB-15 (3-4')	98	105	94	104
480-130382-3	SB-(7-8')	98	103	94	104
480-130382-5 - DL	SB-20 (.5-1')	97	106	96	101
480-130382-5 MS	SB-20 (.5-1')	98	105	98	101
480-130382-5 MSD	SB-20 (.5-1')	96	105	101	101
LCS 480-397178/1-A	Lab Control Sample	96	107	105	103
LCS 480-397362/1-A	Lab Control Sample	97	107	104	105
MB 480-397178/2-A	Method Blank	96	106	96	102
MB 480-397362/2-A	Method Blank	99	108	97	105

Surrogate Legend

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

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(64-126)	(72-126)	(60-140)	(71-125)
480-130382-4	SB-18 (4-6')	102	97	103	98
480-130382-5	SB-20 (.5-1')	97	86	102	93
LCS 480-396862/1-A	Lab Control Sample	100	99	103	96
MB 480-396862/2-A	Method Blank	104	101	102	98

Surrogate Legend

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

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

Lab Sample ID: MB 480-396862/2-A
Matrix: Solid
Analysis Batch: 396868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		5.0	0.36	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,1,2,2-Tetrachloroethane	ND		5.0	0.81	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		5.0	1.1	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,1,2-Trichloroethane	ND		5.0	0.65	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,1-Dichloroethane	ND		5.0	0.61	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,1-Dichloroethene	ND		5.0	0.61	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,2,4-Trichlorobenzene	ND		5.0	0.30	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,2,4-Trimethylbenzene	ND		5.0	0.96	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,2-Dibromo-3-Chloropropane	ND		5.0	2.5	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,2-Dichlorobenzene	ND		5.0	0.39	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,2-Dichloroethane	ND		5.0	0.25	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,2-Dichloropropane	ND		5.0	2.5	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,3,5-Trimethylbenzene	ND		5.0	0.32	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,3-Dichlorobenzene	ND		5.0	0.26	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,4-Dichlorobenzene	ND		5.0	0.70	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
2-Butanone (MEK)	ND		25	1.8	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
2-Hexanone	ND		25	2.5	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
4-Isopropyltoluene	ND		5.0	0.40	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
4-Methyl-2-pentanone (MIBK)	ND		25	1.6	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Acetone	ND		25	4.2	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Benzene	ND		5.0	0.25	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Bromoform	ND		5.0	2.5	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Bromomethane	ND		5.0	0.45	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Carbon disulfide	ND		5.0	2.5	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Carbon tetrachloride	ND		5.0	0.48	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Chlorobenzene	ND		5.0	0.66	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Chloroethane	ND		5.0	1.1	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Chloroform	ND		5.0	0.31	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Chloromethane	ND		5.0	0.30	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
cis-1,2-Dichloroethene	ND		5.0	0.64	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Bromodichloromethane	ND		5.0	0.67	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Cyclohexane	ND		5.0	0.70	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Dibromochloromethane	ND		5.0	0.64	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
1,2-Dibromoethane	ND		5.0	0.64	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Dichlorodifluoromethane	ND		5.0	0.41	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Ethylbenzene	ND		5.0	0.35	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Isopropylbenzene	ND		5.0	0.75	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Methyl acetate	ND		25	3.0	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
m,p-Xylene	ND		10	0.84	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Methyl tert-butyl ether	ND		5.0	0.49	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Methylcyclohexane	ND		5.0	0.76	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Methylene Chloride	ND		5.0	2.3	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
n-Butylbenzene	ND		5.0	0.44	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
N-Propylbenzene	ND		5.0	0.40	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
o-Xylene	ND		5.0	0.65	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
sec-Butylbenzene	ND		5.0	0.44	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Tetrachloroethene	ND		5.0	0.67	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Toluene	ND		5.0	0.38	ug/Kg		01/23/18 08:49	01/23/18 12:17	1

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

Lab Sample ID: MB 480-396862/2-A
Matrix: Solid
Analysis Batch: 396868

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 396862

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
trans-1,2-Dichloroethene	ND		5.0	0.52	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
trans-1,3-Dichloropropene	ND		5.0	2.2	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
cis-1,3-Dichloropropene	ND		5.0	0.72	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Trichloroethene	ND		5.0	1.1	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Styrene	ND		5.0	0.25	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Trichlorofluoromethane	ND		5.0	0.47	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
tert-Butylbenzene	ND		5.0	0.52	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Vinyl chloride	ND		5.0	0.61	ug/Kg		01/23/18 08:49	01/23/18 12:17	1
Xylenes, Total	ND		10	0.84	ug/Kg		01/23/18 08:49	01/23/18 12:17	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*01/23/18 08:49*	*01/23/18 12:17*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*104*		*64 - 126*	*01/23/18 08:49*	*01/23/18 12:17*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 126*	*01/23/18 08:49*	*01/23/18 12:17*	*1*
Toluene-d8 (Surr)	*98*		*71 - 125*	*01/23/18 08:49*	*01/23/18 12:17*	*1*
Dibromofluoromethane (Surr)	*102*		*60 - 140*	*01/23/18 08:49*	*01/23/18 12:17*	*1*

Lab Sample ID: LCS 480-396862/1-A
Matrix: Solid
Analysis Batch: 396868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	50.0	47.4		ug/Kg		95	77 - 121
1,1,2,2-Tetrachloroethane	50.0	49.0		ug/Kg		98	80 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.0		ug/Kg		94	60 - 140
1,1,2-Trichloroethane	50.0	47.3		ug/Kg		95	78 - 122
1,1-Dichloroethane	50.0	45.8		ug/Kg		92	73 - 126
1,1-Dichloroethene	50.0	45.0		ug/Kg		90	59 - 125
1,2,4-Trichlorobenzene	50.0	46.2		ug/Kg		92	64 - 120
1,2,4-Trimethylbenzene	50.0	46.1		ug/Kg		92	74 - 120
1,2-Dibromo-3-Chloropropane	50.0	52.0		ug/Kg		104	63 - 124
1,2-Dichlorobenzene	50.0	45.0		ug/Kg		90	75 - 120
1,2-Dichloroethane	50.0	47.4		ug/Kg		95	77 - 122
1,2-Dichloropropane	50.0	45.1		ug/Kg		90	75 - 124
1,3,5-Trimethylbenzene	50.0	45.8		ug/Kg		92	74 - 120
1,3-Dichlorobenzene	50.0	45.5		ug/Kg		91	74 - 120
1,4-Dichlorobenzene	50.0	45.6		ug/Kg		91	73 - 120
2-Butanone (MEK)	250	293		ug/Kg		117	70 - 134
2-Hexanone	250	276		ug/Kg		110	59 - 130
4-Isopropyltoluene	50.0	46.7		ug/Kg		93	74 - 120
4-Methyl-2-pentanone (MIBK)	250	263		ug/Kg		105	65 - 133
Acetone	250	324		ug/Kg		130	61 - 137
Benzene	50.0	45.4		ug/Kg		91	79 - 127
Bromoform	50.0	46.2		ug/Kg		92	68 - 126
Bromomethane	50.0	42.4		ug/Kg		85	37 - 149

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

Lab Sample ID: LCS 480-396862/1-A
Matrix: Solid
Analysis Batch: 396868

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 396862

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon disulfide	50.0	43.7		ug/Kg		87	64 - 131
Carbon tetrachloride	50.0	46.2		ug/Kg		92	75 - 135
Chlorobenzene	50.0	46.0		ug/Kg		92	76 - 124
Chloroethane	50.0	42.6		ug/Kg		85	69 - 135
Chloroform	50.0	47.1		ug/Kg		94	80 - 120
Chloromethane	50.0	42.7		ug/Kg		85	63 - 127
cis-1,2-Dichloroethene	50.0	45.6		ug/Kg		91	81 - 120
Bromodichloromethane	50.0	47.0		ug/Kg		94	80 - 122
Cyclohexane	50.0	45.5		ug/Kg		91	65 - 120
Dibromochloromethane	50.0	47.7		ug/Kg		95	76 - 125
1,2-Dibromoethane	50.0	49.2		ug/Kg		98	78 - 120
Dichlorodifluoromethane	50.0	47.8		ug/Kg		96	57 - 142
Ethylbenzene	50.0	45.6		ug/Kg		91	80 - 120
Isopropylbenzene	50.0	45.6		ug/Kg		91	72 - 120
Methyl acetate	100	106		ug/Kg		106	55 - 136
m,p-Xylene	50.0	45.1		ug/Kg		90	70 - 130
Methyl tert-butyl ether	50.0	45.8		ug/Kg		92	63 - 125
Methylcyclohexane	50.0	45.4		ug/Kg		91	60 - 140
Methylene Chloride	50.0	44.3		ug/Kg		89	61 - 127
n-Butylbenzene	50.0	46.1		ug/Kg		92	70 - 120
N-Propylbenzene	50.0	45.8		ug/Kg		92	70 - 130
o-Xylene	50.0	45.7		ug/Kg		91	70 - 130
sec-Butylbenzene	50.0	46.3		ug/Kg		93	74 - 120
Tetrachloroethene	50.0	46.6		ug/Kg		93	74 - 122
Toluene	50.0	44.1		ug/Kg		88	74 - 128
trans-1,2-Dichloroethene	50.0	46.0		ug/Kg		92	78 - 126
trans-1,3-Dichloropropene	50.0	46.4		ug/Kg		93	73 - 123
cis-1,3-Dichloropropene	50.0	45.2		ug/Kg		90	80 - 120
Trichloroethene	50.0	46.6		ug/Kg		93	77 - 129
Styrene	50.0	44.7		ug/Kg		89	80 - 120
Trichlorofluoromethane	50.0	51.0		ug/Kg		102	65 - 146
tert-Butylbenzene	50.0	47.0		ug/Kg		94	73 - 120
Vinyl chloride	50.0	42.7		ug/Kg		85	61 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*100*		*64 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 126*
Toluene-d8 (Surr)	*96*		*71 - 125*
Dibromofluoromethane (Surr)	*103*		*60 - 140*

Lab Sample ID: MB 480-397178/2-A
Matrix: Solid
Analysis Batch: 397378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397178

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		01/24/18 15:04	01/25/18 21:29	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

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

Lab Sample ID: MB 480-397178/2-A
Matrix: Solid
Analysis Batch: 397378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397178

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloroethane	ND		100	21	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,1-Dichloroethane	ND		100	31	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,1-Dichloroethene	ND		100	35	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,2-Dichloroethane	ND		100	41	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,2-Dichloropropane	ND		100	16	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
2-Butanone (MEK)	ND		500	300	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
2-Hexanone	ND		500	210	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
4-Isopropyltoluene	ND		100	34	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Acetone	ND		500	410	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Benzene	ND		100	19	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Bromoform	ND		100	50	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Bromomethane	ND		100	22	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Carbon disulfide	ND		100	46	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Carbon tetrachloride	ND		100	26	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Chlorobenzene	ND		100	13	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Chloroethane	ND		100	21	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Chloroform	ND		100	69	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Chloromethane	ND		100	24	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Bromodichloromethane	ND		100	20	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Cyclohexane	ND		100	22	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Dibromochloromethane	ND		100	48	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
1,2-Dibromoethane	ND		100	18	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Ethylbenzene	ND		100	29	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Isopropylbenzene	ND		100	15	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Methyl acetate	ND		500	48	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
m,p-Xylene	ND		200	55	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Methylcyclohexane	ND		100	47	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Methylene Chloride	72.4	J	100	20	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
n-Butylbenzene	ND		100	29	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
N-Propylbenzene	ND		100	26	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
o-Xylene	ND		100	13	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
sec-Butylbenzene	ND		100	37	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Tetrachloroethene	ND		100	13	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Toluene	ND		100	27	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		01/24/18 15:04	01/25/18 21:29	1

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

Lab Sample ID: MB 480-397178/2-A
Matrix: Solid
Analysis Batch: 397378

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397178

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		100	28	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Styrene	ND		100	24	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Trichlorofluoromethane	ND		100	47	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
tert-Butylbenzene	ND		100	28	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Vinyl chloride	ND		100	34	ug/Kg		01/24/18 15:04	01/25/18 21:29	1
Xylenes, Total	ND		200	55	ug/Kg		01/24/18 15:04	01/25/18 21:29	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*01/24/18 15:04*	*01/25/18 21:29*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*96*		*53 - 146*	*01/24/18 15:04*	*01/25/18 21:29*	*1*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*	*01/24/18 15:04*	*01/25/18 21:29*	*1*
Toluene-d8 (Surr)	*102*		*50 - 149*	*01/24/18 15:04*	*01/25/18 21:29*	*1*
Dibromofluoromethane (Surr)	*96*		*60 - 140*	*01/24/18 15:04*	*01/25/18 21:29*	*1*

Lab Sample ID: LCS 480-397178/1-A
Matrix: Solid
Analysis Batch: 397378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2500	2380		ug/Kg		95	68 - 130
1,1,2,2-Tetrachloroethane	2500	2000		ug/Kg		80	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2800		ug/Kg		112	10 - 179
1,1,2-Trichloroethane	2500	2460		ug/Kg		98	80 - 120
1,1-Dichloroethane	2500	2630		ug/Kg		105	78 - 121
1,1-Dichloroethene	2500	2710		ug/Kg		108	48 - 133
1,2,4-Trichlorobenzene	2500	2470		ug/Kg		99	70 - 140
1,2,4-Trimethylbenzene	2500	2290		ug/Kg		92	77 - 127
1,2-Dibromo-3-Chloropropane	2500	1360	*	ug/Kg		54	56 - 122
1,2-Dichlorobenzene	2500	2480		ug/Kg		99	78 - 125
1,2-Dichloroethane	2500	2460		ug/Kg		98	74 - 127
1,2-Dichloropropane	2500	2650		ug/Kg		106	80 - 120
1,3,5-Trimethylbenzene	2500	2310		ug/Kg		92	79 - 120
1,3-Dichlorobenzene	2500	2450		ug/Kg		98	80 - 120
1,4-Dichlorobenzene	2500	2440		ug/Kg		98	80 - 120
2-Butanone (MEK)	12500	11400		ug/Kg		91	54 - 149
2-Hexanone	12500	10300		ug/Kg		82	59 - 127
4-Isopropyltoluene	2500	2400		ug/Kg		96	80 - 120
4-Methyl-2-pentanone (MIBK)	12500	10600		ug/Kg		85	74 - 120
Acetone	12500	10500		ug/Kg		84	47 - 141
Benzene	2500	2700		ug/Kg		108	77 - 125
Bromoform	2500	1830		ug/Kg		73	48 - 125
Bromomethane	2500	2540		ug/Kg		102	39 - 149
Carbon disulfide	2500	2330		ug/Kg		93	40 - 136
Carbon tetrachloride	2500	2180		ug/Kg		87	54 - 135
Chlorobenzene	2500	2660		ug/Kg		106	76 - 126

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

Lab Sample ID: LCS 480-397178/1-A
Matrix: Solid
Analysis Batch: 397378

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397178

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	2500	3020		ug/Kg		121	23 - 150
Chloroform	2500	2630		ug/Kg		105	78 - 120
Chloromethane	2500	2290		ug/Kg		92	61 - 124
cis-1,2-Dichloroethene	2500	2710		ug/Kg		108	79 - 124
Bromodichloromethane	2500	2310		ug/Kg		93	71 - 121
Cyclohexane	2500	2540		ug/Kg		102	49 - 129
Dibromochloromethane	2500	2030		ug/Kg		81	64 - 120
1,2-Dibromoethane	2500	2420		ug/Kg		97	80 - 120
Dichlorodifluoromethane	2500	2300		ug/Kg		92	10 - 150
Ethylbenzene	2500	2550		ug/Kg		102	78 - 124
Isopropylbenzene	2500	2330		ug/Kg		93	76 - 120
Methyl acetate	5000	4310		ug/Kg		86	71 - 123
m,p-Xylene	2500	2570		ug/Kg		103	77 - 125
Methyl tert-butyl ether	2500	2460		ug/Kg		98	67 - 137
Methylcyclohexane	2500	2760		ug/Kg		111	50 - 130
Methylene Chloride	2500	2520		ug/Kg		101	75 - 118
n-Butylbenzene	2500	2340		ug/Kg		93	80 - 120
N-Propylbenzene	2500	2300		ug/Kg		92	76 - 120
o-Xylene	2500	2680		ug/Kg		107	80 - 124
sec-Butylbenzene	2500	2370		ug/Kg		95	79 - 120
Tetrachloroethene	2500	2830		ug/Kg		113	73 - 133
Toluene	2500	2540		ug/Kg		102	75 - 124
trans-1,2-Dichloroethene	2500	2740		ug/Kg		109	74 - 129
trans-1,3-Dichloropropene	2500	2210		ug/Kg		88	73 - 120
cis-1,3-Dichloropropene	2500	2500		ug/Kg		100	75 - 121
Trichloroethene	2500	2710		ug/Kg		108	75 - 131
Styrene	2500	2560		ug/Kg		102	80 - 120
Trichlorofluoromethane	2500	2960		ug/Kg		118	29 - 158
tert-Butylbenzene	2500	2410		ug/Kg		96	78 - 120
Vinyl chloride	2500	2400		ug/Kg		96	59 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*53 - 146*
4-Bromofluorobenzene (Surr)	*107*		*49 - 148*
Toluene-d8 (Surr)	*103*		*50 - 149*
Dibromofluoromethane (Surr)	*105*		*60 - 140*

Lab Sample ID: MB 480-397362/2-A
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,1-Dichloroethane	ND		100	31	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,1-Dichloroethene	ND		100	35	ug/Kg		01/25/18 15:41	01/26/18 12:55	1

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

Lab Sample ID: MB 480-397362/2-A
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,2-Dichloroethane	ND		100	41	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,2-Dichloropropane	ND		100	16	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
2-Butanone (MEK)	ND		500	300	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
2-Hexanone	ND		500	210	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
4-Isopropyltoluene	ND		100	34	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Acetone	ND		500	410	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Benzene	ND		100	19	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Bromoform	ND		100	50	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Bromomethane	ND		100	22	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Carbon disulfide	ND		100	46	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Carbon tetrachloride	ND		100	26	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Chlorobenzene	ND		100	13	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Chloroethane	ND		100	21	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Chloroform	ND		100	69	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Chloromethane	ND		100	24	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Bromodichloromethane	ND		100	20	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Cyclohexane	ND		100	22	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Dibromochloromethane	ND		100	48	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
1,2-Dibromoethane	ND		100	18	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Ethylbenzene	ND		100	29	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Isopropylbenzene	ND		100	15	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Methyl acetate	ND		500	48	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
m,p-Xylene	ND		200	55	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Methylcyclohexane	ND		100	47	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Methylene Chloride	81.4	J	100	20	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
n-Butylbenzene	ND		100	29	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
N-Propylbenzene	ND		100	26	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
o-Xylene	ND		100	13	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
sec-Butylbenzene	ND		100	37	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Tetrachloroethene	ND		100	13	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Toluene	ND		100	27	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Trichloroethene	ND		100	28	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Styrene	ND		100	24	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Trichlorofluoromethane	ND		100	47	ug/Kg		01/25/18 15:41	01/26/18 12:55	1

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

Lab Sample ID: MB 480-397362/2-A
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397362

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		100	28	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Vinyl chloride	ND		100	34	ug/Kg		01/25/18 15:41	01/26/18 12:55	1
Xylenes, Total	ND		200	55	ug/Kg		01/25/18 15:41	01/26/18 12:55	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/Kg*				*01/25/18 15:41*	*01/26/18 12:55*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*53 - 146*	*01/25/18 15:41*	*01/26/18 12:55*	*1*
4-Bromofluorobenzene (Surr)	*108*		*49 - 148*	*01/25/18 15:41*	*01/26/18 12:55*	*1*
Toluene-d8 (Surr)	*105*		*50 - 149*	*01/25/18 15:41*	*01/26/18 12:55*	*1*
Dibromofluoromethane (Surr)	*97*		*60 - 140*	*01/25/18 15:41*	*01/26/18 12:55*	*1*

Lab Sample ID: LCS 480-397362/1-A
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2500	2460		ug/Kg		98	68 - 130
1,1,2,2-Tetrachloroethane	2500	2220		ug/Kg		89	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2180		ug/Kg		87	10 - 179
1,1,2-Trichloroethane	2500	2590		ug/Kg		104	80 - 120
1,1-Dichloroethane	2500	2620		ug/Kg		105	78 - 121
1,1-Dichloroethene	2500	2700		ug/Kg		108	48 - 133
1,2,4-Trichlorobenzene	2500	2730		ug/Kg		109	70 - 140
1,2,4-Trimethylbenzene	2500	2510		ug/Kg		100	77 - 127
1,2-Dibromo-3-Chloropropane	2500	1600		ug/Kg		64	56 - 122
1,2-Dichlorobenzene	2500	2570		ug/Kg		103	78 - 125
1,2-Dichloroethane	2500	2450		ug/Kg		98	74 - 127
1,2-Dichloropropane	2500	2550		ug/Kg		102	80 - 120
1,3,5-Trimethylbenzene	2500	2490		ug/Kg		100	79 - 120
1,3-Dichlorobenzene	2500	2640		ug/Kg		106	80 - 120
1,4-Dichlorobenzene	2500	2590		ug/Kg		103	80 - 120
2-Butanone (MEK)	12500	11500		ug/Kg		92	54 - 149
2-Hexanone	12500	11100		ug/Kg		89	59 - 127
4-Isopropyltoluene	2500	2560		ug/Kg		102	80 - 120
4-Methyl-2-pentanone (MIBK)	12500	11100		ug/Kg		89	74 - 120
Acetone	12500	9070		ug/Kg		73	47 - 141
Benzene	2500	2670		ug/Kg		107	77 - 125
Bromoform	2500	1960		ug/Kg		78	48 - 125
Bromomethane	2500	2740		ug/Kg		109	39 - 149
Carbon disulfide	2500	2340		ug/Kg		94	40 - 136
Carbon tetrachloride	2500	2190		ug/Kg		88	54 - 135
Chlorobenzene	2500	2710		ug/Kg		108	76 - 126
Chloroethane	2500	3100		ug/Kg		124	23 - 150
Chloroform	2500	2590		ug/Kg		104	78 - 120
Chloromethane	2500	2340		ug/Kg		93	61 - 124

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

Lab Sample ID: LCS 480-397362/1-A
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397362

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
cis-1,2-Dichloroethene	2500	2680		ug/Kg		107	79 - 124
Bromodichloromethane	2500	2270		ug/Kg		91	71 - 121
Cyclohexane	2500	2550		ug/Kg		102	49 - 129
Dibromochloromethane	2500	2260		ug/Kg		90	64 - 120
1,2-Dibromoethane	2500	2590		ug/Kg		103	80 - 120
Dichlorodifluoromethane	2500	2360		ug/Kg		94	10 - 150
Ethylbenzene	2500	2630		ug/Kg		105	78 - 124
Isopropylbenzene	2500	2410		ug/Kg		96	76 - 120
Methyl acetate	5000	4330		ug/Kg		87	71 - 123
m,p-Xylene	2500	2640		ug/Kg		106	77 - 125
Methyl tert-butyl ether	2500	2460		ug/Kg		98	67 - 137
Methylcyclohexane	2500	2730		ug/Kg		109	50 - 130
Methylene Chloride	2500	2450		ug/Kg		98	75 - 118
n-Butylbenzene	2500	2520		ug/Kg		101	80 - 120
N-Propylbenzene	2500	2440		ug/Kg		98	76 - 120
o-Xylene	2500	2740		ug/Kg		110	80 - 124
sec-Butylbenzene	2500	2510		ug/Kg		100	79 - 120
Tetrachloroethene	2500	2930		ug/Kg		117	73 - 133
Toluene	2500	2600		ug/Kg		104	75 - 124
trans-1,2-Dichloroethene	2500	2690		ug/Kg		108	74 - 129
trans-1,3-Dichloropropene	2500	2400		ug/Kg		96	73 - 120
cis-1,3-Dichloropropene	2500	2540		ug/Kg		101	75 - 121
Trichloroethene	2500	2640		ug/Kg		106	75 - 131
Styrene	2500	2650		ug/Kg		106	80 - 120
Trichlorofluoromethane	2500	2810		ug/Kg		113	29 - 158
tert-Butylbenzene	2500	2520		ug/Kg		101	78 - 120
Vinyl chloride	2500	2520		ug/Kg		101	59 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*97*		*53 - 146*
4-Bromofluorobenzene (Surr)	*107*		*49 - 148*
Toluene-d8 (Surr)	*105*		*50 - 149*
Dibromofluoromethane (Surr)	*104*		*60 - 140*

Lab Sample ID: 480-130382-5 MS
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: SB-20 (.5-1')
Prep Type: Total/NA
Prep Batch: 397362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	ND		1570	1740		ug/Kg	☼	111	64 - 142
1,1,2,2-Tetrachloroethane	ND		1570	1840		ug/Kg	☼	117	56 - 128
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1570	2110		ug/Kg	☼	134	64 - 154
1,1,2-Trichloroethane	ND		1570	1880		ug/Kg	☼	120	63 - 133
1,1-Dichloroethane	ND		1570	1970		ug/Kg	☼	125	64 - 135
1,1-Dichloroethene	ND		1570	1880		ug/Kg	☼	120	62 - 145
1,2,4-Trichlorobenzene	ND		1570	1870		ug/Kg	☼	119	56 - 145
1,2,4-Trimethylbenzene	290	J	1570	2080		ug/Kg	☼	114	67 - 139

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

Lab Sample ID: 480-130382-5 MS
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: SB-20 (.5-1')
Prep Type: Total/NA
Prep Batch: 397362

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	ND		1570	1040		ug/Kg	☼	66	40 - 122
1,2-Dichlorobenzene	ND		1570	1940		ug/Kg	☼	124	68 - 133
1,2-Dichloroethane	ND		1570	1900		ug/Kg	☼	121	62 - 135
1,2-Dichloropropane	ND		1570	1890		ug/Kg	☼	120	67 - 139
1,3,5-Trimethylbenzene	ND		1570	1900		ug/Kg	☼	121	67 - 142
1,3-Dichlorobenzene	ND		1570	1930		ug/Kg	☼	123	68 - 136
1,4-Dichlorobenzene	ND		1570	1950		ug/Kg	☼	124	69 - 136
2-Butanone (MEK)	ND		7850	9290		ug/Kg	☼	118	46 - 132
2-Hexanone	ND		7850	8350		ug/Kg	☼	106	44 - 130
4-Isopropyltoluene	ND		1570	1910		ug/Kg	☼	122	67 - 143
4-Methyl-2-pentanone (MIBK)	ND		7850	8860		ug/Kg	☼	113	49 - 125
Acetone	ND		7850	9120		ug/Kg	☼	116	32 - 136
Benzene	ND		1570	2010		ug/Kg	☼	128	68 - 137
Bromoform	ND		1570	968		ug/Kg	☼	62	43 - 134
Bromomethane	ND	F1	1570	2040		ug/Kg	☼	130	38 - 137
Carbon disulfide	ND		1570	1540		ug/Kg	☼	98	52 - 139
Carbon tetrachloride	ND		1570	1550		ug/Kg	☼	98	60 - 150
Chlorobenzene	ND		1570	1970		ug/Kg	☼	126	67 - 136
Chloroethane	ND		1570	1670		ug/Kg	☼	107	34 - 140
Chloroform	ND		1570	1950		ug/Kg	☼	124	64 - 133
Chloromethane	ND		1570	1850		ug/Kg	☼	118	47 - 143
cis-1,2-Dichloroethene	290	J	1570	2300		ug/Kg	☼	128	65 - 137
Bromodichloromethane	ND		1570	1460		ug/Kg	☼	93	62 - 136
Cyclohexane	ND		1570	1920		ug/Kg	☼	122	63 - 149
Dibromochloromethane	ND		1570	1270		ug/Kg	☼	81	57 - 137
1,2-Dibromoethane	ND		1570	1830		ug/Kg	☼	116	65 - 133
Dichlorodifluoromethane	ND		1570	1440		ug/Kg	☼	92	26 - 150
Ethylbenzene	ND		1570	1940		ug/Kg	☼	124	67 - 136
Isopropylbenzene	ND		1570	1740		ug/Kg	☼	111	65 - 147
Methyl acetate	ND	F1	3140	4110	F1	ug/Kg	☼	131	50 - 124
m,p-Xylene	ND		1570	1980		ug/Kg	☼	126	68 - 138
Methyl tert-butyl ether	ND		1570	1880		ug/Kg	☼	120	60 - 130
Methylcyclohexane	ND		1570	2310		ug/Kg	☼	147	67 - 150
Methylene Chloride	200	J B	1570	2090		ug/Kg	☼	121	63 - 138
n-Butylbenzene	ND		1570	1940		ug/Kg	☼	124	64 - 144
N-Propylbenzene	ND		1570	1820		ug/Kg	☼	116	64 - 144
o-Xylene	ND		1570	2070		ug/Kg	☼	132	67 - 135
sec-Butylbenzene	ND		1570	1910		ug/Kg	☼	122	66 - 145
Tetrachloroethene	3000		1570	4860		ug/Kg	☼	120	67 - 150
Toluene	ND		1570	1970		ug/Kg	☼	125	68 - 137
trans-1,2-Dichloroethene	ND		1570	2030		ug/Kg	☼	129	65 - 138
trans-1,3-Dichloropropene	ND		1570	1330		ug/Kg	☼	84	58 - 143
cis-1,3-Dichloropropene	ND		1570	1590		ug/Kg	☼	101	61 - 148
Trichloroethene	180	J	1570	2090		ug/Kg	☼	122	69 - 143
Styrene	ND		1570	1810		ug/Kg	☼	115	68 - 137
Trichlorofluoromethane	ND		1570	2250		ug/Kg	☼	143	35 - 150
tert-Butylbenzene	ND		1570	1870		ug/Kg	☼	119	67 - 146
Vinyl chloride	ND		1570	1950		ug/Kg	☼	124	56 - 150

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

Lab Sample ID: 480-130382-5 MS
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: SB-20 (.5-1')
Prep Type: Total/NA
Prep Batch: 397362

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*
4-Bromofluorobenzene (Surr)	*105*		*49 - 148*
Toluene-d8 (Surr)	*101*		*50 - 149*
Dibromofluoromethane (Surr)	*98*		*60 - 140*

Lab Sample ID: 480-130382-5 MSD
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: SB-20 (.5-1')
Prep Type: Total/NA
Prep Batch: 397362

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	ND		1560	1670		ug/Kg	☼	107	64 - 142	4	20
1,1,2,2-Tetrachloroethane	ND		1560	1990		ug/Kg	☼	127	56 - 128	8	20
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1560	1910		ug/Kg	☼	122	64 - 154	10	20
1,1,2-Trichloroethane	ND		1560	1850		ug/Kg	☼	118	63 - 133	1	20
1,1-Dichloroethane	ND		1560	1850		ug/Kg	☼	118	64 - 135	6	20
1,1-Dichloroethene	ND		1560	2100		ug/Kg	☼	134	62 - 145	11	20
1,2,4-Trichlorobenzene	ND		1560	1870		ug/Kg	☼	120	56 - 145	0	20
1,2,4-Trimethylbenzene	290	J	1560	2060		ug/Kg	☼	113	67 - 139	1	20
1,2-Dibromo-3-Chloropropane	ND		1560	1150		ug/Kg	☼	73	40 - 122	10	20
1,2-Dichlorobenzene	ND		1560	1910		ug/Kg	☼	122	68 - 133	2	20
1,2-Dichloroethane	ND		1560	1750		ug/Kg	☼	112	62 - 135	8	20
1,2-Dichloropropane	ND		1560	1930		ug/Kg	☼	123	67 - 139	2	20
1,3,5-Trimethylbenzene	ND		1560	1920		ug/Kg	☼	123	67 - 142	1	20
1,3-Dichlorobenzene	ND		1560	1880		ug/Kg	☼	120	68 - 136	2	20
1,4-Dichlorobenzene	ND		1560	1840		ug/Kg	☼	118	69 - 136	6	20
2-Butanone (MEK)	ND		7820	8500		ug/Kg	☼	109	46 - 132	9	20
2-Hexanone	ND		7820	8210		ug/Kg	☼	105	44 - 130	2	20
4-Isopropyltoluene	ND		1560	1910		ug/Kg	☼	122	67 - 143	0	20
4-Methyl-2-pentanone (MIBK)	ND		7820	8740		ug/Kg	☼	112	49 - 125	1	20
Acetone	ND		7820	9270		ug/Kg	☼	118	32 - 136	2	20
Benzene	ND		1560	1880		ug/Kg	☼	120	68 - 137	6	20
Bromoform	ND		1560	1070		ug/Kg	☼	68	43 - 134	10	20
Bromomethane	ND	F1	1560	2230	F1	ug/Kg	☼	143	38 - 137	9	20
Carbon disulfide	ND		1560	1470		ug/Kg	☼	94	52 - 139	5	20
Carbon tetrachloride	ND		1560	1580		ug/Kg	☼	101	60 - 150	2	20
Chlorobenzene	ND		1560	2020		ug/Kg	☼	129	67 - 136	2	20
Chloroethane	ND		1560	1700		ug/Kg	☼	109	34 - 140	1	20
Chloroform	ND		1560	1970		ug/Kg	☼	126	64 - 133	1	20
Chloromethane	ND		1560	1710		ug/Kg	☼	109	47 - 143	8	20
cis-1,2-Dichloroethene	290	J	1560	2120		ug/Kg	☼	117	65 - 137	8	20
Bromodichloromethane	ND		1560	1410		ug/Kg	☼	90	62 - 136	4	20
Cyclohexane	ND		1560	1910		ug/Kg	☼	122	63 - 149	0	20
Dibromochloromethane	ND		1560	1300		ug/Kg	☼	83	57 - 137	2	20
1,2-Dibromoethane	ND		1560	1860		ug/Kg	☼	119	65 - 133	2	20
Dichlorodifluoromethane	ND		1560	1510		ug/Kg	☼	97	26 - 150	5	20
Ethylbenzene	ND		1560	1840		ug/Kg	☼	118	67 - 136	5	20
Isopropylbenzene	ND		1560	1790		ug/Kg	☼	114	65 - 147	2	20

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

Lab Sample ID: 480-130382-5 MSD
Matrix: Solid
Analysis Batch: 397428

Client Sample ID: SB-20 (.5-1')
Prep Type: Total/NA
Prep Batch: 397362

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	ND	F1	3130	4170	F1	ug/Kg	☼	133	50 - 124	1	20
m,p-Xylene	ND		1560	2020		ug/Kg	☼	129	68 - 138	2	20
Methyl tert-butyl ether	ND		1560	1870		ug/Kg	☼	120	60 - 130	0	20
Methylcyclohexane	ND		1560	2120		ug/Kg	☼	136	67 - 150	8	20
Methylene Chloride	200	J B	1560	1840		ug/Kg	☼	105	63 - 138	13	20
n-Butylbenzene	ND		1560	1910		ug/Kg	☼	122	64 - 144	1	20
N-Propylbenzene	ND		1560	1810		ug/Kg	☼	116	64 - 144	1	20
o-Xylene	ND		1560	2020		ug/Kg	☼	129	67 - 135	3	20
sec-Butylbenzene	ND		1560	1800		ug/Kg	☼	115	66 - 145	6	20
Tetrachloroethene	3000		1560	4840		ug/Kg	☼	119	67 - 150	0	20
Toluene	ND		1560	2020		ug/Kg	☼	129	68 - 137	3	20
trans-1,2-Dichloroethene	ND		1560	1920		ug/Kg	☼	123	65 - 138	5	20
trans-1,3-Dichloropropene	ND		1560	1340		ug/Kg	☼	86	58 - 143	1	20
cis-1,3-Dichloropropene	ND		1560	1600		ug/Kg	☼	102	61 - 148	1	20
Trichloroethene	180	J	1560	2100		ug/Kg	☼	123	69 - 143	0	20
Styrene	ND		1560	1770		ug/Kg	☼	113	68 - 137	3	20
Trichlorofluoromethane	ND		1560	2210		ug/Kg	☼	141	35 - 150	2	20
tert-Butylbenzene	ND		1560	1850		ug/Kg	☼	119	67 - 146	1	20
Vinyl chloride	ND		1560	1770		ug/Kg	☼	113	56 - 150	10	20

Surrogate	*MSD %Recovery*	*MSD Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*96*		*53 - 146*
4-Bromofluorobenzene (Surr)	*105*		*49 - 148*
Toluene-d8 (Surr)	*101*		*50 - 149*
Dibromofluoromethane (Surr)	*101*		*60 - 140*

GC/MS VOA

Prep Batch: 396862

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-4	SB-18 (4-6')	Total/NA	Solid	5035A_L	
480-130382-5	SB-20 (.5-1')	Total/NA	Solid	5035A_L	
MB 480-396862/2-A	Method Blank	Total/NA	Solid	5035A_L	
LCS 480-396862/1-A	Lab Control Sample	Total/NA	Solid	5035A_L	

Analysis Batch: 396868

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-4	SB-18 (4-6')	Total/NA	Solid	8260C	396862
480-130382-5	SB-20 (.5-1')	Total/NA	Solid	8260C	396862
MB 480-396862/2-A	Method Blank	Total/NA	Solid	8260C	396862
LCS 480-396862/1-A	Lab Control Sample	Total/NA	Solid	8260C	396862

Prep Batch: 397178

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-1	SB-14 (5"-1')	Total/NA	Solid	5035A_H	
480-130382-2	SB-15 (3-4')	Total/NA	Solid	5035A_H	
480-130382-3	SB-(7-8')	Total/NA	Solid	5035A_H	
MB 480-397178/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-397178/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	

Prep Batch: 397362

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-5 - DL	SB-20 (.5-1')	Total/NA	Solid	5035A_H	
MB 480-397362/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-397362/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	
480-130382-5 MS	SB-20 (.5-1')	Total/NA	Solid	5035A_H	
480-130382-5 MSD	SB-20 (.5-1')	Total/NA	Solid	5035A_H	

Analysis Batch: 397378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-1	SB-14 (5"-1')	Total/NA	Solid	8260C	397178
480-130382-2	SB-15 (3-4')	Total/NA	Solid	8260C	397178
480-130382-3	SB-(7-8')	Total/NA	Solid	8260C	397178
MB 480-397178/2-A	Method Blank	Total/NA	Solid	8260C	397178
LCS 480-397178/1-A	Lab Control Sample	Total/NA	Solid	8260C	397178

Analysis Batch: 397428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-5 - DL	SB-20 (.5-1')	Total/NA	Solid	8260C	397362
MB 480-397362/2-A	Method Blank	Total/NA	Solid	8260C	397362
LCS 480-397362/1-A	Lab Control Sample	Total/NA	Solid	8260C	397362
480-130382-5 MS	SB-20 (.5-1')	Total/NA	Solid	8260C	397362
480-130382-5 MSD	SB-20 (.5-1')	Total/NA	Solid	8260C	397362

General Chemistry

Analysis Batch: 396897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-1	SB-14 (5"-1')	Total/NA	Solid	Moisture	
480-130382-2	SB-15 (3-4')	Total/NA	Solid	Moisture	

General Chemistry (Continued)

Analysis Batch: 396897 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130382-3	SB-(7-8')	Total/NA	Solid	Moisture	
480-130382-4	SB-18 (4-6')	Total/NA	Solid	Moisture	
480-130382-5	SB-20 (.5-1')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Client Sample ID: SB-14 (5"-1')
Lab Sample ID: 480-130382-1
Date Collected: 01/19/18 11:00
Matrix: Solid
Date Received: 01/19/18 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	396897	01/23/18 10:42	CDC	TAL BUF

Client Sample ID: SB-14 (5"-1')
Lab Sample ID: 480-130382-1
Date Collected: 01/19/18 11:00
Matrix: Solid
Date Received: 01/19/18 16:32
Percent Solids: 84.8

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			397178	01/24/18 15:04	MXS	TAL BUF
Total/NA	Analysis	8260C		50	397378	01/25/18 22:14	AEM	TAL BUF

Client Sample ID: SB-15 (3-4')
Lab Sample ID: 480-130382-2
Date Collected: 01/19/18 12:00
Matrix: Solid
Date Received: 01/19/18 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	396897	01/23/18 10:42	CDC	TAL BUF

Client Sample ID: SB-15 (3-4')
Lab Sample ID: 480-130382-2
Date Collected: 01/19/18 12:00
Matrix: Solid
Date Received: 01/19/18 16:32
Percent Solids: 91.3

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			397178	01/24/18 15:04	MXS	TAL BUF
Total/NA	Analysis	8260C		1	397378	01/25/18 22:38	AEM	TAL BUF

Client Sample ID: SB-(7-8')
Lab Sample ID: 480-130382-3
Date Collected: 01/19/18 12:30
Matrix: Solid
Date Received: 01/19/18 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	396897	01/23/18 10:42	CDC	TAL BUF

Client Sample ID: SB-(7-8')
Lab Sample ID: 480-130382-3
Date Collected: 01/19/18 12:30
Matrix: Solid
Date Received: 01/19/18 16:32
Percent Solids: 96.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			397178	01/24/18 15:04	MXS	TAL BUF
Total/NA	Analysis	8260C		1	397378	01/25/18 23:01	AEM	TAL BUF

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Client Sample ID: SB-18 (4-6')

Lab Sample ID: 480-130382-4
Date Collected: 01/19/18 14:30
Matrix: Solid
Date Received: 01/19/18 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	396897	01/23/18 10:42	CDC	TAL BUF

Client Sample ID: SB-18 (4-6')

Lab Sample ID: 480-130382-4
Date Collected: 01/19/18 14:30
Matrix: Solid
Date Received: 01/19/18 16:32
Percent Solids: 94.4

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			396862	01/23/18 08:49	CDC	TAL BUF
Total/NA	Analysis	8260C		1	396868	01/23/18 20:11	CDC	TAL BUF

Client Sample ID: SB-20 (.5-1')

Lab Sample ID: 480-130382-5
Date Collected: 01/19/18 15:20
Matrix: Solid
Date Received: 01/19/18 16:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	396897	01/23/18 10:42	CDC	TAL BUF

Client Sample ID: SB-20 (.5-1')

Lab Sample ID: 480-130382-5
Date Collected: 01/19/18 15:20
Matrix: Solid
Date Received: 01/19/18 16:32
Percent Solids: 79.0

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_L			396862	01/23/18 08:49	CDC	TAL BUF
Total/NA	Analysis	8260C		1	396868	01/23/18 20:37	CDC	TAL BUF
Total/NA	Prep	5035A_H	DL		397362	01/25/18 15:41	MXS	TAL BUF
Total/NA	Analysis	8260C	DL	4	397428	01/26/18 18:09	KMN	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Turnkey Environmental Restoration, LLC
TestAmerica Job ID: 480-130382-1
Project/Site: Benchmark - 165 West Utica

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: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
Moisture	Fine 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: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130382-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-130382-1	SB-14 (5"-1')	Solid	01/19/18 11:00	01/19/18 16:32
480-130382-2	SB-15 (3-4')	Solid	01/19/18 12:00	01/19/18 16:32
480-130382-3	SB-(7-8')	Solid	01/19/18 12:30	01/19/18 16:32
480-130382-4	SB-18 (4-6')	Solid	01/19/18 14:30	01/19/18 16:32
480-130382-5	SB-20 (.5-1')	Solid	01/19/18 15:20	01/19/18 16:32

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Nicic Surace	Lab PM: Brian Fisher	Carrier Tracking No(s):	COC No: 480-108336-25240.1
Client Contact: Mr. Nate Munley	Phone: 716-713-3437	E-Mail: NMunley@Turnkeyllc.com		Page: Page 1 of 1
Company: Benchmark Env. Eng. & Science, PLLC				Job #:
Address: 2558 Hamburg Turnpike Suite 300	Due Date Requested:			
City: Lackawanna	TAT Requested (days):			
State, Zip: NY, 14218				
Phone: 716-713-3437	PO #: T0239-017-002			
Email: nmunley@benchmarkturnkey.com	WO #:			
Project Name: ~~441 Elmwood/142 & 204 W. Utica~~ 165 West Utica	Project #: T0239-017-002			
Site: 165 West Utica	SSOW#:			

Analysis Requested

Preservation Codes:
A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - pH 4-5, Z - other (specify)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	TCL + CP-51 VOC's	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
SB-14 (5'-7')	1/19/18	11:00	G	S			X		+ TICS
SB-15 (3-4')		12:00					X		
SB-16 (7-8')		12:30					X		
SB-18 (4-6')		14:50					X		
SB-20 (.5-1')		15:20					X		+ TICS

480-130382 COC

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

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
		1/19/18 4:32			1-19-18 1632	TA
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Ver: 08/04/2016

3.8 #1

1/30/2018

Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-130382-1

Login Number: 130382
List Number: 1
Creator: Hulbert, Michael J

List Source: TestAmerica Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (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	benchmark
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	

TestAmerica

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-130647-1
Client Project/Site: Benchmark - 165 West Utica

For:
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Attn: Nate Munley

Joseph V. Giacomazza

Authorized for release by:
2/2/2018 9:27:33 AM
Joe Giacomazza, Project Management Assistant II
joe.giacomazza@testamericainc.com

Designee for

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

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

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

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

Table of Contents

Definitions/Glossary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

Qualifiers

GC/MS VOA

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

Glossary

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

Job ID: 480-130647-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-130647-1

Comments
No additional comments.

Receipt
The sample was received on 1/26/2018 3:15 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 7.5º C.

GC/MS VOA
Method(s) 8260C: The following sample was analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: MW-1 (24-26') (480-130647-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was analyzed using medium level soil analysis and diluted to bring the concentration of target analytes within the calibration range: MW-1 (24-26') (480-130647-1). 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.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

Client Sample ID: MW-1 (24-26')

Lab Sample ID: 480-130647-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,3,5-Trimethylbenzene	43000		1100	330	ug/Kg	10	☼	8260C	Total/NA
4-Isopropyltoluene	12000		1100	370	ug/Kg	10	☼	8260C	Total/NA
Ethylbenzene	1200		1100	320	ug/Kg	10	☼	8260C	Total/NA
Isopropylbenzene	3400		1100	170	ug/Kg	10	☼	8260C	Total/NA
m,p-Xylene	5400		2200	610	ug/Kg	10	☼	8260C	Total/NA
Methylene Chloride	630	J B	1100	220	ug/Kg	10	☼	8260C	Total/NA
n-Butylbenzene	18000		1100	320	ug/Kg	10	☼	8260C	Total/NA
N-Propylbenzene	12000		1100	290	ug/Kg	10	☼	8260C	Total/NA
o-Xylene	4300		1100	140	ug/Kg	10	☼	8260C	Total/NA
sec-Butylbenzene	10000		1100	410	ug/Kg	10	☼	8260C	Total/NA
Xylenes, Total	9700		2200	610	ug/Kg	10	☼	8260C	Total/NA
1,2,4-Trimethylbenzene - DL	130000		2200	610	ug/Kg	20	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

Client Sample ID: MW-1 (24-26')
Date Collected: 01/26/18 12:00
Date Received: 01/26/18 15:15

Lab Sample ID: 480-130647-1
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1100	310	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,1,2,2-Tetrachloroethane	ND		1100	180	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1100	550	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,1,2-Trichloroethane	ND		1100	230	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,1-Dichloroethane	ND		1100	340	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,1-Dichloroethene	ND		1100	380	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,2,4-Trichlorobenzene	ND		1100	420	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,2-Dibromo-3-Chloropropane	ND		1100	550	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,2-Dibromoethane	ND		1100	190	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,2-Dichlorobenzene	ND		1100	280	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,2-Dichloroethane	ND		1100	450	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,2-Dichloropropane	ND		1100	180	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,3,5-Trimethylbenzene	**43000**		1100	330	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,3-Dichlorobenzene	ND		1100	290	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
1,4-Dichlorobenzene	ND		1100	150	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
2-Butanone (MEK)	ND		5500	3300	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
2-Hexanone	ND		5500	2300	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
4-Isopropyltoluene	**12000**		1100	370	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
4-Methyl-2-pentanone (MIBK)	ND		5500	350	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Acetone	ND		5500	4500	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Benzene	ND		1100	210	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Bromodichloromethane	ND		1100	220	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Bromoform	ND		1100	550	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Bromomethane	ND		1100	240	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Carbon disulfide	ND		1100	500	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Carbon tetrachloride	ND		1100	280	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Chlorobenzene	ND		1100	150	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Chloroethane	ND		1100	230	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Chloroform	ND		1100	760	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Chloromethane	ND		1100	260	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
cis-1,2-Dichloroethene	ND		1100	300	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
cis-1,3-Dichloropropene	ND		1100	260	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Cyclohexane	ND		1100	240	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Dibromochloromethane	ND		1100	530	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Dichlorodifluoromethane	ND		1100	480	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Ethylbenzene	**1200**		1100	320	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Isopropylbenzene	**3400**		1100	170	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
m,p-Xylene	**5400**		2200	610	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Methyl acetate	ND		5500	520	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Methyl tert-butyl ether	ND		1100	420	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Methylcyclohexane	ND		1100	520	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Methylene Chloride	**630**	**J B**	1100	220	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
n-Butylbenzene	**18000**		1100	320	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
N-Propylbenzene	**12000**		1100	290	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
o-Xylene	**4300**		1100	140	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
sec-Butylbenzene	**10000**		1100	410	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Styrene	ND		1100	270	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
tert-Butylbenzene	ND		1100	310	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Tetrachloroethene	ND		1100	150	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

Client Sample ID: MW-1 (24-26')
Date Collected: 01/26/18 12:00
Date Received: 01/26/18 15:15

Lab Sample ID: 480-130647-1
Matrix: Solid
Percent Solids: 93.1

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Toluene	ND		1100	300	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
trans-1,2-Dichloroethene	ND		1100	260	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
trans-1,3-Dichloropropene	ND		1100	110	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Trichloroethene	ND		1100	310	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Trichlorofluoromethane	ND		1100	520	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Vinyl chloride	ND		1100	370	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10
Xylenes, Total	**9700**		2200	610	ug/Kg	☼	01/30/18 14:00	01/31/18 15:08	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*53 - 146*	*01/30/18 14:00*	*01/31/18 15:08*	*10*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*	*01/30/18 14:00*	*01/31/18 15:08*	*10*
Dibromofluoromethane (Surr)	*100*		*60 - 140*	*01/30/18 14:00*	*01/31/18 15:08*	*10*
Toluene-d8 (Surr)	*102*		*50 - 149*	*01/30/18 14:00*	*01/31/18 15:08*	*10*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2,4-Trimethylbenzene	**130000**		2200	610	ug/Kg	☼	01/30/18 14:00	01/31/18 23:39	20

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*53 - 146*	*01/30/18 14:00*	*01/31/18 23:39*	*20*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*	*01/30/18 14:00*	*01/31/18 23:39*	*20*
Dibromofluoromethane (Surr)	*100*		*60 - 140*	*01/30/18 14:00*	*01/31/18 23:39*	*20*
Toluene-d8 (Surr)	*101*		*50 - 149*	*01/30/18 14:00*	*01/31/18 23:39*	*20*

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(53-146)	(49-148)	(60-140)	(50-149)
480-130647-1	MW-1 (24-26')	99	106	100	102
480-130647-1 - DL	MW-1 (24-26')	99	106	100	101
LCS 480-397975/1-A	Lab Control Sample	99	106	107	105
MB 480-397975/2-A	Method Blank	99	110	98	105

Surrogate Legend

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

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

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

Lab Sample ID: MB 480-397975/2-A
Matrix: Solid
Analysis Batch: 398065

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,1-Dichloroethane	ND		100	31	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,1-Dichloroethene	ND		100	35	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,2-Dibromoethane	ND		100	18	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,2-Dichloroethane	ND		100	41	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,2-Dichloropropane	ND		100	16	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
2-Butanone (MEK)	ND		500	300	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
2-Hexanone	ND		500	210	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
4-Isopropyltoluene	ND		100	34	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Acetone	ND		500	410	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Benzene	ND		100	19	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Bromodichloromethane	ND		100	20	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Bromoform	ND		100	50	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Bromomethane	ND		100	22	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Carbon disulfide	ND		100	46	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Carbon tetrachloride	ND		100	26	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Chlorobenzene	ND		100	13	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Chloroethane	ND		100	21	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Chloroform	ND		100	69	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Chloromethane	ND		100	24	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Cyclohexane	ND		100	22	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Dibromochloromethane	ND		100	48	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Ethylbenzene	ND		100	29	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Isopropylbenzene	ND		100	15	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
m,p-Xylene	ND		200	55	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Methyl acetate	ND		500	48	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Methylcyclohexane	ND		100	47	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Methylene Chloride	65.8	J	100	20	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
n-Butylbenzene	ND		100	29	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
N-Propylbenzene	ND		100	26	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
o-Xylene	ND		100	13	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
sec-Butylbenzene	ND		100	37	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Styrene	ND		100	24	ug/Kg		01/30/18 14:00	01/31/18 10:53	1

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

Lab Sample ID: MB 480-397975/2-A
Matrix: Solid
Analysis Batch: 398065

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 397975

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		100	28	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Tetrachloroethene	ND		100	13	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Toluene	ND		100	27	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Trichloroethene	ND		100	28	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Trichlorofluoromethane	ND		100	47	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Vinyl chloride	ND		100	34	ug/Kg		01/30/18 14:00	01/31/18 10:53	1
Xylenes, Total	ND		200	55	ug/Kg		01/30/18 14:00	01/31/18 10:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*99*		*53 - 146*	*01/30/18 14:00*	*01/31/18 10:53*	*1*
4-Bromofluorobenzene (Surr)	*110*		*49 - 148*	*01/30/18 14:00*	*01/31/18 10:53*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*01/30/18 14:00*	*01/31/18 10:53*	*1*
Toluene-d8 (Surr)	*105*		*50 - 149*	*01/30/18 14:00*	*01/31/18 10:53*	*1*

Lab Sample ID: LCS 480-397975/1-A
Matrix: Solid
Analysis Batch: 398065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2500	2630		ug/Kg		105	68 - 130
1,1,2,2-Tetrachloroethane	2500	2290		ug/Kg		92	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2920		ug/Kg		117	10 - 179
1,1,2-Trichloroethane	2500	2620		ug/Kg		105	80 - 120
1,1-Dichloroethane	2500	2770		ug/Kg		111	78 - 121
1,1-Dichloroethene	2500	2820		ug/Kg		113	48 - 133
1,2,4-Trichlorobenzene	2500	2760		ug/Kg		111	70 - 140
1,2,4-Trimethylbenzene	2500	2610		ug/Kg		104	77 - 127
1,2-Dibromo-3-Chloropropane	2500	1770		ug/Kg		71	56 - 122
1,2-Dibromoethane	2500	2640		ug/Kg		105	80 - 120
1,2-Dichlorobenzene	2500	2680		ug/Kg		107	78 - 125
1,2-Dichloroethane	2500	2590		ug/Kg		104	74 - 127
1,2-Dichloropropane	2500	2800		ug/Kg		112	80 - 120
1,3,5-Trimethylbenzene	2500	2590		ug/Kg		104	79 - 120
1,3-Dichlorobenzene	2500	2690		ug/Kg		108	80 - 120
1,4-Dichlorobenzene	2500	2630		ug/Kg		105	80 - 120
2-Butanone (MEK)	12500	12100		ug/Kg		97	54 - 149
2-Hexanone	12500	11500		ug/Kg		92	59 - 127
4-Isopropyltoluene	2500	2740		ug/Kg		109	80 - 120
4-Methyl-2-pentanone (MIBK)	12500	12100		ug/Kg		97	74 - 120
Acetone	12500	11500		ug/Kg		92	47 - 141
Benzene	2500	2830		ug/Kg		113	77 - 125
Bromodichloromethane	2500	2450		ug/Kg		98	71 - 121
Bromoform	2500	2040		ug/Kg		82	48 - 125
Bromomethane	2500	2630		ug/Kg		105	39 - 149
Carbon disulfide	2500	2450		ug/Kg		98	40 - 136

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

Lab Sample ID: LCS 480-397975/1-A
Matrix: Solid
Analysis Batch: 398065

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 397975

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	2500	2480		ug/Kg		99	54 - 135
Chlorobenzene	2500	2840		ug/Kg		114	76 - 126
Chloroethane	2500	3110		ug/Kg		124	23 - 150
Chloroform	2500	2710		ug/Kg		109	78 - 120
Chloromethane	2500	2510		ug/Kg		100	61 - 124
cis-1,2-Dichloroethene	2500	2790		ug/Kg		112	79 - 124
cis-1,3-Dichloropropene	2500	2710		ug/Kg		108	75 - 121
Cyclohexane	2500	2890		ug/Kg		116	49 - 129
Dibromochloromethane	2500	2320		ug/Kg		93	64 - 120
Dichlorodifluoromethane	2500	2800		ug/Kg		112	10 - 150
Ethylbenzene	2500	2780		ug/Kg		111	78 - 124
Isopropylbenzene	2500	2600		ug/Kg		104	76 - 120
m,p-Xylene	2500	2770		ug/Kg		111	77 - 125
Methyl acetate	5000	5040		ug/Kg		101	71 - 123
Methyl tert-butyl ether	2500	2560		ug/Kg		102	67 - 137
Methylcyclohexane	2500	3030		ug/Kg		121	50 - 130
Methylene Chloride	2500	2640		ug/Kg		106	75 - 118
n-Butylbenzene	2500	2660		ug/Kg		106	80 - 120
N-Propylbenzene	2500	2590		ug/Kg		103	76 - 120
o-Xylene	2500	2840		ug/Kg		114	80 - 124
sec-Butylbenzene	2500	2700		ug/Kg		108	79 - 120
Styrene	2500	2770		ug/Kg		111	80 - 120
tert-Butylbenzene	2500	2700		ug/Kg		108	78 - 120
Tetrachloroethene	2500	2970		ug/Kg		119	73 - 133
Toluene	2500	2760		ug/Kg		111	75 - 124
trans-1,2-Dichloroethene	2500	2770		ug/Kg		111	74 - 129
trans-1,3-Dichloropropene	2500	2520		ug/Kg		101	73 - 120
Trichloroethene	2500	2730		ug/Kg		109	75 - 131
Trichlorofluoromethane	2500	3500		ug/Kg		140	29 - 158
Vinyl chloride	2500	2730		ug/Kg		109	59 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*99*		*53 - 146*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*
Dibromofluoromethane (Surr)	*107*		*60 - 140*
Toluene-d8 (Surr)	*105*		*50 - 149*

QC Association Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

GC/MS VOA

Prep Batch: 397975

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130647-1 - DL	MW-1 (24-26')	Total/NA	Solid	5035A_H	
480-130647-1	MW-1 (24-26')	Total/NA	Solid	5035A_H	
MB 480-397975/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-397975/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	

Analysis Batch: 398065

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130647-1	MW-1 (24-26')	Total/NA	Solid	8260C	397975
MB 480-397975/2-A	Method Blank	Total/NA	Solid	8260C	397975
LCS 480-397975/1-A	Lab Control Sample	Total/NA	Solid	8260C	397975

Analysis Batch: 398191

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130647-1 - DL	MW-1 (24-26')	Total/NA	Solid	8260C	397975

General Chemistry

Analysis Batch: 397989

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130647-1	MW-1 (24-26')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

Client Sample ID: MW-1 (24-26')
Date Collected: 01/26/18 12:00
Date Received: 01/26/18 15:15

Lab Sample ID: 480-130647-1
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	397989	01/30/18 14:51	AMM	TAL BUF

Client Sample ID: MW-1 (24-26')
Date Collected: 01/26/18 12:00
Date Received: 01/26/18 15:15

Lab Sample ID: 480-130647-1
Matrix: Solid
Percent Solids: 93.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			397975	01/30/18 14:00	AMM	TAL BUF
Total/NA	Analysis	8260C		10	398065	01/31/18 15:08	ARS	TAL BUF
Total/NA	Prep	5035A_H	DL		397975	01/30/18 14:00	AMM	TAL BUF
Total/NA	Analysis	8260C	DL	20	398191	01/31/18 23:39	AMM	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Turnkey Environmental Restoration, LLC
TestAmerica Job ID: 480-130647-1
Project/Site: Benchmark - 165 West Utica

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

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

Method Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
Moisture	Fine 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: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130647-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-130647-1	MW-1 (24-26')	Solid	01/26/18 12:00	01/26/18 15:15

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

TAL-4124 (1007)

480-130647 COC

Client	Project Manager	Date	Chain of Custody Number
Tonawanda Env. Restoration	Nate Manley / Brian Fischer	1/26/18	274027
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page** 1 of ____
2558 Hamburg Tpke	716-713-3437		
City	**State**	**Zip Code**	**Site Contact**	**Lab Contact**
Buffalo	NY	14218	Nate Manley	Brian Fischer
Project Name and Location (State)	**Carrier/Waybill Number**
165 West Utica Street	
Contract/Purchase Order/Quote No.	
60239-017-002	

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/ NaOH	Analysis (Attach list if more space is needed): TCL PCBs/VOCs
MW-1 (24-26')	1/26/18	12:00				X	X						X

Special Instructions/ Conditions of Receipt

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

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

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

QC Requirements (Specify)

		Date	Time
1. Relinquished By		1/26/18	14:10
2. Relinquished By	Chuck Cikolb	01/26/18	1515
3. Relinquished By			
1. Received By	Chuck Kow TA	01/26/18	1410
2. Received By		1/26/18	1515
3. Received By			

Comments

7.5 #1

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

Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-130647-1

Login Number: 130647

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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

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ANALYTICAL REPORT

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

TestAmerica Job ID: 480-130699-1
Client Project/Site: Benchmark - 165 West Utica

For:
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Attn: Nate Munley

Joseph V. Giacomazza

Authorized for release by:
2/6/2018 2:34:25 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

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

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

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

Table of Contents

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.

Glossary

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

Case Narrative

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

Job ID: 480-130699-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-130699-1

Comments
No additional comments.

Receipt
The sample was received on 1/30/2018 4:50 PM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8º C.

GC/MS VOA
Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-398667 recovered outside acceptance criteria, low biased, for 2-Butanone and 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: MW-2 (24-26') (480-130699-1).

Method(s) 8260C: The following sample was analyzed using medium level soil analysis to bring the concentration of target analytes within the calibration range: MW-2 (24-26') (480-130699-1). 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.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

Client Sample ID: MW-2 (24-26')

Lab Sample ID: 480-130699-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	1300		130	37	ug/Kg	1	☼	8260C	Total/NA
1,3,5-Trimethylbenzene	480		130	40	ug/Kg	1	☼	8260C	Total/NA
4-Isopropyltoluene	99	J	130	44	ug/Kg	1	☼	8260C	Total/NA
n-Butylbenzene	140		130	38	ug/Kg	1	☼	8260C	Total/NA
sec-Butylbenzene	77	J	130	48	ug/Kg	1	☼	8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

Client Sample ID: MW-2 (24-26')
Date Collected: 01/29/18 10:30
Date Received: 01/30/18 16:50

Lab Sample ID: 480-130699-1
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		130	36	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,1,2,2-Tetrachloroethane	ND		130	21	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		130	65	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,1,2-Trichloroethane	ND		130	27	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,1-Dichloroethane	ND		130	40	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,1-Dichloroethene	ND		130	45	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,2,4-Trichlorobenzene	ND		130	50	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,2,4-Trimethylbenzene	**1300**		130	37	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,2-Dibromo-3-Chloropropane	ND		130	65	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,2-Dibromoethane	ND		130	23	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,2-Dichlorobenzene	ND		130	33	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,2-Dichloroethane	ND		130	54	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,2-Dichloropropane	ND		130	21	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,3,5-Trimethylbenzene	**480**		130	40	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,3-Dichlorobenzene	ND		130	35	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
1,4-Dichlorobenzene	ND		130	18	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
2-Butanone (MEK)	ND		650	390	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
2-Hexanone	ND		650	270	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
4-Isopropyltoluene	**99**	**J**	130	44	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
4-Methyl-2-pentanone (MIBK)	ND		650	42	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Acetone	ND		650	540	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Benzene	ND		130	25	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Bromodichloromethane	ND		130	26	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Bromoform	ND		130	65	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Bromomethane	ND		130	29	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Carbon disulfide	ND		130	60	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Carbon tetrachloride	ND		130	33	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Chlorobenzene	ND		130	17	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Chloroethane	ND		130	27	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Chloroform	ND		130	90	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Chloromethane	ND		130	31	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
cis-1,2-Dichloroethene	ND		130	36	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
cis-1,3-Dichloropropene	ND		130	31	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Cyclohexane	ND		130	29	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Dibromochloromethane	ND		130	63	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Dichlorodifluoromethane	ND		130	57	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Ethylbenzene	ND		130	38	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Isopropylbenzene	ND		130	20	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
m,p-Xylene	ND		260	73	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Methyl acetate	ND		650	62	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Methyl tert-butyl ether	ND		130	49	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Methylcyclohexane	ND		130	61	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Methylene Chloride	ND		130	26	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
n-Butylbenzene	**140**		130	38	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
N-Propylbenzene	ND		130	34	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
o-Xylene	ND		130	17	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
sec-Butylbenzene	**77**	**J**	130	48	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Styrene	ND		130	32	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
tert-Butylbenzene	ND		130	36	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

Client Sample ID: MW-2 (24-26')
Date Collected: 01/29/18 10:30
Date Received: 01/30/18 16:50

Lab Sample ID: 480-130699-1
Matrix: Solid
Percent Solids: 82.2

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		130	18	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Toluene	ND		130	35	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
trans-1,2-Dichloroethene	ND		130	31	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
trans-1,3-Dichloropropene	ND		130	13	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Trichloroethene	ND		130	36	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Trichlorofluoromethane	ND		130	61	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Vinyl chloride	ND		130	44	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1
Xylenes, Total	ND		260	73	ug/Kg	☼	02/05/18 14:11	02/06/18 03:11	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*53 - 146*	*02/05/18 14:11*	*02/06/18 03:11*	*1*
4-Bromofluorobenzene (Surr)	*98*		*49 - 148*	*02/05/18 14:11*	*02/06/18 03:11*	*1*
Dibromofluoromethane (Surr)	*98*		*60 - 140*	*02/05/18 14:11*	*02/06/18 03:11*	*1*
Toluene-d8 (Surr)	*102*		*50 - 149*	*02/05/18 14:11*	*02/06/18 03:11*	*1*

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(53-146)	(49-148)	(60-140)	(50-149)
480-130699-1	MW-2 (24-26')	98	98	98	102
LCS 480-398639/1-A	Lab Control Sample	102	104	104	106
MB 480-398639/2-A	Method Blank	101	106	99	106

Surrogate Legend

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

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

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

Lab Sample ID: MB 480-398639/2-A
Matrix: Solid
Analysis Batch: 398667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		100	28	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,1,2,2-Tetrachloroethane	ND		100	16	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		100	50	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,1,2-Trichloroethane	ND		100	21	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,1-Dichloroethane	ND		100	31	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,1-Dichloroethene	ND		100	35	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,2,4-Trichlorobenzene	ND		100	38	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,2,4-Trimethylbenzene	ND		100	28	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,2-Dibromo-3-Chloropropane	ND		100	50	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,2-Dibromoethane	ND		100	18	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,2-Dichlorobenzene	ND		100	26	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,2-Dichloroethane	ND		100	41	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,2-Dichloropropane	ND		100	16	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,3,5-Trimethylbenzene	ND		100	30	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,3-Dichlorobenzene	ND		100	27	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
1,4-Dichlorobenzene	ND		100	14	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
2-Butanone (MEK)	ND		500	300	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
2-Hexanone	ND		500	210	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
4-Isopropyltoluene	ND		100	34	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
4-Methyl-2-pentanone (MIBK)	ND		500	32	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Acetone	ND		500	410	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Benzene	ND		100	19	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Bromodichloromethane	ND		100	20	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Bromoform	ND		100	50	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Bromomethane	ND		100	22	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Carbon disulfide	ND		100	46	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Carbon tetrachloride	ND		100	26	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Chlorobenzene	ND		100	13	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Chloroethane	ND		100	21	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Chloroform	ND		100	69	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Chloromethane	ND		100	24	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
cis-1,2-Dichloroethene	ND		100	28	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
cis-1,3-Dichloropropene	ND		100	24	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Cyclohexane	ND		100	22	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Dibromochloromethane	ND		100	48	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Dichlorodifluoromethane	ND		100	44	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Ethylbenzene	ND		100	29	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Isopropylbenzene	ND		100	15	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
m,p-Xylene	ND		200	55	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Methyl acetate	ND		500	48	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Methyl tert-butyl ether	ND		100	38	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Methylcyclohexane	ND		100	47	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Methylene Chloride	ND		100	20	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
n-Butylbenzene	ND		100	29	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
N-Propylbenzene	ND		100	26	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
o-Xylene	ND		100	13	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
sec-Butylbenzene	ND		100	37	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Styrene	ND		100	24	ug/Kg		02/05/18 14:11	02/05/18 22:31	1

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

Lab Sample ID: MB 480-398639/2-A
Matrix: Solid
Analysis Batch: 398667

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 398639

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		100	28	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Tetrachloroethene	ND		100	13	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Toluene	ND		100	27	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
trans-1,2-Dichloroethene	ND		100	24	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
trans-1,3-Dichloropropene	ND		100	9.8	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Trichloroethene	ND		100	28	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Trichlorofluoromethane	ND		100	47	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Vinyl chloride	ND		100	34	ug/Kg		02/05/18 14:11	02/05/18 22:31	1
Xylenes, Total	ND		200	55	ug/Kg		02/05/18 14:11	02/05/18 22:31	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*101*		*53 - 146*	*02/05/18 14:11*	*02/05/18 22:31*	*1*
4-Bromofluorobenzene (Surr)	*106*		*49 - 148*	*02/05/18 14:11*	*02/05/18 22:31*	*1*
Dibromofluoromethane (Surr)	*99*		*60 - 140*	*02/05/18 14:11*	*02/05/18 22:31*	*1*
Toluene-d8 (Surr)	*106*		*50 - 149*	*02/05/18 14:11*	*02/05/18 22:31*	*1*

Lab Sample ID: LCS 480-398639/1-A
Matrix: Solid
Analysis Batch: 398667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	2500	2530		ug/Kg		101	68 - 130
1,1,2,2-Tetrachloroethane	2500	2240		ug/Kg		89	73 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	2500	2750		ug/Kg		110	10 - 179
1,1,2-Trichloroethane	2500	2430		ug/Kg		97	80 - 120
1,1-Dichloroethane	2500	2580		ug/Kg		103	78 - 121
1,1-Dichloroethene	2500	2460		ug/Kg		98	48 - 133
1,2,4-Trichlorobenzene	2500	2640		ug/Kg		106	70 - 140
1,2,4-Trimethylbenzene	2500	2710		ug/Kg		108	77 - 127
1,2-Dibromo-3-Chloropropane	2500	2040		ug/Kg		82	56 - 122
1,2-Dibromoethane	2500	2400		ug/Kg		96	80 - 120
1,2-Dichlorobenzene	2500	2660		ug/Kg		106	78 - 125
1,2-Dichloroethane	2500	2320		ug/Kg		93	74 - 127
1,2-Dichloropropane	2500	2600		ug/Kg		104	80 - 120
1,3,5-Trimethylbenzene	2500	2690		ug/Kg		108	79 - 120
1,3-Dichlorobenzene	2500	2600		ug/Kg		104	80 - 120
1,4-Dichlorobenzene	2500	2580		ug/Kg		103	80 - 120
2-Butanone (MEK)	12500	8750		ug/Kg		70	54 - 149
2-Hexanone	12500	9140		ug/Kg		73	59 - 127
4-Isopropyltoluene	2500	2780		ug/Kg		111	80 - 120
4-Methyl-2-pentanone (MIBK)	12500	10000		ug/Kg		80	74 - 120
Acetone	12500	7980		ug/Kg		64	47 - 141
Benzene	2500	2550		ug/Kg		102	77 - 125
Bromodichloromethane	2500	2500		ug/Kg		100	71 - 121
Bromoform	2500	2240		ug/Kg		89	48 - 125
Bromomethane	2500	2030		ug/Kg		81	39 - 149
Carbon disulfide	2500	2500		ug/Kg		100	40 - 136

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

Lab Sample ID: LCS 480-398639/1-A
Matrix: Solid
Analysis Batch: 398667

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 398639

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Carbon tetrachloride	2500	2570		ug/Kg		103	54 - 135
Chlorobenzene	2500	2560		ug/Kg		102	76 - 126
Chloroethane	2500	2200		ug/Kg		88	23 - 150
Chloroform	2500	2460		ug/Kg		98	78 - 120
Chloromethane	2500	2300		ug/Kg		92	61 - 124
cis-1,2-Dichloroethene	2500	2520		ug/Kg		101	79 - 124
cis-1,3-Dichloropropene	2500	2590		ug/Kg		104	75 - 121
Cyclohexane	2500	2700		ug/Kg		108	49 - 129
Dibromochloromethane	2500	2450		ug/Kg		98	64 - 120
Dichlorodifluoromethane	2500	2280		ug/Kg		91	10 - 150
Ethylbenzene	2500	2590		ug/Kg		103	78 - 124
Isopropylbenzene	2500	2670		ug/Kg		107	76 - 120
m,p-Xylene	2500	2570		ug/Kg		103	77 - 125
Methyl acetate	5000	3970		ug/Kg		79	71 - 123
Methyl tert-butyl ether	2500	2340		ug/Kg		93	67 - 137
Methylcyclohexane	2500	2740		ug/Kg		110	50 - 130
Methylene Chloride	2500	2470		ug/Kg		99	75 - 118
n-Butylbenzene	2500	2730		ug/Kg		109	80 - 120
N-Propylbenzene	2500	2740		ug/Kg		110	76 - 120
o-Xylene	2500	2650		ug/Kg		106	80 - 124
sec-Butylbenzene	2500	2690		ug/Kg		108	79 - 120
Styrene	2500	2570		ug/Kg		103	80 - 120
tert-Butylbenzene	2500	2690		ug/Kg		108	78 - 120
Tetrachloroethene	2500	2610		ug/Kg		104	73 - 133
Toluene	2500	2500		ug/Kg		100	75 - 124
trans-1,2-Dichloroethene	2500	2560		ug/Kg		102	74 - 129
trans-1,3-Dichloropropene	2500	2490		ug/Kg		99	73 - 120
Trichloroethene	2500	2550		ug/Kg		102	75 - 131
Trichlorofluoromethane	2500	2420		ug/Kg		97	29 - 158
Vinyl chloride	2500	2300		ug/Kg		92	59 - 124

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*102*		*53 - 146*
4-Bromofluorobenzene (Surr)	*104*		*49 - 148*
Dibromofluoromethane (Surr)	*104*		*60 - 140*
Toluene-d8 (Surr)	*106*		*50 - 149*

QC Association Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

GC/MS VOA

Prep Batch: 398639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130699-1	MW-2 (24-26')	Total/NA	Solid	5035A_H	
MB 480-398639/2-A	Method Blank	Total/NA	Solid	5035A_H	
LCS 480-398639/1-A	Lab Control Sample	Total/NA	Solid	5035A_H	

Analysis Batch: 398667

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130699-1	MW-2 (24-26')	Total/NA	Solid	8260C	398639
MB 480-398639/2-A	Method Blank	Total/NA	Solid	8260C	398639
LCS 480-398639/1-A	Lab Control Sample	Total/NA	Solid	8260C	398639

General Chemistry

Analysis Batch: 398656

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130699-1	MW-2 (24-26')	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

Client Sample ID: MW-2 (24-26') — **Lab Sample ID: 480-130699-1**
Date Collected: 01/29/18 10:30 — **Matrix: Solid**
Date Received: 01/30/18 16:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	398656	02/05/18 16:03	CDC	TAL BUF

Client Sample ID: MW-2 (24-26') — **Lab Sample ID: 480-130699-1**
Date Collected: 01/29/18 10:30 — **Matrix: Solid**
Date Received: 01/30/18 16:50 — **Percent Solids: 82.2**

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5035A_H			398639	02/05/18 14:11	MXS	TAL BUF
Total/NA	Analysis	8260C		1	398667	02/06/18 03:11	MXS	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Turnkey Environmental Restoration, LLC
TestAmerica Job ID: 480-130699-1
Project/Site: Benchmark - 165 West Utica

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

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

Method Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
Moisture	Fine 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: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130699-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-130699-1	MW-2 (24-26')	Solid	01/29/18 10:30	01/30/18 16:50

Chain of Custody Record

TAL-4124 (1007)

Temperature on Receipt ______

Drinking Water? Yes☐ No☐

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

480-130699 COC

Client: Turnkey Env. Restoration	Project Manager: Nate Munley/ ~~[illegible]~~ Brian Fischer	Date: 1/29/18
Address: 2558 Hamburg TPke	Telephone Number (Area Code)/Fax Number: 716-713-3437	Lab Number
City: Buffalo; State: NY; Zip Code: 14218	Site Contact: Nick Suroli; Lab Contact: Brian Fischer	Chain of Custody Number: 274028
Project Name and Location (State): 165 West Utica	Carrier/Waybill Number	Page 1 of 1
Contract/Purchase Order/Quote No.: B0234-017-002		

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil		Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH		Analysis (Attach list if more space is needed): TCL+CP-51 VOC's	Special Instructions/ Conditions of Receipt
MW-2 (24-26')	1/29/18	10:30				X		X							X	

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

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

Turn Around Time Required: ☐ 24 Hours ☐ 48 Hours ☐ 7 Days ☐ 14 Days ☐ 21 Days ☐ Other ______

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By: [signature]	1/29/18	12:30	1. Received By: [signature]	1/30/18	1400
2. Relinquished By: [signature]	1-30-18	1650	2. Received By: [signature]	1-30-18	1650
3. Relinquished By			3. Received By		

Comments

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

4.8 #1

Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-130699-1

Login Number: 130699

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 480-130826-1
Client Project/Site: Benchmark - 165 West Utica

For:
Turnkey Environmental Restoration, LLC
2558 Hamburg Turnpike
Suite 300
Lackawanna, New York 14218

Attn: Nate Munley

Authorized for release by:
2/8/2018 9:43:23 AM

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

Table of Contents

Qualifiers

GC/MS VOA

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

GC/MS VOA TICs

Qualifier	Qualifier Description
J	Indicates an Estimated Value for TICs
N	Presumptive evidence of material.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

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

Case Narrative

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Job ID: 480-130826-1

Laboratory: TestAmerica Buffalo

Narrative

Job Narrative
480-130826-1

Comments
No additional comments.

Receipt
The samples were received on 2/2/2018 12:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.6º C.

GC/MS VOA
Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-1 (480-130826-1). Elevated reporting limits (RLs) are provided.

Method(s) 8260C: The following sample was collected in properly preserved vials for analysis of volatile organic compounds (VOCs). However, the pH was outside the required criteria when verified by the laboratory, and corrective action was not possible: MW-1 (480-130826-1). The sample was analyzed within 7 days per EPA recommendation.

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-398504 recovered outside acceptance criteria, low biased, for 2-Hexanone. A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported. The following sample is impacted: MW-1 (480-130826-1).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-398504 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane, Tetrachloroethene and Trichlorofluoromethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: MW-1 (480-130826-1).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-398876 recovered above the upper control limit for 1,1,2-Trichloro-1,2,2-trifluoroethane. The samples associated with this CCV were non-detects for the affected analytes; therefore, the data have been reported. The following sample is impacted: MW-2 (480-130826-2).

Method(s) 8260C: The continuing calibration verification (CCV) associated with batch 480-398876 recovered outside acceptance criteria, low biased, for 2-Hexanone, 1,1,2,2-Tetrachloroethane and 4-Methyl-2-pentanone (MIBK). A reporting limit (RL) standard was analyzed, and the target analyte was detected. Since the associated samples were non-detect for this analyte, the data have been reported.

Method(s) 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: MW-2 (480-130826-2). 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.

Detection Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Client Sample ID: MW-1 — Lab Sample ID: 480-130826-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	2200		50	38	ug/L	50		8260C	Total/NA
1,3,5-Trimethylbenzene	450		50	39	ug/L	50		8260C	Total/NA
4-Isopropyltoluene	95		50	16	ug/L	50		8260C	Total/NA
cis-1,2-Dichloroethene	750		50	41	ug/L	50		8260C	Total/NA
Ethylbenzene	68		50	37	ug/L	50		8260C	Total/NA
Isopropylbenzene	75		50	40	ug/L	50		8260C	Total/NA
m,p-Xylene	190		100	33	ug/L	50		8260C	Total/NA
n-Butylbenzene	110		50	32	ug/L	50		8260C	Total/NA
N-Propylbenzene	180		50	35	ug/L	50		8260C	Total/NA
o-Xylene	210		50	38	ug/L	50		8260C	Total/NA
sec-Butylbenzene	67		50	38	ug/L	50		8260C	Total/NA
Xylenes, Total	400		100	33	ug/L	50		8260C	Total/NA

Client Sample ID: MW-2 — Lab Sample ID: 480-130826-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	160		4.0	3.0	ug/L	4		8260C	Total/NA
1,3,5-Trimethylbenzene	50		4.0	3.1	ug/L	4		8260C	Total/NA
4-Isopropyltoluene	4.1		4.0	1.2	ug/L	4		8260C	Total/NA
cis-1,2-Dichloroethene	18		4.0	3.2	ug/L	4		8260C	Total/NA
Isopropylbenzene	6.2		4.0	3.2	ug/L	4		8260C	Total/NA
m,p-Xylene	9.9		8.0	2.6	ug/L	4		8260C	Total/NA
n-Butylbenzene	4.2		4.0	2.6	ug/L	4		8260C	Total/NA
N-Propylbenzene	9.6		4.0	2.8	ug/L	4		8260C	Total/NA
o-Xylene	3.7	J	4.0	3.0	ug/L	4		8260C	Total/NA
Tetrachloroethene	33		4.0	1.4	ug/L	4		8260C	Total/NA
Xylenes, Total	14		8.0	2.6	ug/L	4		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Client Sample ID: MW-1
Date Collected: 01/31/18 14:20
Date Received: 02/02/18 00:15

Lab Sample ID: 480-130826-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		50	41	ug/L			02/03/18 00:20	50
1,1,2,2-Tetrachloroethane	ND		50	11	ug/L			02/03/18 00:20	50
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		50	16	ug/L			02/03/18 00:20	50
1,1,2-Trichloroethane	ND		50	12	ug/L			02/03/18 00:20	50
1,1-Dichloroethane	ND		50	19	ug/L			02/03/18 00:20	50
1,1-Dichloroethene	ND		50	15	ug/L			02/03/18 00:20	50
1,2,4-Trichlorobenzene	ND		50	21	ug/L			02/03/18 00:20	50
1,2,4-Trimethylbenzene	**2200**		50	38	ug/L			02/03/18 00:20	50
1,2-Dibromo-3-Chloropropane	ND		50	20	ug/L			02/03/18 00:20	50
1,2-Dibromoethane	ND		50	37	ug/L			02/03/18 00:20	50
1,2-Dichlorobenzene	ND		50	40	ug/L			02/03/18 00:20	50
1,2-Dichloroethane	ND		50	11	ug/L			02/03/18 00:20	50
1,2-Dichloropropane	ND		50	36	ug/L			02/03/18 00:20	50
1,3,5-Trimethylbenzene	**450**		50	39	ug/L			02/03/18 00:20	50
1,3-Dichlorobenzene	ND		50	39	ug/L			02/03/18 00:20	50
1,4-Dichlorobenzene	ND		50	42	ug/L			02/03/18 00:20	50
2-Butanone (MEK)	ND		500	66	ug/L			02/03/18 00:20	50
2-Hexanone	ND		250	62	ug/L			02/03/18 00:20	50
4-Isopropyltoluene	**95**		50	16	ug/L			02/03/18 00:20	50
4-Methyl-2-pentanone (MIBK)	ND		250	110	ug/L			02/03/18 00:20	50
Acetone	ND		500	150	ug/L			02/03/18 00:20	50
Benzene	ND		50	21	ug/L			02/03/18 00:20	50
Bromodichloromethane	ND		50	20	ug/L			02/03/18 00:20	50
Bromoform	ND		50	13	ug/L			02/03/18 00:20	50
Bromomethane	ND		50	35	ug/L			02/03/18 00:20	50
Carbon disulfide	ND		50	9.5	ug/L			02/03/18 00:20	50
Carbon tetrachloride	ND		50	14	ug/L			02/03/18 00:20	50
Chlorobenzene	ND		50	38	ug/L			02/03/18 00:20	50
Chloroethane	ND		50	16	ug/L			02/03/18 00:20	50
Chloroform	ND		50	17	ug/L			02/03/18 00:20	50
Chloromethane	ND		50	18	ug/L			02/03/18 00:20	50
cis-1,2-Dichloroethene	**750**		50	41	ug/L			02/03/18 00:20	50
cis-1,3-Dichloropropene	ND		50	18	ug/L			02/03/18 00:20	50
Cyclohexane	ND		50	9.0	ug/L			02/03/18 00:20	50
Dibromochloromethane	ND		50	16	ug/L			02/03/18 00:20	50
Dichlorodifluoromethane	ND		50	34	ug/L			02/03/18 00:20	50
Ethylbenzene	**68**		50	37	ug/L			02/03/18 00:20	50
Isopropylbenzene	**75**		50	40	ug/L			02/03/18 00:20	50
m,p-Xylene	**190**		100	33	ug/L			02/03/18 00:20	50
Methyl acetate	ND		130	65	ug/L			02/03/18 00:20	50
Methyl tert-butyl ether	ND		50	8.0	ug/L			02/03/18 00:20	50
Methylcyclohexane	ND		50	8.0	ug/L			02/03/18 00:20	50
Methylene Chloride	ND		50	22	ug/L			02/03/18 00:20	50
n-Butylbenzene	**110**		50	32	ug/L			02/03/18 00:20	50
N-Propylbenzene	**180**		50	35	ug/L			02/03/18 00:20	50
o-Xylene	**210**		50	38	ug/L			02/03/18 00:20	50
sec-Butylbenzene	**67**		50	38	ug/L			02/03/18 00:20	50
Styrene	ND		50	37	ug/L			02/03/18 00:20	50
tert-Butylbenzene	ND		50	41	ug/L			02/03/18 00:20	50

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Client Sample ID: MW-1
Date Collected: 01/31/18 14:20
Date Received: 02/02/18 00:15

Lab Sample ID: 480-130826-1
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	ND		50	18	ug/L			02/03/18 00:20	50
Toluene	ND		50	26	ug/L			02/03/18 00:20	50
trans-1,2-Dichloroethene	ND		50	45	ug/L			02/03/18 00:20	50
trans-1,3-Dichloropropene	ND		50	19	ug/L			02/03/18 00:20	50
Trichloroethene	ND		50	23	ug/L			02/03/18 00:20	50
Trichlorofluoromethane	ND		50	44	ug/L			02/03/18 00:20	50
Vinyl chloride	ND		50	45	ug/L			02/03/18 00:20	50
Xylenes, Total	**400**		100	33	ug/L			02/03/18 00:20	50

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Benzene, 1-ethyl-2-methyl-	*420*	*T J N*	*ug/L*		*8.59*	*611-14-3*		*02/03/18 00:20*	*50*
Benzene, 2-ethyl-1,4-dimethyl-	*190*	*T J N*	*ug/L*		*9.54*	*1758-88-9*		*02/03/18 00:20*	*50*
Benzene, 1-methyl-3-(1-methylethyl)-	*130*	*T J N*	*ug/L*		*9.61*	*535-77-3*		*02/03/18 00:20*	*50*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*102*		*77 - 120*		*02/03/18 00:20*	*50*
4-Bromofluorobenzene (Surr)	*110*		*73 - 120*		*02/03/18 00:20*	*50*
Toluene-d8 (Surr)	*102*		*80 - 120*		*02/03/18 00:20*	*50*

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Client Sample ID: MW-2
Date Collected: 01/31/18 13:10
Date Received: 02/02/18 00:15

Lab Sample ID: 480-130826-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		4.0	3.3	ug/L			02/07/18 12:37	4
1,1,2,2-Tetrachloroethane	ND		4.0	0.84	ug/L			02/07/18 12:37	4
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		4.0	1.2	ug/L			02/07/18 12:37	4
1,1,2-Trichloroethane	ND		4.0	0.92	ug/L			02/07/18 12:37	4
1,1-Dichloroethane	ND		4.0	1.5	ug/L			02/07/18 12:37	4
1,1-Dichloroethene	ND		4.0	1.2	ug/L			02/07/18 12:37	4
1,2,4-Trichlorobenzene	ND		4.0	1.6	ug/L			02/07/18 12:37	4
1,2,4-Trimethylbenzene	**160**		4.0	3.0	ug/L			02/07/18 12:37	4
1,2-Dibromo-3-Chloropropane	ND		4.0	1.6	ug/L			02/07/18 12:37	4
1,2-Dibromoethane	ND		4.0	2.9	ug/L			02/07/18 12:37	4
1,2-Dichlorobenzene	ND		4.0	3.2	ug/L			02/07/18 12:37	4
1,2-Dichloroethane	ND		4.0	0.84	ug/L			02/07/18 12:37	4
1,2-Dichloropropane	ND		4.0	2.9	ug/L			02/07/18 12:37	4
1,3,5-Trimethylbenzene	**50**		4.0	3.1	ug/L			02/07/18 12:37	4
1,3-Dichlorobenzene	ND		4.0	3.1	ug/L			02/07/18 12:37	4
1,4-Dichlorobenzene	ND		4.0	3.4	ug/L			02/07/18 12:37	4
2-Butanone (MEK)	ND		40	5.3	ug/L			02/07/18 12:37	4
2-Hexanone	ND		20	5.0	ug/L			02/07/18 12:37	4
4-Isopropyltoluene	**4.1**		4.0	1.2	ug/L			02/07/18 12:37	4
4-Methyl-2-pentanone (MIBK)	ND		20	8.4	ug/L			02/07/18 12:37	4
Acetone	ND		40	12	ug/L			02/07/18 12:37	4
Benzene	ND		4.0	1.6	ug/L			02/07/18 12:37	4
Bromodichloromethane	ND		4.0	1.6	ug/L			02/07/18 12:37	4
Bromoform	ND		4.0	1.0	ug/L			02/07/18 12:37	4
Bromomethane	ND		4.0	2.8	ug/L			02/07/18 12:37	4
Carbon disulfide	ND		4.0	0.76	ug/L			02/07/18 12:37	4
Carbon tetrachloride	ND		4.0	1.1	ug/L			02/07/18 12:37	4
Chlorobenzene	ND		4.0	3.0	ug/L			02/07/18 12:37	4
Chloroethane	ND		4.0	1.3	ug/L			02/07/18 12:37	4
Chloroform	ND		4.0	1.4	ug/L			02/07/18 12:37	4
Chloromethane	ND		4.0	1.4	ug/L			02/07/18 12:37	4
cis-1,2-Dichloroethene	**18**		4.0	3.2	ug/L			02/07/18 12:37	4
cis-1,3-Dichloropropene	ND		4.0	1.4	ug/L			02/07/18 12:37	4
Cyclohexane	ND		4.0	0.72	ug/L			02/07/18 12:37	4
Dibromochloromethane	ND		4.0	1.3	ug/L			02/07/18 12:37	4
Dichlorodifluoromethane	ND		4.0	2.7	ug/L			02/07/18 12:37	4
Ethylbenzene	ND		4.0	3.0	ug/L			02/07/18 12:37	4
Isopropylbenzene	**6.2**		4.0	3.2	ug/L			02/07/18 12:37	4
m,p-Xylene	**9.9**		8.0	2.6	ug/L			02/07/18 12:37	4
Methyl acetate	ND		10	5.2	ug/L			02/07/18 12:37	4
Methyl tert-butyl ether	ND		4.0	0.64	ug/L			02/07/18 12:37	4
Methylcyclohexane	ND		4.0	0.64	ug/L			02/07/18 12:37	4
Methylene Chloride	ND		4.0	1.8	ug/L			02/07/18 12:37	4
n-Butylbenzene	**4.2**		4.0	2.6	ug/L			02/07/18 12:37	4
N-Propylbenzene	**9.6**		4.0	2.8	ug/L			02/07/18 12:37	4
o-Xylene	**3.7**	**J**	4.0	3.0	ug/L			02/07/18 12:37	4
sec-Butylbenzene	ND		4.0	3.0	ug/L			02/07/18 12:37	4
Styrene	ND		4.0	2.9	ug/L			02/07/18 12:37	4
tert-Butylbenzene	ND		4.0	3.2	ug/L			02/07/18 12:37	4

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Client Sample ID: MW-2
Date Collected: 01/31/18 13:10
Date Received: 02/02/18 00:15

Lab Sample ID: 480-130826-2
Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Tetrachloroethene	**33**		4.0	1.4	ug/L			02/07/18 12:37	4
Toluene	ND		4.0	2.0	ug/L			02/07/18 12:37	4
trans-1,2-Dichloroethene	ND		4.0	3.6	ug/L			02/07/18 12:37	4
trans-1,3-Dichloropropene	ND		4.0	1.5	ug/L			02/07/18 12:37	4
Trichloroethene	ND		4.0	1.8	ug/L			02/07/18 12:37	4
Trichlorofluoromethane	ND		4.0	3.5	ug/L			02/07/18 12:37	4
Vinyl chloride	ND		4.0	3.6	ug/L			02/07/18 12:37	4
Xylenes, Total	**14**		8.0	2.6	ug/L			02/07/18 12:37	4

Tentatively Identified Compound	*Est. Result*	*Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Methane, dibromofluoro-	*37*	*T J N*	*ug/L*		*4.41*	*1868-53-7*		*02/07/18 12:37*	*4*
Unknown	*17*	*T J*	*ug/L*		*7.75*			*02/07/18 12:37*	*4*
Unknown	*27*	*T J*	*ug/L*		*7.81*			*02/07/18 12:37*	*4*
Benzene, 1-ethyl-2-methyl-	*40*	*T J N*	*ug/L*		*8.59*	*611-14-3*		*02/07/18 12:37*	*4*
Benzene, 1-methyl-3-(1-methylethyl)-	*10*	*T J N*	*ug/L*		*9.54*	*535-77-3*		*02/07/18 12:37*	*4*

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*94*		*77 - 120*		*02/07/18 12:37*	*4*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*02/07/18 12:37*	*4*
Toluene-d8 (Surr)	*96*		*80 - 120*		*02/07/18 12:37*	*4*

Surrogate Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)		
		DCA	BFB	TOL
Lab Sample ID	Client Sample ID	(77-120)	(73-120)	(80-120)
480-130826-1	MW-1	102	110	102
480-130826-2	MW-2	94	104	96
LCS 480-398504/4	Lab Control Sample	95	103	97
LCS 480-398876/5	Lab Control Sample	93	100	97
MB 480-398504/6	Method Blank	98	104	99
MB 480-398876/7	Method Blank	92	104	98

Surrogate Legend

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

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

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

Lab Sample ID: MB 480-398504/6
Matrix: Water
Analysis Batch: 398504

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/02/18 22:03	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/02/18 22:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/02/18 22:03	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/02/18 22:03	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/02/18 22:03	1
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/02/18 22:03	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/02/18 22:03	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/02/18 22:03	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/02/18 22:03	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/02/18 22:03	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/02/18 22:03	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/02/18 22:03	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/02/18 22:03	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/02/18 22:03	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/02/18 22:03	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/02/18 22:03	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/02/18 22:03	1
2-Hexanone	ND		5.0	1.2	ug/L			02/02/18 22:03	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			02/02/18 22:03	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/02/18 22:03	1
Acetone	ND		10	3.0	ug/L			02/02/18 22:03	1
Benzene	ND		1.0	0.41	ug/L			02/02/18 22:03	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/02/18 22:03	1
Bromoform	ND		1.0	0.26	ug/L			02/02/18 22:03	1
Bromomethane	ND		1.0	0.69	ug/L			02/02/18 22:03	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/02/18 22:03	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/02/18 22:03	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/02/18 22:03	1
Chloroethane	ND		1.0	0.32	ug/L			02/02/18 22:03	1
Chloroform	ND		1.0	0.34	ug/L			02/02/18 22:03	1
Chloromethane	ND		1.0	0.35	ug/L			02/02/18 22:03	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/02/18 22:03	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/02/18 22:03	1
Cyclohexane	ND		1.0	0.18	ug/L			02/02/18 22:03	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/02/18 22:03	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/02/18 22:03	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/02/18 22:03	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/02/18 22:03	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/02/18 22:03	1
Methyl acetate	ND		2.5	1.3	ug/L			02/02/18 22:03	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/02/18 22:03	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/02/18 22:03	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/02/18 22:03	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/02/18 22:03	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/02/18 22:03	1
o-Xylene	ND		1.0	0.76	ug/L			02/02/18 22:03	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/02/18 22:03	1
Styrene	ND		1.0	0.73	ug/L			02/02/18 22:03	1

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

Lab Sample ID: MB 480-398504/6
Matrix: Water
Analysis Batch: 398504

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/02/18 22:03	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/02/18 22:03	1
Toluene	ND		1.0	0.51	ug/L			02/02/18 22:03	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/02/18 22:03	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/02/18 22:03	1
Trichloroethene	ND		1.0	0.46	ug/L			02/02/18 22:03	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/02/18 22:03	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/02/18 22:03	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/02/18 22:03	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*02/02/18 22:03*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*98*		*77 - 120*		*02/02/18 22:03*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*02/02/18 22:03*	*1*
Toluene-d8 (Surr)	*99*		*80 - 120*		*02/02/18 22:03*	*1*

Lab Sample ID: LCS 480-398504/4
Matrix: Water
Analysis Batch: 398504

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	28.7		ug/L		115	73 - 126
1,1,2,2-Tetrachloroethane	25.0	20.4		ug/L		82	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	31.3		ug/L		125	61 - 148
1,1,2-Trichloroethane	25.0	22.8		ug/L		91	76 - 122
1,1-Dichloroethane	25.0	27.3		ug/L		109	77 - 120
1,1-Dichloroethene	25.0	28.5		ug/L		114	66 - 127
1,2,4-Trichlorobenzene	25.0	26.1		ug/L		105	79 - 122
1,2,4-Trimethylbenzene	25.0	25.8		ug/L		103	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	17.7		ug/L		71	56 - 134
1,2-Dibromoethane	25.0	22.8		ug/L		91	77 - 120
1,2-Dichlorobenzene	25.0	26.5		ug/L		106	80 - 124
1,2-Dichloroethane	25.0	25.7		ug/L		103	75 - 120
1,2-Dichloropropane	25.0	25.0		ug/L		100	76 - 120
1,3,5-Trimethylbenzene	25.0	25.9		ug/L		104	77 - 121
1,3-Dichlorobenzene	25.0	26.7		ug/L		107	77 - 120
1,4-Dichlorobenzene	25.0	26.4		ug/L		106	80 - 120
2-Butanone (MEK)	125	114		ug/L		91	57 - 140
2-Hexanone	125	98.4		ug/L		79	65 - 127
4-Isopropyltoluene	25.0	26.6		ug/L		107	73 - 120
4-Methyl-2-pentanone (MIBK)	125	99.1		ug/L		79	71 - 125
Acetone	125	104		ug/L		83	56 - 142
Benzene	25.0	28.9		ug/L		116	71 - 124
Bromodichloromethane	25.0	26.1		ug/L		104	80 - 122
Bromoform	25.0	20.1		ug/L		80	61 - 132

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

Lab Sample ID: LCS 480-398504/4
Matrix: Water
Analysis Batch: 398504

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Bromomethane	25.0	30.4		ug/L		122	55 - 144
Carbon disulfide	25.0	28.1		ug/L		113	59 - 134
Carbon tetrachloride	25.0	28.8		ug/L		115	72 - 134
Chlorobenzene	25.0	26.5		ug/L		106	80 - 120
Chloroethane	25.0	28.0		ug/L		112	69 - 136
Chloroform	25.0	26.4		ug/L		106	73 - 127
Chloromethane	25.0	27.9		ug/L		112	68 - 124
cis-1,2-Dichloroethene	25.0	27.9		ug/L		111	74 - 124
cis-1,3-Dichloropropene	25.0	26.0		ug/L		104	74 - 124
Cyclohexane	25.0	27.7		ug/L		111	59 - 135
Dibromochloromethane	25.0	22.5		ug/L		90	75 - 125
Dichlorodifluoromethane	25.0	29.1		ug/L		117	59 - 135
Ethylbenzene	25.0	25.8		ug/L		103	77 - 123
Isopropylbenzene	25.0	25.9		ug/L		104	77 - 122
m,p-Xylene	25.0	26.5		ug/L		106	76 - 122
Methyl acetate	50.0	41.0		ug/L		82	74 - 133
Methyl tert-butyl ether	25.0	24.6		ug/L		98	77 - 120
Methylcyclohexane	25.0	28.2		ug/L		113	68 - 134
Methylene Chloride	25.0	26.4		ug/L		105	75 - 124
n-Butylbenzene	25.0	25.2		ug/L		101	71 - 128
N-Propylbenzene	25.0	25.7		ug/L		103	75 - 127
o-Xylene	25.0	26.0		ug/L		104	76 - 122
sec-Butylbenzene	25.0	26.5		ug/L		106	74 - 127
Styrene	25.0	25.9		ug/L		103	80 - 120
tert-Butylbenzene	25.0	26.5		ug/L		106	75 - 123
Tetrachloroethene	25.0	29.2		ug/L		117	74 - 122
Toluene	25.0	26.0		ug/L		104	80 - 122
trans-1,2-Dichloroethene	25.0	28.5		ug/L		114	73 - 127
trans-1,3-Dichloropropene	25.0	23.0		ug/L		92	80 - 120
Trichloroethene	25.0	28.3		ug/L		113	74 - 123
Trichlorofluoromethane	25.0	30.5		ug/L		122	62 - 150
Vinyl chloride	25.0	28.2		ug/L		113	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*95*		*77 - 120*
4-Bromofluorobenzene (Surr)	*103*		*73 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

Lab Sample ID: MB 480-398876/7
Matrix: Water
Analysis Batch: 398876

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.0	0.82	ug/L			02/07/18 10:29	1
1,1,2,2-Tetrachloroethane	ND		1.0	0.21	ug/L			02/07/18 10:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.0	0.31	ug/L			02/07/18 10:29	1
1,1,2-Trichloroethane	ND		1.0	0.23	ug/L			02/07/18 10:29	1
1,1-Dichloroethane	ND		1.0	0.38	ug/L			02/07/18 10:29	1

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

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

Lab Sample ID: MB 480-398876/7
Matrix: Water
Analysis Batch: 398876

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1-Dichloroethene	ND		1.0	0.29	ug/L			02/07/18 10:29	1
1,2,4-Trichlorobenzene	ND		1.0	0.41	ug/L			02/07/18 10:29	1
1,2,4-Trimethylbenzene	ND		1.0	0.75	ug/L			02/07/18 10:29	1
1,2-Dibromo-3-Chloropropane	ND		1.0	0.39	ug/L			02/07/18 10:29	1
1,2-Dibromoethane	ND		1.0	0.73	ug/L			02/07/18 10:29	1
1,2-Dichlorobenzene	ND		1.0	0.79	ug/L			02/07/18 10:29	1
1,2-Dichloroethane	ND		1.0	0.21	ug/L			02/07/18 10:29	1
1,2-Dichloropropane	ND		1.0	0.72	ug/L			02/07/18 10:29	1
1,3,5-Trimethylbenzene	ND		1.0	0.77	ug/L			02/07/18 10:29	1
1,3-Dichlorobenzene	ND		1.0	0.78	ug/L			02/07/18 10:29	1
1,4-Dichlorobenzene	ND		1.0	0.84	ug/L			02/07/18 10:29	1
2-Butanone (MEK)	ND		10	1.3	ug/L			02/07/18 10:29	1
2-Hexanone	ND		5.0	1.2	ug/L			02/07/18 10:29	1
4-Isopropyltoluene	ND		1.0	0.31	ug/L			02/07/18 10:29	1
4-Methyl-2-pentanone (MIBK)	ND		5.0	2.1	ug/L			02/07/18 10:29	1
Acetone	ND		10	3.0	ug/L			02/07/18 10:29	1
Benzene	ND		1.0	0.41	ug/L			02/07/18 10:29	1
Bromodichloromethane	ND		1.0	0.39	ug/L			02/07/18 10:29	1
Bromoform	ND		1.0	0.26	ug/L			02/07/18 10:29	1
Bromomethane	ND		1.0	0.69	ug/L			02/07/18 10:29	1
Carbon disulfide	ND		1.0	0.19	ug/L			02/07/18 10:29	1
Carbon tetrachloride	ND		1.0	0.27	ug/L			02/07/18 10:29	1
Chlorobenzene	ND		1.0	0.75	ug/L			02/07/18 10:29	1
Chloroethane	ND		1.0	0.32	ug/L			02/07/18 10:29	1
Chloroform	ND		1.0	0.34	ug/L			02/07/18 10:29	1
Chloromethane	ND		1.0	0.35	ug/L			02/07/18 10:29	1
cis-1,2-Dichloroethene	ND		1.0	0.81	ug/L			02/07/18 10:29	1
cis-1,3-Dichloropropene	ND		1.0	0.36	ug/L			02/07/18 10:29	1
Cyclohexane	ND		1.0	0.18	ug/L			02/07/18 10:29	1
Dibromochloromethane	ND		1.0	0.32	ug/L			02/07/18 10:29	1
Dichlorodifluoromethane	ND		1.0	0.68	ug/L			02/07/18 10:29	1
Ethylbenzene	ND		1.0	0.74	ug/L			02/07/18 10:29	1
Isopropylbenzene	ND		1.0	0.79	ug/L			02/07/18 10:29	1
m,p-Xylene	ND		2.0	0.66	ug/L			02/07/18 10:29	1
Methyl acetate	ND		2.5	1.3	ug/L			02/07/18 10:29	1
Methyl tert-butyl ether	ND		1.0	0.16	ug/L			02/07/18 10:29	1
Methylcyclohexane	ND		1.0	0.16	ug/L			02/07/18 10:29	1
Methylene Chloride	ND		1.0	0.44	ug/L			02/07/18 10:29	1
n-Butylbenzene	ND		1.0	0.64	ug/L			02/07/18 10:29	1
N-Propylbenzene	ND		1.0	0.69	ug/L			02/07/18 10:29	1
o-Xylene	ND		1.0	0.76	ug/L			02/07/18 10:29	1
sec-Butylbenzene	ND		1.0	0.75	ug/L			02/07/18 10:29	1
Styrene	ND		1.0	0.73	ug/L			02/07/18 10:29	1
tert-Butylbenzene	ND		1.0	0.81	ug/L			02/07/18 10:29	1
Tetrachloroethene	ND		1.0	0.36	ug/L			02/07/18 10:29	1
Toluene	ND		1.0	0.51	ug/L			02/07/18 10:29	1
trans-1,2-Dichloroethene	ND		1.0	0.90	ug/L			02/07/18 10:29	1
trans-1,3-Dichloropropene	ND		1.0	0.37	ug/L			02/07/18 10:29	1

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

Lab Sample ID: MB 480-398876/7
Matrix: Water
Analysis Batch: 398876

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	ND		1.0	0.46	ug/L			02/07/18 10:29	1
Trichlorofluoromethane	ND		1.0	0.88	ug/L			02/07/18 10:29	1
Vinyl chloride	ND		1.0	0.90	ug/L			02/07/18 10:29	1
Xylenes, Total	ND		2.0	0.66	ug/L			02/07/18 10:29	1

Tentatively Identified Compound	*MB Est. Result*	*MB Qualifier*	*Unit*	*D*	*RT*	*CAS No.*	*Prepared*	*Analyzed*	*Dil Fac*
Tentatively Identified Compound	*None*		*ug/L*					*02/07/18 10:29*	*1*

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*92*		*77 - 120*		*02/07/18 10:29*	*1*
4-Bromofluorobenzene (Surr)	*104*		*73 - 120*		*02/07/18 10:29*	*1*
Toluene-d8 (Surr)	*98*		*80 - 120*		*02/07/18 10:29*	*1*

Lab Sample ID: LCS 480-398876/5
Matrix: Water
Analysis Batch: 398876

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.3		ug/L		109	73 - 126
1,1,2,2-Tetrachloroethane	25.0	19.3		ug/L		77	76 - 120
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.6		ug/L		122	61 - 148
1,1,2-Trichloroethane	25.0	21.2		ug/L		85	76 - 122
1,1-Dichloroethane	25.0	26.1		ug/L		104	77 - 120
1,1-Dichloroethene	25.0	26.6		ug/L		106	66 - 127
1,2,4-Trichlorobenzene	25.0	24.7		ug/L		99	79 - 122
1,2,4-Trimethylbenzene	25.0	24.0		ug/L		96	76 - 121
1,2-Dibromo-3-Chloropropane	25.0	15.2		ug/L		61	56 - 134
1,2-Dibromoethane	25.0	20.7		ug/L		83	77 - 120
1,2-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 124
1,2-Dichloroethane	25.0	24.0		ug/L		96	75 - 120
1,2-Dichloropropane	25.0	24.1		ug/L		96	76 - 120
1,3,5-Trimethylbenzene	25.0	24.5		ug/L		98	77 - 121
1,3-Dichlorobenzene	25.0	25.8		ug/L		103	77 - 120
1,4-Dichlorobenzene	25.0	25.1		ug/L		100	80 - 120
2-Butanone (MEK)	125	103		ug/L		83	57 - 140
2-Hexanone	125	88.8		ug/L		71	65 - 127
4-Isopropyltoluene	25.0	25.1		ug/L		100	73 - 120
4-Methyl-2-pentanone (MIBK)	125	90.2		ug/L		72	71 - 125
Acetone	125	101		ug/L		81	56 - 142
Benzene	25.0	27.7		ug/L		111	71 - 124
Bromodichloromethane	25.0	24.5		ug/L		98	80 - 122
Bromoform	25.0	18.5		ug/L		74	61 - 132
Bromomethane	25.0	24.8		ug/L		99	55 - 144
Carbon disulfide	25.0	26.5		ug/L		106	59 - 134
Carbon tetrachloride	25.0	27.5		ug/L		110	72 - 134
Chlorobenzene	25.0	25.0		ug/L		100	80 - 120
Chloroethane	25.0	23.2		ug/L		93	69 - 136

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

Lab Sample ID: LCS 480-398876/5
Matrix: Water
Analysis Batch: 398876

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroform	25.0	25.2		ug/L		101	73 - 127
Chloromethane	25.0	23.7		ug/L		95	68 - 124
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	24.5		ug/L		98	74 - 124
Cyclohexane	25.0	26.9		ug/L		108	59 - 135
Dibromochloromethane	25.0	20.9		ug/L		84	75 - 125
Dichlorodifluoromethane	25.0	26.5		ug/L		106	59 - 135
Ethylbenzene	25.0	24.4		ug/L		98	77 - 123
Isopropylbenzene	25.0	24.6		ug/L		98	77 - 122
m,p-Xylene	25.0	24.5		ug/L		98	76 - 122
Methyl acetate	50.0	38.2		ug/L		76	74 - 133
Methyl tert-butyl ether	25.0	23.4		ug/L		94	77 - 120
Methylcyclohexane	25.0	27.1		ug/L		108	68 - 134
Methylene Chloride	25.0	25.2		ug/L		101	75 - 124
n-Butylbenzene	25.0	23.9		ug/L		95	71 - 128
N-Propylbenzene	25.0	24.2		ug/L		97	75 - 127
o-Xylene	25.0	24.9		ug/L		100	76 - 122
sec-Butylbenzene	25.0	25.0		ug/L		100	74 - 127
Styrene	25.0	24.2		ug/L		97	80 - 120
tert-Butylbenzene	25.0	24.4		ug/L		98	75 - 123
Tetrachloroethene	25.0	27.2		ug/L		109	74 - 122
Toluene	25.0	25.4		ug/L		102	80 - 122
trans-1,2-Dichloroethene	25.0	27.4		ug/L		110	73 - 127
trans-1,3-Dichloropropene	25.0	21.3		ug/L		85	80 - 120
Trichloroethene	25.0	26.7		ug/L		107	74 - 123
Trichlorofluoromethane	25.0	27.0		ug/L		108	62 - 150
Vinyl chloride	25.0	24.4		ug/L		98	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*93*		*77 - 120*
4-Bromofluorobenzene (Surr)	*100*		*73 - 120*
Toluene-d8 (Surr)	*97*		*80 - 120*

QC Association Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

GC/MS VOA

Analysis Batch: 398504

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130826-1	MW-1	Total/NA	Water	8260C	
MB 480-398504/6	Method Blank	Total/NA	Water	8260C	
LCS 480-398504/4	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 398876

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-130826-2	MW-2	Total/NA	Water	8260C	
MB 480-398876/7	Method Blank	Total/NA	Water	8260C	
LCS 480-398876/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Client Sample ID: MW-1

Lab Sample ID: 480-130826-1

Date Collected: 01/31/18 14:20

Matrix: Water

Date Received: 02/02/18 00:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		50	398504	02/03/18 00:20	RRS	TAL BUF

Client Sample ID: MW-2

Lab Sample ID: 480-130826-2

Date Collected: 01/31/18 13:10

Matrix: Water

Date Received: 02/02/18 00:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		4	398876	02/07/18 12:37	KMN	TAL BUF

Laboratory References:

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

Accreditation/Certification Summary

Client: Turnkey Environmental Restoration, LLC
TestAmerica Job ID: 480-130826-1
Project/Site: Benchmark - 165 West Utica

Laboratory: TestAmerica Buffalo

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

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

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

Method Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

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

Protocol References:

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

Laboratory References:

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

Sample Summary

Client: Turnkey Environmental Restoration, LLC
Project/Site: Benchmark - 165 West Utica

TestAmerica Job ID: 480-130826-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-130826-1	MW-1	Water	01/31/18 14:20	02/02/18 00:15
480-130826-2	MW-2	Water	01/31/18 13:10	02/02/18 00:15

Chain of Custody Record

Temperature on Receipt _____

Drinking Water? Yes☐ No☐

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-130826 COC

TAL-4124 (1007)

Client	Project Manager	Date	Chain of Custody Number
Turnkey Env. Restoration	Nate Manley / Brian Fischer	1/31/18	274026
Address	**Telephone Number (Area Code)/Fax Number**	**Lab Number**	**Page 1 of 1**
2558 Hamburg Tpke	716-713-3437		
City / **State** / **Zip Code**	**Site Contact**	**Lab Contact**	
Buffalo / NY / 14218	Nick Sorai	Brian Fischer	
Project Name and Location (State)	**Carrier/Waybill Number**		
165 West Utica St Site			
Contract/Purchase Order/Quote No.			
B0239-017-002			

Sample I.D. No. and Description (Containers for each sample may be combined on one line)	Date	Time	Matrix: Air	Aqueous	Sed.	Soil	Containers & Preservatives: Unpres.	H2SO4	HNO3	HCl	NaOH	ZnAc/NaOH	Analysis: TCL HCP-SI VOC's	Special Instructions/ Conditions of Receipt
MW-1	1/31/18	14:20		X						X				+ TIC's
MW-2	1/31/18	13:6		X						X				+ TIC's

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

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

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

QC Requirements (Specify)

	Date	Time		Date	Time
1. Relinquished By	1/31/18	16:00	1. Received By	2-1-18	1415
2. Relinquished By	2-1-18	1850	2. Received By TAS 2-2-18 0015		
3. Relinquished By			3. Received By		

Comments

3.6 #1

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

Login Sample Receipt Checklist

Client: Turnkey Environmental Restoration, LLC

Job Number: 480-130826-1

Login Number: 130826

List Source: TestAmerica Buffalo

List Number: 1

Creator: Williams, Christopher S

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	TURNKEY
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	N/A	