Lockheed Martin Corporation
6801 Rockledge Drive MP: CCT-246
Bethesda, MD 20817
Telephone 301-548-2227

May 10, 2017

Mr. James R. Carroll
Program Administrator
Land Restoration Program
Land Management Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

Subject: Block E Downgradient Trichloroethene Groundwater Investigation
Middle River Complex, Middle River, Maryland

Dear Mr. Carroll:

Tetra Tech, Inc. (Tetra Tech), on behalf of Lockheed Martin Corporation (Lockheed Martin), is presenting this summary of the limited additional investigation of trichloroethene (TCE) in groundwater downgradient of Block E of the Middle River Complex (MRC). The purpose of this study was to determine the downgradient extent and concentrations of TCE in groundwater to assist in the planning of the Block E remedial activities.

Investigation Objective

During October–November 2016, Lockheed Martin Corporation (Lockheed Martin) performed an investigation to more accurately delineate the current downgradient extent of the groundwater trichloroethene (TCE) plume south of the most downgradient monitoring well SEMW-6I (Figure 1).

Background

In January and April of 2016, groundwater samples were collected from monitoring and injection wells in Block E to better delineate the TCE plume at locations hydraulically downgradient (south) of underground storage tank (UST) 2 (shown as former UST 2 on Figure 1). UST 2 was discovered

adjacent to the foundation of former Building D in 2013 during construction of the Block E groundwater remedy. UST 2 contained TCE, and is now considered to be a source of elevated volatile organic compound (VOC) concentrations in groundwater in the Block E southeastern TCE area. Sampling results indicated that the TCE plume was likely further downgradient from Block E (south of SEMW-6I) than previously known. Therefore, investigation of the area between SEMW-6I and Dark Head Cove (Block F) was warranted to delineate the suspected TCE plume in this location. In December 2016, surface water samples were collected from Dark Head Cove in six locations directly downgradient of the groundwater TCE plume (*Final 2016 Surface Water Sampling Report Tetra Tech, 2017*). TCE was detected in several sampling locations in Dark Head Cove, with a maximum detected concentration of 7.8 micrograms per liter (µg/L) at MRC-SW12B-D (Figure 2). Vinyl chloride was not detected in any of the surface water samples.

Investigation Approach

The scope and methodology of this investigation was described in a letter (Block E Downgradient Trichloroethene Groundwater Investigation Work Plan) that was submitted to the Maryland Department of the Environment (MDE) on September 20, 2016 and approved on October 18, 2016.

To locate the center-line of the TCE plume downgradient of SEMW-6I, and optimize placement of the screen intervals of the new monitoring wells, groundwater was screened for TCE along four transects perpendicular to the assumed groundwater flow direction, as shown on Figure 3:

Transect A: seven sampling locations: A1 through A7.

Transect B: six sampling locations: B1 through B6.

Transect C: eight sampling locations: C1 through C8.

Transect D: four sampling locations: D1 through D4.

Groundwater samples were collected from 25 sampling locations. At each sampling location, groundwater was collected from three depths[1]: 15 to 19 feet (shallow); 20 to 24 feet (intermediate); and 26 to 30 feet (deep). The distance between sampling locations within each transect varied between 12 and 30 feet. Groundwater samples were collected using a SP-16 groundwater sampler

[1] Except A-6, A-7, and C-8, where samples were collected from less than three depth intervals.

by Geoprobe® Systems. To collect a sample, the groundwater sampler was driven to the desired sampling depth using standard Geoprobe® rods. Extension rods were used to hold the screen in position while the rods and sheath were retracted to expose the screen. Polyethylene tubing was lowered to the center of the screen. A groundwater sample was then collected for screening using a peristaltic pump after purging an approximately one liter volume.

TCE concentrations were measured in real time using a field gas chromatograph (GC) model FROG 4000. The results of this screening are shown on Figure 3 and in Table 1.

Additionally, one groundwater samples from Transect C (C-4I) and nine groundwater samples from Transect D were collected and sent to an analytical laboratory (Test America, Inc.) to be analyzed for volatile organic compounds (VOCs). Refer to Appendix A for analytical laboratory reports. Four groundwater samples (C-4I, D-2I, D-3I, and D-4I) were analyzed using both a field GC and by the analytical laboratory for comparison. This comparison indicated a generally good relationship between the TCE results obtained with these two methods (Table 1).

Investigation Results Summary

The results of the TCE screening can be summarized as following:

- The TCE plume extends south-east from SEMW-6I to near Dark Head Cove (approximately 200 feet). Figure 3 presents a preliminary 1,000 µg/L TCE contour line (bold dark magenta line) south-east from SEMW-6I.
- The width of the downgradient portion of the TCE plume varies from approximately 40 feet along Transect A to approximately 90 feet along Transect D near Dark Head Cove (Figure 3).
- For all DPT samples within the 1,000 µg/L TCE contour line on Figure 3 (46 values[2]), the average and median TCE concentrations were 9,428 µg/L and 4,503 µg/L respectively. TCE concentrations were above 20,000 µg/L at six locations (B-1D, B-2I, B-2D, C-4S, C-4I, and C-6D).

[2] Average and median values are calculated for the sampling points inside the 1,000 µg/L TCE contour (highlighted yellow in Table 1). Analytical laboratory results (see Appendix A) were used in place of field GC when available for these calculations. Not detected (ND) values for TCE were interpreted as zero values.

- For all shallow DPT samples (15 to 19 feet) within the 1,000 µg/L TCE contour line on Figure 3 (14 values[2]), the average and median TCE concentrations were 7,591 µg/L and 4,426 µg/L, respectively. In one shallow location (C-4), the TCE concentration was above 20,000 µg/L.

- For all intermediate DPT samples (20 to 24 feet) within the 1,000 µg/L TCE contour line on Figure 3 (16 values[2]) the average and median TCE concentrations were 9,522 µg/L and 4,503 µg/L, respectively. In two intermediate locations (B-2 and C-4) the TCE concentrations were above 20,000 µg/L.

- For all deep interval DPT samples (26 to 30 feet) within the 1,000 µg/L TCE contour line on Figure 3 (16 values[2]), the average and median TCE concentrations were 10,941 µg/L and 3,314 µg/L, respectively. In three deep locations (B-1, B-2, and C-6) the TCE concentrations were above 20,000 µg/L.

- Overall, the TCE concentrations in transects A and B were slightly higher with increasing depth, but this trend was not consistent. In fact, TCE concentrations in the shallow samples were higher along C and D transect near Dark Head Cove.

- The width of the TCE plume increased near Dark Head Cove, and TCE concentrations were generally lower there than in the upgradient sampling locations. It is possible that the interaction with cove surface water may be responsible for the plume widening near Dark Head Cove.

Based on the TCE screening results, three additional two-inch diameter groundwater monitoring wells (SEMW-7I, SEMW-8S, and SEMW-8I) were installed on November 14-15, 2016 at locations shown on Figure 3. Wells SEMW-7I and SEMW-8I were screened between 20 and 30 feet below ground surface. Well SEMW-8S was screened between five and 15 feet below ground surface. Groundwater samples were collected from these three wells on November 21, 2016 and sent to an analytical laboratory (Test America, Inc.) to be analyzed for the following parameters:

- VOCs
- iron
- manganese
- alkalinity
- sulfates
- total organic carbon (TOC)
- dissolved gases (ethane, ethane, methane)

- native bacteria genetic analyses: *Dehalobacter*, *Dehaloccocoides*, and functional genes (DHC) in SEMW-7I only.

The analytical results for the above parameters are in Table 2 and in Appendix A.

The TCE concentrations were 22,000 µg/L, 7,100 µg/L, and 16,000 µg/L in wells SEMW-7I, SEMW-8I, SEMW-8, respectively. These TCE values were in the same range as the TCE screening values obtained from these locations with a field GC (see Figure 3).

The iron concentrations ranged from 0.61 milligram per liter (mg/L) to 16 mg/L. The manganese concentrations ranged from 0.11 mg/L to 1.3 mg/L. Alkalinity values were non-detect (below 1.9 mg/L) in SEMW-8S, 4.2 mg/L in SEMW-7I, and 47 mg/L in SEMW-8I. TOC concentrations ranged from 0.61 mg/L to 3.1 mg/L.

The sulfate concentrations were relatively low in SEMW-7I and SEMW-8I (7.9 mg/L and 9.8 mg/L, respectively). However, the sulfate level in SEMW-8S was elevated (180 mg/L). This, with other data discussed below, indicates a likely intrusion of surface water from Dark Head Cove.

DHC analysis in SEMW-7I indicated an absence of dechlorinating bacteria. Dissolved gas concentrations (ethane, ethane, methane) in SEMW-7I were in low parts per billion range. The highest concentration was for ethene at 10 µg/L in SEMW-8I. This indicates possible limited biodegradation of TCE is occurring in the deeper interval near SEMW-8I.

The field parameters (Table 3) indicate reducing conditions (-154 millivolts [mV] oxidation reduction potential and 0 mg/L dissolved oxygen) in SEMW-8I. This is an indication that TCE biodegradation is possible in this location. Well SEMW-8S had higher values for specific conductivity, oxidation reduction potential, and dissolved oxygen, as compared to other locations (Table 3). This indicates that possible brackish water intrusion has occurred into shallow groundwater near Dark Head Cove. Depth to water measurements in SEMW-8S (0.07 feet above sea level, measured in January 2017) support a surface water intrusion hypothesis. Tidal fluctuations in Dark Head Cove are greater than the 0.07 feet depth to water in SEMW-8S; thus, water intrusion into the shallow groundwater is possible in this area.

TCE Plume Conclusions

Overall, the results of this investigation, together with the new data collected from the existing monitoring and injection wells at Block E in 2016, resulted in a better delineation of the TCE plume that originates at former UST 2 in Block E (Figure 1), and continues to near Dark Head Cove. The western boundary of the plume near Dark Head Cove remains non-delineated. Note that a large number of sampling locations in the TCE plume resulted in a high degree of accuracy when determining the shape of the plume; 28 injection wells, 18 monitoring wells, and 25 field GC sampling locations were used for this delineation. As stated above, however, there is some uncertainty in the location of the western boundary of the TCE plume near Dark Head Cove (Figure 1, southwest of sampling point D-4).

The TCE plume 1,000 µg/L contour in Blocks E and F is shown on Figure 1 and can be generally described as follows:

- The plume is long and narrow; approximately 400 feet long and 40 to 80 feet wide.
- Generally high concentrations of TCE are within the plume (there are multiple locations with over 20,000 µg/L of TCE).
- TCE concentrations do not decrease significantly with distance from the source (former UST 2). High TCE concentrations persist all the way from UST 2 to near Dark Head Cove.
- The TCE plume spreads out near Dark Head Cove; this is likely due to surface water interference and a nearly flat groundwater table near the cove.

If you have any questions regarding the work plan, please feel free to contact me at (301) 548-2227.

Sincerely,

Lynnette Drake
Project Lead, Environmental Remediation
Lockheed Martin Corporation

Enclosures: Figures 1, 2, and 3, Tables 1, 2, and 3, and Appendix A,

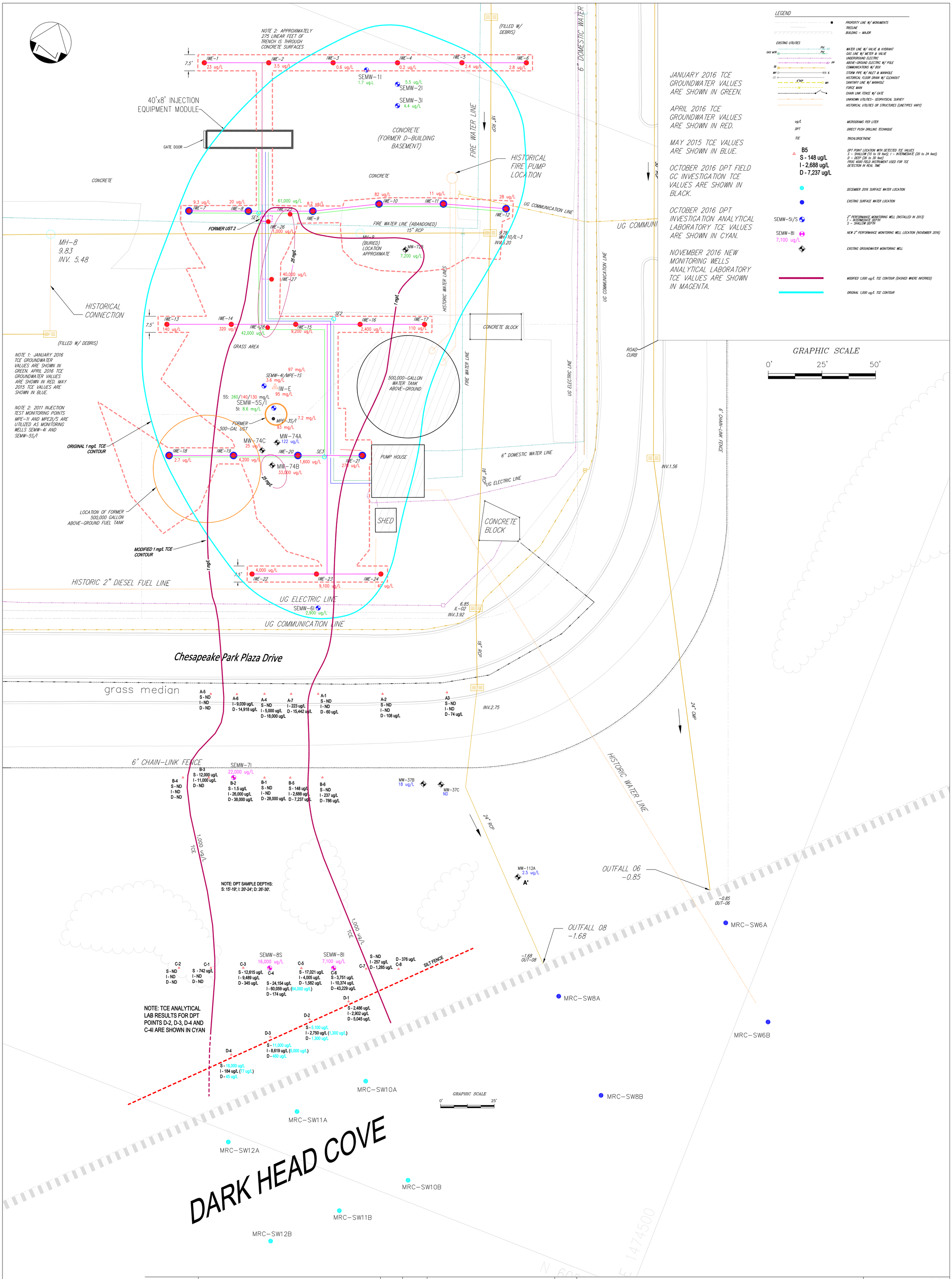
cc: (via email without enclosure)
Gary Schold, MDE
Mark Mank, MDE
Tom Blackman, Lockheed Martin
Christine Kline, Lockheed Martin
Norman Varney, Lockheed Martin
Michael Martin, Tetra Tech
Cannon Silver, CDM Smith

cc: (via mail with CD enclosure)
Jann Richardson, Lockheed Martin

cc: (via mail with enclosure)
Tom Green, LMCPI
Mike Musheno, LMCPI
Doug Mettee, Lockheed Martin MST
John Morgan, LMCPI

cc: (send RMFT)
Scott Heinlein

FIGURES



JANUARY 2016 TCE GROUNDWATER VALUES ARE SHOWN IN GREEN.

APRIL 2016 TCE GROUNDWATER VALUES ARE SHOWN IN RED.

MAY 2015 TCE VALUES ARE SHOWN IN BLUE.

OCTOBER 2016 DPT FIELD GC INVESTIGATION TCE VALUES ARE SHOWN IN BLACK.

OCTOBER 2016 DPT INVESTIGATION ANALYTICAL LABORATORY TCE VALUES ARE SHOWN IN CYAN.

NOVEMBER 2016 NEW MONITORING WELLS ANALYTICAL LABORATORY TCE VALUES ARE SHOWN IN MAGENTA.

REFERENCE PLANS & DATA:

1. UTILITY CROSS CONNECTION SURVEY PERFORMED BY TETRA TECH CREW: RAB & AN, DATED 10/6,10/10 & 10/11/2011.
2. SURVEYED LOCATIONS OF UNDERGROUND ELECTRIC, WATER, COMMUNICATION LINES, ARE BASED ON GEOPHYSICAL SURVEYS CONDUCTED BY ENVIROSCAN, INC. LANCASTER, PA, AND UNKNOWN FEATURES.
3. SEWER PIPE CCTV REPORTS PREPARED BY VIDEO PIPE SERVICES, INC. DATED 9/26 & 10/12/2011
4. BLOCK G TOPOGRAPHIC SURVEY UPDATE PREPARED BY TETRA TECH CREW: RAB & AN, DATED: 06/07 & 06/08/2011
5. PRE-CONSTRUCTION SURVEY OF STORM DRAIN LINES FOR BLOCK E PREPARED BY TETRA TECH CREW: RAB & AN, DATED 08/15 & 08/16/ 2011.
6. BACKGROUND BASEMAP AND PROPERTY LINES ARE FROM CHESAPEAKE PARK SITE PLAN - LMC PROPERTIES, INC PREPARED BY TAI CONSULTING ENGINEERS, DATED 4/15/01. BACKGROUND DATA IS NOT FIELD VERIFIED AND FOR REFERENCE ONLY.

TETRA TECH

www.tetratech.com

MARK	DATE	DESCRIPTION	BY

BLOCK E AND F GROUNDWATER TCE PLUME

LOCKHEED MARTIN CORPORATION
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

DATE:	4/6/17
PROJECT NO.:	112IC03835
DRAWING SIZE:	ARCH E
DRAWN BY:	DWM
CHECKED BY:	BD

COPYRIGHT TETRA TECH INC.

FIGURE 1

C:\USERS\BORIS.DYNKIN\DOCUMENTS\LMC MRC\BLOCK E CONSTRUCTION\INVESTIGATION WP\GW INVESTIGAITON MEMO\BLOCK E DOWNGRADIENT GW MEMO.DWG DWM 4/6/17

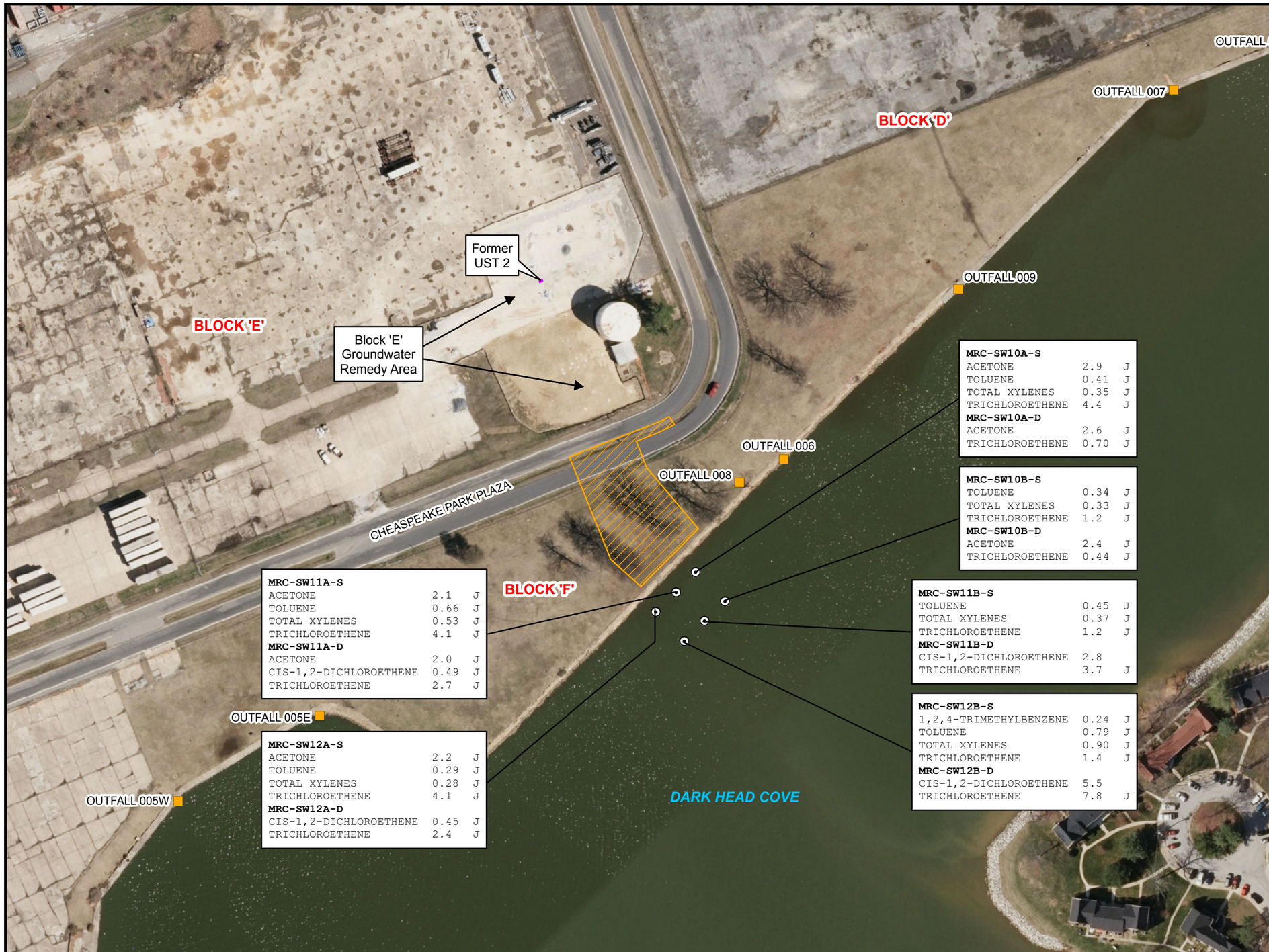


FIGURE 2

DECEMBER 2016 SURFACE WATER SAMPLING RESULTS DARK HEAD COVE

LEGEND

- DECEMBER 2016 SURFACE WATER SAMPLE LOCATION
- AREA OF OCTOBER-NOVEMBER 2016 TCE INVESTIGATION
- STORMWATER OUTFALL LOCATION (UPDATED APRIL 2015)

J = ESTIMATED VALUE.
UST = UNDERGROUND STORAGE TANK.
ALL CONCENTRATIONS SHOWN ARE IN MICROGRAMS PER LITER (µg/L).

SAMPLE RESULTS SHOWN FROM SAMPLES COLLECTED DECEMBER 13, 2016.
TCE CONTOURS FROM TETRA TECH (2016) AND OCTOBER 2016 PROBE GROUNDWATER SAMPLING.
2014 AERIAL PHOTOGRAPH PROVIDED BY U.S. GEOLOGICAL SURVEY.

Lockheed Martin Middle River Complex
Middle River, Maryland

0 62.5 125 Feet

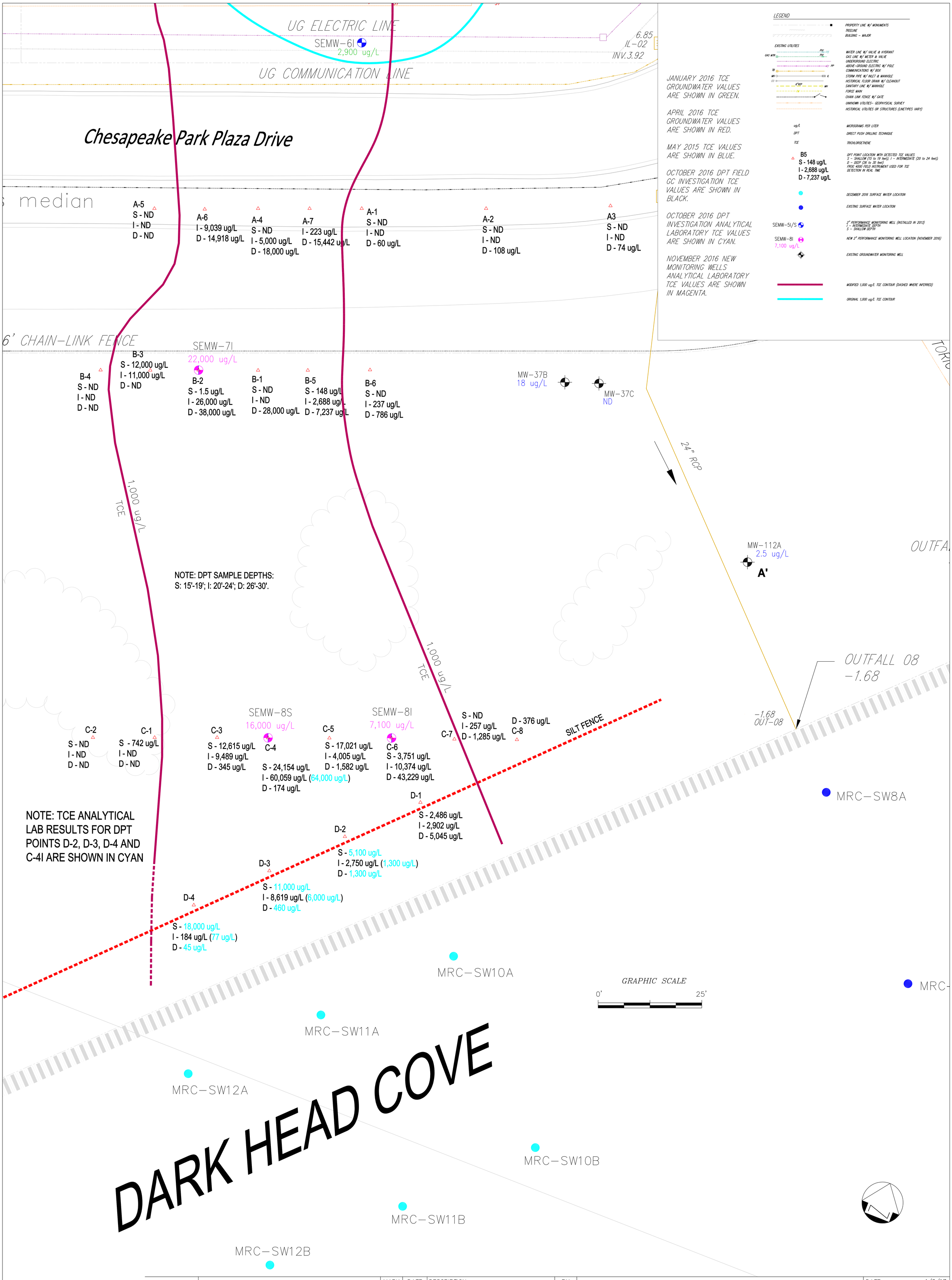
N

DATE MODIFIED: 04/06/17

CREATED BY: JEE

TETRA TECH

Map Document: (P:\GIS\Middle_River\MapDocs\MXD\dhc_samplocs_mar2017_alt.mxd)
04/06/17 -- JEE



JANUARY 2016 TCE GROUNDWATER VALUES ARE SHOWN IN GREEN.

APRIL 2016 TCE GROUNDWATER VALUES ARE SHOWN IN RED.

MAY 2015 TCE VALUES ARE SHOWN IN BLUE.

OCTOBER 2016 DPT FIELD GC INVESTIGATION TCE VALUES ARE SHOWN IN BLACK.

OCTOBER 2016 DPT INVESTIGATION ANALYTICAL LABORATORY TCE VALUES ARE SHOWN IN CYAN.

NOVEMBER 2016 NEW MONITORING WELLS ANALYTICAL LABORATORY TCE VALUES ARE SHOWN IN MAGENTA.

REFERENCE PLANS & DATA:

1. UTILITY CROSS CONNECTION SURVEY PERFORMED BY TETRA TECH CREW: RAB & AN, DATED 10/6,10/10 & 10/11/2011
2. SURVEYED LOCATIONS OF UNDERGROUND ELECTRIC, WATER, COMMUNICATION LINES, ARE BASED ON GEOPHYSICAL SURVEYS CONDUCTED BY ENVIROSCAN, INC. LANCASTER, PA, AND UNKNOWN FEATURES.
3. SEWER PIPE CCTV REPORTS PREPARED BY VIDEO PIPE SERVICES, INC. DATED 9/26 & 10/12/2011
4. BLOCK D TOPOGRAPHIC SURVEY UPDATE PREPARED BY TETRA TECH CREW: RAB & AN, DATED: 06/07 & 06/08/2011
5. PRE-CONSTRUCTION SURVEY OF STORM DRAIN LINES FOR BLOCK E PREPARED BY TETRA TECH CREW: RAB & AN, DATED 08/15 & 08/16/ 2011.
6. BACKGROUND BASEMAP AND PROPERTY LINES ARE FROM CHESAPEAKE PARK SITE PLAN - LMC PROPERTIES, INC PREPARED BY TAI CONSULTING ENGINEERS, DATED 4/15/01. BACKGROUND DATA IS NOT FIELD VERIFIED AND FOR REFERENCE ONLY.

TETRA TECH

www.tetratech.com

MARK	DATE	DESCRIPTION	BY

BLOCK E DOWNGRADIENT TCE PLUME INVESTIGATION

LOCKHEED MARTIN CORPORATION
MIDDLE RIVER COMPLEX, MIDDLE RIVER, MARYLAND

DATE:	4/6/17
PROJECT NO.:	112IC03835
DRAWING SIZE:	ARCH E
DRAWN BY:	DWM
CHECKED BY:	BD

COPYRIGHT TETRA TECH INC.

FIGURE 3

C:\USERS\BORIS.DYNKIN\DOCUMENTS\LMC MRC\BLOCK E CONSTRUCTION\INVESTIGATION WP\GW INVESTIGAITON MEMO\BLOCK E DOWNGRADIENT GW MEMO.DWG DWM 4/6/17

TABLES

Table 1
Field GC and Analytical Laboratory TCE Screening Results
Lockheed Martin Middle River Complex, Middle River, Maryland

DPT Point ID	TCE by Field GC (µg/L)			TCE by Analytical Lab (µg/L)		
	Shallow 15 to 19 feet	Intermediate 20 to 24 feet	Deep 26 to 30 feet	Shallow 15 to 19 feet	Intermediate 20 to 24 feet	Deep 26 to 30 feet
A-6	NS	9,039	14,918			
A-4	ND	5,000	18,000			
A-7	NS	223	15,442			
B-4	ND	ND	ND			
B-6	ND	237	786			
B-1	ND	ND	28,000			
B-2	2	26,000	38,000			
B-3	12,000	11,000	ND			
B-5	148	2,688	7,237			
C-1	742	ND	ND			
C-2	ND	ND	ND			
C-8	NS	NS	376			
C-3	12,615	9,489	345			
C-4	24,154	60,059	174		64,000	
C-5	17,021	4,005	1,582			
C-6	3,751	10,374	43,229			
C-7	ND	257	1,285			
D-1	2,486	2,902	5,045			
D-2	NS	2,750	NS	5,100	1,300	1,300
D-3	NS	8,619	NS	11,000	6,000	460
D-4	NS	184	NS	18,000	77	45
Average values[1]	**7,591**	**9,522**	**10,941**			
Median values[1]	**4,426**	**4,503**	**3,314**			

For all intervals (shallow, intermediate and deep) within 1000 µg/L TCE contour

Average[1] **9,428** **µg/L**

Median[1] **4,503** **µg/L**

[1]Average and median values are calculated for the sampling points inside 1,000 µg/L TCE contour (highlighted yellow). Analytical laboratory results were used when available for these calculations. ND (not detected) values for TCE were interpreted as zero values.

GC	gas chromatograph (model FROG 4000)
DPT	direct push drilling technology
ND	not detected
NS	not sampled
TCE	trichloroethene
µg/L	micrograms per liter

Table 2
New Monitoring Wells Analytical Results
Lockheed Martin Middle River Complex, Middle River, Maryland

Parameter	Unit	SEMW-7 20 feet to 30 feet screen	SEMW-8I 18 feet to 28 feet screen	SEMW-8S 8 feet to 18 feet screen
General chemistry				
IRON	µg/L	610	16000	7000
MANGANESE	µg/L	110	1300	530
ALKALINITY	mg/L	4.2 J	47	1.9
SULFATE	mg/L	7.9	9.8	180
TOTAL ORGANIC CARBON	mg/L	0.61 J	1.3	3.1
Microbial population				
BAV1 VC R-DASE	cells/mL	0.5 U		
DEHALOBACTER	cells/mL	41		
DEHALOCOCCOIDES	cells/mL	0.5 U		
TCE R-DASE	cells/mL	0.5 U		
VINYL CHLORIDE REDUCTASE GENE	cells/mL	0.5 U		
Volatile organic compounds (VOCs) - only detections are shown				
CIS-1,2-DICHLOROETHENE	µg/L	190 U	170 J	150 U
TRICHLOROETHENE	µg/L	22000	7100	16000
Dissolved gases				
ETHANE	µg/L	0.47 J	5.8	0.5
ETHENE	µg/L	0.28 J	10	0.51
METHANE	µg/L	1.4	6.1	3.7

cells/mL - cells per milliliter
J - Result is less than the reporting limit but greater than or equal to the method detection limit and the concentration is an approximate value
µg/L - micrograms per liter
mg/L - milligrams per liter
U - analyte was analyzed for but not detected

Table 3
New Monitoring Wells Field Parameters
Lockheed Martin Middle River Complex, Middle River, Maryland

Sampling Location	Field Parameters				
	ORP mV	DO mg/L	pH	Specific Conductivity mS/cm	Turbidity NTU
SEMW-7I	6	0	5.17	0.271	0.6
SEMW-8I	-127	0	6.28	0.55	20.3
SEMW-8S	154	4.97	7.98	4.76	27

Notes

DO	dissoved oxygen
mg/L	milligrams per liter
mSm/cm	millisiemens per centimeter
mV	millivolts
NTU	nephelometric turbidity unit
ORP	oxidation-reduction potential

APPENDIX A

Appears on CD only.

ANALYTICAL REPORT

Job Number: 240-71528-1

Job Description: Block E Downgradient TCE GW

For:
Tetra Tech, Inc.
Foster Plaza 7
661 Anderson Drive
Pittsburgh, PA 15220-2745

Attention: Chris Pike

Approved for release.
John McFadden
Project Manager I
11/8/2016 3:07 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
john.mcfadden@testamericainc.com
11/08/2016

cc: Tony Apanavage
Samantha Brenner
Mike Martin
Tobrena Sedlmyer
Final Data Tracking

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

Table of Contents

Cover Title Page 1

Data Summaries 4

Definitions 4

Case Narrative 5

Detection Summary 7

Client Sample Results 11

Default Detection Limits 35

Surrogate Summary 36

QC Sample Results 37

QC Association 49

Chronicle 50

Certification Summary 52

Method Summary 53

Sample Summary 54

Manual Integration Summary 55

Reagent Traceability 60

Organic Sample Data 78

GC/MS VOA 78

Method 8260C Low Level 78

Method 8260C Low Level QC Summary 79

Method 8260C Low Level Sample Data 105

Standards Data 145

Method 8260C Low Level ICAL Data 145

Method 8260C Low Level CCAL Data 156

Raw QC Data 165

Method 8260C Low Level Blank Data 165

Table of Contents

Method 8260C Low Level LCS/LCSD Data 171

Method 8260C Low Level Run Logs 183

Subcontracted Data 187

Shipping and Receiving Documents 188

Client Chain of Custody 189

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
E	Result exceeded calibration range.
B	Compound was found in the blank and sample.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Block E Downgradient TCE GW

Report Number: 240-71528-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 8260C VOC analysis was performed at TetstAmerica Pittsburgh Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 11/1/2016 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

The samples were collected in amber vials, except for sample TB-103116 that was in clear vials. The samples appear to have fine particulates in the amber vials. It appears that the water may have interacted with the particulates as there are a lot of tiny bubbles in all of the amber vials. These tiny bubbles may add up to a larger bubble that may be greater than 6mm if the tiny bubbles combine.

LOW LEVEL VOLATILE ORGANIC COMPOUNDS

Samples MRC-D2-S (240-71528-1), MRC-D2-I (240-71528-2), MRC-D2-D (240-71528-3), TB-103116 (240-71528-4), MRC-D3-S (240-71528-5), MRC-D3-I (240-71528-6), MRC-D3-D (240-71528-7), MRC-D4-S (240-71528-8), MRC-D4-I (240-71528-9) and MRC-D4-D (240-71528-10) were analyzed for Low Level Volatile Organic Compounds in accordance with SW-846 Method 8260C. The samples were analyzed on 11/03/2016, 11/06/2016 and 11/07/2016.

Trichloroethene was detected in method blank MB 180-193465/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,2-Dichloroethane, Carbon disulfide, Dichlorobromomethane, Tetrachloroethene and Vinyl chloride exceeded the RPD limit for LCSD 180-193223/5. Acetone exceeded the RPD limit for LCSD 180-193465/14.

Samples MRC-D2-S (240-71528-1)[200X], MRC-D2-I (240-71528-2)[40X], MRC-D2-D (240-71528-3)[30X], MRC-D3-S (240-71528-5)[100X], MRC-D3-S (240-71528-5)[500X], MRC-D3-I (240-71528-6)[200X], MRC-D3-D (240-71528-7)[30X], MRC-D4-S (240-71528-8)[500X], MRC-D4-I (240-71528-9)[10X] and MRC-D4-D (240-71528-10)[2.5X] required dilution prior to analysis to bring the concentration of target analytes within the calibration range. The reporting limits have been adjusted accordingly.

All initial undiluted analysis are being reported to reach client's reporting limit requirements. Trichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane are not reported in some analysis if carryover was suspected in an analysis that followed a sample that contained those analytes in an over-range sample prior to that analyses.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 193223 recovered outside control limits for the following analytes: 1,2-Dichloroethane, Carbon disulfide, Dichlorobromomethane, Tetrachloroethene and Vinyl chloride.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 193465 recovered outside control limits for the following analytes: Acetone.

The continuing calibration verification (CCV) analyzed in batch 193223 was outside the method criteria for the following analyte: 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-Chloropropane, 2-Butanone , 2-Hexanone, 4-Methyl-2-pentanone, Acetone, Bromoform, Chlorodibromomethane and Chloroethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-193465 was outside the method criteria for the following analytes: 1,2,4-Trichlorobenzene, 4-Methyl-2-pentanone , Acetone and Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-193501 was outside the method criteria for the following analytes: Acetone, Bromoform and Chlorodibromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D2-S — Lab Sample ID: 240-71528-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	25		1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloroethane	0.36	J	1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	2.8		1.0	0.32	ug/L	1		8260C	Total/NA
Acetone	4.9	J	10	3.1	ug/L	1		8260C	Total/NA
Chlorobenzene	0.81	J	1.0	0.15	ug/L	1		8260C	Total/NA
Chloroform	4.2		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	27		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	4.9		1.0	0.20	ug/L	1		8260C	Total/NA
Toluene	0.27	J	1.0	0.16	ug/L	1		8260C	Total/NA
Trichloroethene	1300	E	1.0	0.20	ug/L	1		8260C	Total/NA
Trichloroethene - DL	5100	B	200	40	ug/L	200		8260C	Total/NA

Client Sample ID: MRC-D2-I — Lab Sample ID: 240-71528-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	2.1		1.0	0.24	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	1.2		1.0	0.32	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	11		10	2.6	ug/L	1		8260C	Total/NA
Acetone	13		10	3.1	ug/L	1		8260C	Total/NA
Benzene	1.1		1.0	0.18	ug/L	1		8260C	Total/NA
Chloroform	3.2		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	13		1.0	0.30	ug/L	1		8260C	Total/NA
Ethylbenzene	0.32	J	1.0	0.25	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	6.3		1.0	0.20	ug/L	1		8260C	Total/NA
Styrene	0.23	J	1.0	0.22	ug/L	1		8260C	Total/NA
Toluene	1.2		1.0	0.16	ug/L	1		8260C	Total/NA
Xylenes, Total	0.52	J	2.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	13	J	40	12	ug/L	40		8260C	Total/NA
Trichloroethene - DL	1300	B	40	7.9	ug/L	40		8260C	Total/NA

Client Sample ID: MRC-D2-D — Lab Sample ID: 240-71528-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	3.3		1.0	0.24	ug/L	1		8260C	Total/NA
Acetone	4.1	J	10	3.1	ug/L	1		8260C	Total/NA
Chloroform	2.0		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	15		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	7.4		1.0	0.20	ug/L	1		8260C	Total/NA
Toluene	0.17	J	1.0	0.16	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene - DL	17	J	30	9.1	ug/L	30		8260C	Total/NA
Methyl tert-butyl ether - DL	7.8	J	30	5.9	ug/L	30		8260C	Total/NA
Trichloroethene - DL	1300		30	5.9	ug/L	30		8260C	Total/NA

Client Sample ID: TB-103116 — Lab Sample ID: 240-71528-4

No Detections.

Client Sample ID: MRC-D3-S — Lab Sample ID: 240-71528-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	100	E	1.0	0.24	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: MRC-D3-S (Continued) — Lab Sample ID: 240-71528-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloroethane	1.0		1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	5.6		1.0	0.32	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.69	J *	1.0	0.24	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	0.42	J	1.0	0.21	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	0.81	J	1.0	0.24	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	4.9	J	10	2.6	ug/L	1		8260C	Total/NA
Acetone	9.7	J	10	3.1	ug/L	1		8260C	Total/NA
Benzene	0.71	J	1.0	0.18	ug/L	1		8260C	Total/NA
Chlorobenzene	7.0		1.0	0.15	ug/L	1		8260C	Total/NA
Chloroform	13		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	44		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.55	J	1.0	0.20	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.38	J *	1.0	0.24	ug/L	1		8260C	Total/NA
Toluene	0.69	J	1.0	0.16	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.58	J	1.0	0.20	ug/L	1		8260C	Total/NA
1,1,2-Trichloro-1,2,2-trifluoroethane - DL	47	J	100	24	ug/L	100		8260C	Total/NA
Trichloroethene - DL	12000	E B	100	20	ug/L	100		8260C	Total/NA
Trichloroethene - DL2	11000	B	500	99	ug/L	500		8260C	Total/NA

Client Sample ID: MRC-D3-I — Lab Sample ID: 240-71528-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	1.2		1.0	0.32	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	0.49	J	1.0	0.21	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	0.25	J	1.0	0.24	ug/L	1		8260C	Total/NA
Acetone	3.2	J	10	3.1	ug/L	1		8260C	Total/NA
Carbon tetrachloride	0.73	J	1.0	0.56	ug/L	1		8260C	Total/NA
Chlorobenzene	0.24	J	1.0	0.15	ug/L	1		8260C	Total/NA
Chloroform	3.2		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	21		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	1.3		1.0	0.20	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.25	J *	1.0	0.24	ug/L	1		8260C	Total/NA
trans-1,2-Dichloroethene	0.24	J	1.0	0.20	ug/L	1		8260C	Total/NA
Trichloroethene - DL	6000	B	200	40	ug/L	200		8260C	Total/NA

Client Sample ID: MRC-D3-D — Lab Sample ID: 240-71528-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1-Dichloroethene	0.66	J	1.0	0.32	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	0.27	J	1.0	0.21	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	5.1	J	10	2.6	ug/L	1		8260C	Total/NA
Acetone	8.3	J	10	3.1	ug/L	1		8260C	Total/NA
Benzene	0.65	J	1.0	0.18	ug/L	1		8260C	Total/NA
Chloroform	2.1		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	8.1		1.0	0.30	ug/L	1		8260C	Total/NA
Ethylbenzene	0.30	J	1.0	0.25	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	7.7		1.0	0.20	ug/L	1		8260C	Total/NA
Toluene	0.81	J	1.0	0.16	ug/L	1		8260C	Total/NA
Xylenes, Total	0.36	J	2.0	0.27	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether - DL	9.6	J	30	5.9	ug/L	30		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D3-D (Continued) — Lab Sample ID: 240-71528-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene - DL	460		30	5.9	ug/L	30		8260C	Total/NA

Client Sample ID: MRC-D4-S — Lab Sample ID: 240-71528-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,2-Trichloro-1,2,2-trifluoroethane	87	E	1.0	0.24	ug/L	1		8260C	Total/NA
1,1,2-Trichloroethane	0.63	J	1.0	0.31	ug/L	1		8260C	Total/NA
1,1-Dichloroethene	2.4		1.0	0.32	ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	0.31	J	1.0	0.23	ug/L	1		8260C	Total/NA
1,2-Dichloroethane	0.33	J *	1.0	0.24	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	1.0		1.0	0.21	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	1.4		1.0	0.24	ug/L	1		8260C	Total/NA
Benzene	0.46	J	1.0	0.18	ug/L	1		8260C	Total/NA
Carbon tetrachloride	0.71	J	1.0	0.56	ug/L	1		8260C	Total/NA
Chlorobenzene	7.7		1.0	0.15	ug/L	1		8260C	Total/NA
Chloroform	6.8		1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	21		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	0.73	J	1.0	0.20	ug/L	1		8260C	Total/NA
Tetrachloroethene	0.47	J *	1.0	0.24	ug/L	1		8260C	Total/NA
Trichloroethene - DL	18000	B	500	99	ug/L	500		8260C	Total/NA

Client Sample ID: MRC-D4-I — Lab Sample ID: 240-71528-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trichlorobenzene	110	E	1.0	0.49	ug/L	1		8260C	Total/NA
1,2-Dichlorobenzene	8.8		1.0	0.23	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	46		1.0	0.21	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	33		1.0	0.24	ug/L	1		8260C	Total/NA
2-Butanone (MEK)	9.2	J	10	2.6	ug/L	1		8260C	Total/NA
Acetone	7.7	J	10	3.1	ug/L	1		8260C	Total/NA
Benzene	1.7		1.0	0.18	ug/L	1		8260C	Total/NA
Chlorobenzene	41		1.0	0.15	ug/L	1		8260C	Total/NA
Chloroform	0.92	J	1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	2.4		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	2.9		1.0	0.20	ug/L	1		8260C	Total/NA
Toluene	0.39	J	1.0	0.16	ug/L	1		8260C	Total/NA
1,2,4-Trichlorobenzene - DL	160		10	4.9	ug/L	10		8260C	Total/NA
1,2-Dichlorobenzene - DL	9.5	J	10	2.3	ug/L	10		8260C	Total/NA
1,3-Dichlorobenzene - DL	56		10	2.1	ug/L	10		8260C	Total/NA
1,4-Dichlorobenzene - DL	40		10	2.4	ug/L	10		8260C	Total/NA
Chlorobenzene - DL	56		10	1.5	ug/L	10		8260C	Total/NA
Methyl tert-butyl ether - DL	2.4	J	10	2.0	ug/L	10		8260C	Total/NA
Trichloroethene - DL	77	B	10	2.0	ug/L	10		8260C	Total/NA

Client Sample ID: MRC-D4-D — Lab Sample ID: 240-71528-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichlorobenzene	1.4		1.0	0.23	ug/L	1		8260C	Total/NA
1,3-Dichlorobenzene	12		1.0	0.21	ug/L	1		8260C	Total/NA
1,4-Dichlorobenzene	7.7		1.0	0.24	ug/L	1		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D4-D (Continued) — Lab Sample ID: 240-71528-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
2-Butanone (MEK)	3.8	J	10	2.6	ug/L	1		8260C	Total/NA
Acetone	4.3	J	10	3.1	ug/L	1		8260C	Total/NA
Benzene	0.39	J	1.0	0.18	ug/L	1		8260C	Total/NA
Chlorobenzene	6.3		1.0	0.15	ug/L	1		8260C	Total/NA
Chloroform	0.91	J	1.0	0.27	ug/L	1		8260C	Total/NA
cis-1,2-Dichloroethene	5.4		1.0	0.30	ug/L	1		8260C	Total/NA
Methyl tert-butyl ether	5.7		1.0	0.20	ug/L	1		8260C	Total/NA
Toluene	0.23	J	1.0	0.16	ug/L	1		8260C	Total/NA
1,2,4-Trichlorobenzene - DL	27		2.5	1.2	ug/L	2.5		8260C	Total/NA
1,2-Dichlorobenzene - DL	1.5	J	2.5	0.58	ug/L	2.5		8260C	Total/NA
1,3-Dichlorobenzene - DL	12		2.5	0.52	ug/L	2.5		8260C	Total/NA
1,4-Dichlorobenzene - DL	7.7		2.5	0.61	ug/L	2.5		8260C	Total/NA
Chlorobenzene - DL	6.5		2.5	0.37	ug/L	2.5		8260C	Total/NA
Chloroform - DL	0.83	J	2.5	0.67	ug/L	2.5		8260C	Total/NA
cis-1,2-Dichloroethene - DL	5.1		2.5	0.76	ug/L	2.5		8260C	Total/NA
Methyl tert-butyl ether - DL	6.0		2.5	0.49	ug/L	2.5		8260C	Total/NA
Trichloroethene - DL	45	B	2.5	0.50	ug/L	2.5		8260C	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D2-S

Date Collected: 10/31/16 09:45
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-1

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 14:59	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 14:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**25**		1.0	0.24	ug/L			11/03/16 14:59	1
1,1,2-Trichloroethane	**0.36**	**J**	1.0	0.31	ug/L			11/03/16 14:59	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 14:59	1
1,1-Dichloroethene	**2.8**		1.0	0.32	ug/L			11/03/16 14:59	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 14:59	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 14:59	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 14:59	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 14:59	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 14:59	1
1,3-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			11/03/16 14:59	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/03/16 14:59	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/03/16 14:59	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 14:59	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 14:59	1
Acetone	**4.9**	**J**	10	3.1	ug/L			11/03/16 14:59	1
Benzene	1.0	U	1.0	0.18	ug/L			11/03/16 14:59	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 14:59	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 14:59	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 14:59	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 14:59	1
Chlorobenzene	**0.81**	**J**	1.0	0.15	ug/L			11/03/16 14:59	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 14:59	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 14:59	1
Chloroform	**4.2**		1.0	0.27	ug/L			11/03/16 14:59	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 14:59	1
cis-1,2-Dichloroethene	**27**		1.0	0.30	ug/L			11/03/16 14:59	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 14:59	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 14:59	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 14:59	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 14:59	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 14:59	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 14:59	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 14:59	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 14:59	1
Methyl tert-butyl ether	**4.9**		1.0	0.20	ug/L			11/03/16 14:59	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 14:59	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 14:59	1
Tetrachloroethene	1.0	U *	1.0	0.24	ug/L			11/03/16 14:59	1
Toluene	**0.27**	**J**	1.0	0.16	ug/L			11/03/16 14:59	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 14:59	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 14:59	1
Trichloroethene	**1300**	**E**	1.0	0.20	ug/L			11/03/16 14:59	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 14:59	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 14:59	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 14:59	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 14:59	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D2-S

Date Collected: 10/31/16 09:45
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-1

Matrix: Water

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/03/16 14:59*	*1*
Dibromofluoromethane (Surr)	*85*		*77 - 127*		*11/03/16 14:59*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 120*		*11/03/16 14:59*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 134*		*11/03/16 14:59*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	200	U	200	54	ug/L			11/06/16 18:10	200
1,1,2,2-Tetrachloroethane	200	U	200	74	ug/L			11/06/16 18:10	200
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	48	ug/L			11/06/16 18:10	200
1,1,2-Trichloroethane	200	U	200	61	ug/L			11/06/16 18:10	200
1,1-Dichloroethane	200	U	200	68	ug/L			11/06/16 18:10	200
1,1-Dichloroethene	200	U	200	64	ug/L			11/06/16 18:10	200
1,2,4-Trichlorobenzene	200	U	200	99	ug/L			11/06/16 18:10	200
1,2-Dibromo-3-Chloropropane	400	U	400	79	ug/L			11/06/16 18:10	200
1,2-Dichlorobenzene	200	U	200	46	ug/L			11/06/16 18:10	200
1,2-Dichloroethane	200	U	200	48	ug/L			11/06/16 18:10	200
1,2-Dichloropropane	200	U	200	69	ug/L			11/06/16 18:10	200
1,3-Dichlorobenzene	200	U	200	41	ug/L			11/06/16 18:10	200
1,4-Dichlorobenzene	200	U	200	49	ug/L			11/06/16 18:10	200
2-Butanone (MEK)	2000	U	2000	510	ug/L			11/06/16 18:10	200
2-Hexanone	2000	U	2000	400	ug/L			11/06/16 18:10	200
4-Methyl-2-pentanone (MIBK)	2000	U	2000	440	ug/L			11/06/16 18:10	200
Acetone	2000	U *	2000	630	ug/L			11/06/16 18:10	200
Benzene	200	U	200	36	ug/L			11/06/16 18:10	200
Bromoform	200	U	200	150	ug/L			11/06/16 18:10	200
Bromomethane	200	U	200	120	ug/L			11/06/16 18:10	200
Carbon disulfide	200	U	200	110	ug/L			11/06/16 18:10	200
Carbon tetrachloride	200	U	200	110	ug/L			11/06/16 18:10	200
Chlorobenzene	200	U	200	29	ug/L			11/06/16 18:10	200
Chlorodibromomethane	200	U	200	87	ug/L			11/06/16 18:10	200
Chloroethane	200	U	200	120	ug/L			11/06/16 18:10	200
Chloroform	200	U	200	53	ug/L			11/06/16 18:10	200
Chloromethane	200	U	200	76	ug/L			11/06/16 18:10	200
cis-1,2-Dichloroethene	200	U	200	61	ug/L			11/06/16 18:10	200
cis-1,3-Dichloropropene	200	U	200	64	ug/L			11/06/16 18:10	200
Cyclohexane	200	U	200	55	ug/L			11/06/16 18:10	200
Dichlorodifluoromethane	200	U	200	94	ug/L			11/06/16 18:10	200
Dichlorobromomethane	200	U	200	110	ug/L			11/06/16 18:10	200
Ethylbenzene	200	U	200	50	ug/L			11/06/16 18:10	200
Isopropylbenzene	200	U	200	41	ug/L			11/06/16 18:10	200
Methyl acetate	2000	U	2000	280	ug/L			11/06/16 18:10	200
Methylcyclohexane	200	U	200	37	ug/L			11/06/16 18:10	200
Methyl tert-butyl ether	200	U	200	39	ug/L			11/06/16 18:10	200
Methylene Chloride	200	U	200	190	ug/L			11/06/16 18:10	200
Styrene	200	U	200	43	ug/L			11/06/16 18:10	200
Tetrachloroethene	200	U	200	49	ug/L			11/06/16 18:10	200
Toluene	200	U	200	31	ug/L			11/06/16 18:10	200
trans-1,2-Dichloroethene	200	U	200	40	ug/L			11/06/16 18:10	200
trans-1,3-Dichloropropene	200	U	200	44	ug/L			11/06/16 18:10	200

Client Sample ID: MRC-D2-S — Lab Sample ID: 240-71528-1

Date Collected: 10/31/16 09:45 **Matrix: Water**
Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**5100**	**B**	200	40	ug/L			11/06/16 18:10	200
Trichlorofluoromethane	200	U	200	81	ug/L			11/06/16 18:10	200
Vinyl chloride	200	U	200	34	ug/L			11/06/16 18:10	200
Xylenes, Total	400	U	400	54	ug/L			11/06/16 18:10	200
Ethylene Dibromide	200	U	200	100	ug/L			11/06/16 18:10	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*91*		*80 - 120*		*11/06/16 18:10*	*200*
Dibromofluoromethane (Surr)	*90*		*77 - 127*		*11/06/16 18:10*	*200*
4-Bromofluorobenzene (Surr)	*98*		*72 - 120*		*11/06/16 18:10*	*200*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 134*		*11/06/16 18:10*	*200*

Client Sample ID: MRC-D2-I — Lab Sample ID: 240-71528-2

Date Collected: 10/31/16 09:55 **Matrix: Water**
Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 15:26	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 15:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**2.1**		1.0	0.24	ug/L			11/03/16 15:26	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 15:26	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 15:26	1
1,1-Dichloroethene	**1.2**		1.0	0.32	ug/L			11/03/16 15:26	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 15:26	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 15:26	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 15:26	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 15:26	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 15:26	1
1,3-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			11/03/16 15:26	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/03/16 15:26	1
2-Butanone (MEK)	**11**		10	2.6	ug/L			11/03/16 15:26	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 15:26	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 15:26	1
Acetone	**13**		10	3.1	ug/L			11/03/16 15:26	1
Benzene	**1.1**		1.0	0.18	ug/L			11/03/16 15:26	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 15:26	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 15:26	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 15:26	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 15:26	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			11/03/16 15:26	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 15:26	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 15:26	1
Chloroform	**3.2**		1.0	0.27	ug/L			11/03/16 15:26	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 15:26	1
cis-1,2-Dichloroethene	**13**		1.0	0.30	ug/L			11/03/16 15:26	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 15:26	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 15:26	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 15:26	1

Client Sample ID: MRC-D2-I

Date Collected: 10/31/16 09:55
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-2

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 15:26	1
Ethylbenzene	**0.32**	**J**	1.0	0.25	ug/L			11/03/16 15:26	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 15:26	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 15:26	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 15:26	1
Methyl tert-butyl ether	**6.3**		1.0	0.20	ug/L			11/03/16 15:26	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 15:26	1
Styrene	**0.23**	**J**	1.0	0.22	ug/L			11/03/16 15:26	1
Tetrachloroethene	1.0	U *	1.0	0.24	ug/L			11/03/16 15:26	1
Toluene	**1.2**		1.0	0.16	ug/L			11/03/16 15:26	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 15:26	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 15:26	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 15:26	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 15:26	1
Xylenes, Total	**0.52**	**J**	2.0	0.27	ug/L			11/03/16 15:26	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 15:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*80 - 120*		*11/03/16 15:26*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 127*		*11/03/16 15:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 120*		*11/03/16 15:26*	*1*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 134*		*11/03/16 15:26*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	40	U	40	15	ug/L			11/06/16 14:29	40
1,1,2-Trichloro-1,2,2-trifluoroethane	40	U	40	9.5	ug/L			11/06/16 14:29	40
1,1,2-Trichloroethane	40	U	40	12	ug/L			11/06/16 14:29	40
1,1-Dichloroethane	40	U	40	14	ug/L			11/06/16 14:29	40
1,1-Dichloroethene	40	U	40	13	ug/L			11/06/16 14:29	40
1,2,4-Trichlorobenzene	40	U	40	20	ug/L			11/06/16 14:29	40
1,2-Dibromo-3-Chloropropane	80	U	80	16	ug/L			11/06/16 14:29	40
1,2-Dichlorobenzene	40	U	40	9.2	ug/L			11/06/16 14:29	40
1,2-Dichloroethane	40	U	40	9.6	ug/L			11/06/16 14:29	40
1,2-Dichloropropane	40	U	40	14	ug/L			11/06/16 14:29	40
1,3-Dichlorobenzene	40	U	40	8.3	ug/L			11/06/16 14:29	40
1,4-Dichlorobenzene	40	U	40	9.7	ug/L			11/06/16 14:29	40
2-Butanone (MEK)	400	U	400	100	ug/L			11/06/16 14:29	40
2-Hexanone	400	U	400	80	ug/L			11/06/16 14:29	40
4-Methyl-2-pentanone (MIBK)	400	U	400	88	ug/L			11/06/16 14:29	40
Acetone	400	U *	400	130	ug/L			11/06/16 14:29	40
Benzene	40	U	40	7.3	ug/L			11/06/16 14:29	40
Bromoform	40	U	40	30	ug/L			11/06/16 14:29	40
Bromomethane	40	U	40	23	ug/L			11/06/16 14:29	40
Carbon disulfide	40	U	40	21	ug/L			11/06/16 14:29	40
Carbon tetrachloride	40	U	40	22	ug/L			11/06/16 14:29	40
Chlorobenzene	40	U	40	5.8	ug/L			11/06/16 14:29	40
Chlorodibromomethane	40	U	40	17	ug/L			11/06/16 14:29	40
Chloroethane	40	U	40	23	ug/L			11/06/16 14:29	40
Chloroform	40	U	40	11	ug/L			11/06/16 14:29	40

Client Sample ID: MRC-D2-I

Lab Sample ID: 240-71528-2

Date Collected: 10/31/16 09:55
Matrix: Water
Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	40	U	40	15	ug/L			11/06/16 14:29	40
cis-1,2-Dichloroethene	**13**	**J**	40	12	ug/L			11/06/16 14:29	40
cis-1,3-Dichloropropene	40	U	40	13	ug/L			11/06/16 14:29	40
Cyclohexane	40	U	40	11	ug/L			11/06/16 14:29	40
Dichlorodifluoromethane	40	U	40	19	ug/L			11/06/16 14:29	40
Dichlorobromomethane	40	U	40	23	ug/L			11/06/16 14:29	40
Ethylbenzene	40	U	40	10	ug/L			11/06/16 14:29	40
Isopropylbenzene	40	U	40	8.2	ug/L			11/06/16 14:29	40
Methyl acetate	400	U	400	56	ug/L			11/06/16 14:29	40
Methylcyclohexane	40	U	40	7.4	ug/L			11/06/16 14:29	40
Methyl tert-butyl ether	40	U	40	7.8	ug/L			11/06/16 14:29	40
Methylene Chloride	40	U	40	38	ug/L			11/06/16 14:29	40
Styrene	40	U	40	8.6	ug/L			11/06/16 14:29	40
Tetrachloroethene	40	U	40	9.8	ug/L			11/06/16 14:29	40
Toluene	40	U	40	6.2	ug/L			11/06/16 14:29	40
trans-1,2-Dichloroethene	40	U	40	8.0	ug/L			11/06/16 14:29	40
trans-1,3-Dichloropropene	40	U	40	8.9	ug/L			11/06/16 14:29	40
Trichloroethene	**1300**	**B**	40	7.9	ug/L			11/06/16 14:29	40
Trichlorofluoromethane	40	U	40	16	ug/L			11/06/16 14:29	40
Vinyl chloride	40	U	40	6.7	ug/L			11/06/16 14:29	40
Xylenes, Total	80	U	80	11	ug/L			11/06/16 14:29	40
Ethylene Dibromide	40	U	40	21	ug/L			11/06/16 14:29	40

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*80 - 120*		*11/06/16 14:29*	*40*
Dibromofluoromethane (Surr)	*86*		*77 - 127*		*11/06/16 14:29*	*40*
4-Bromofluorobenzene (Surr)	*94*		*72 - 120*		*11/06/16 14:29*	*40*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 134*		*11/06/16 14:29*	*40*

Client Sample ID: MRC-D2-D

Lab Sample ID: 240-71528-3

Date Collected: 10/31/16 10:12
Matrix: Water
Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 15:53	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 15:53	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**3.3**		1.0	0.24	ug/L			11/03/16 15:53	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 15:53	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 15:53	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			11/03/16 15:53	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 15:53	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 15:53	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 15:53	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 15:53	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 15:53	1
1,3-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			11/03/16 15:53	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/03/16 15:53	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/03/16 15:53	1

Client Sample ID: MRC-D2-D

Date Collected: 10/31/16 10:12
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 15:53	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 15:53	1
Acetone	**4.1**	**J**	10	3.1	ug/L			11/03/16 15:53	1
Benzene	1.0	U	1.0	0.18	ug/L			11/03/16 15:53	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 15:53	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 15:53	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 15:53	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 15:53	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			11/03/16 15:53	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 15:53	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 15:53	1
Chloroform	**2.0**		1.0	0.27	ug/L			11/03/16 15:53	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 15:53	1
cis-1,2-Dichloroethene	**15**		1.0	0.30	ug/L			11/03/16 15:53	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 15:53	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 15:53	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 15:53	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 15:53	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 15:53	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 15:53	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 15:53	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 15:53	1
Methyl tert-butyl ether	**7.4**		1.0	0.20	ug/L			11/03/16 15:53	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 15:53	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 15:53	1
Tetrachloroethene	1.0	U *	1.0	0.24	ug/L			11/03/16 15:53	1
Toluene	**0.17**	**J**	1.0	0.16	ug/L			11/03/16 15:53	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 15:53	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 15:53	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 15:53	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 15:53	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 15:53	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 15:53	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*84*		*80 - 120*		*11/03/16 15:53*	*1*
Dibromofluoromethane (Surr)	*85*		*77 - 127*		*11/03/16 15:53*	*1*
4-Bromofluorobenzene (Surr)	*94*		*72 - 120*		*11/03/16 15:53*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 134*		*11/03/16 15:53*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	30	U	30	8.1	ug/L			11/07/16 13:24	30
1,1,2,2-Tetrachloroethane	30	U	30	11	ug/L			11/07/16 13:24	30
1,1,2-Trichloro-1,2,2-trifluoroethane	30	U	30	7.1	ug/L			11/07/16 13:24	30
1,1,2-Trichloroethane	30	U	30	9.2	ug/L			11/07/16 13:24	30
1,1-Dichloroethane	30	U	30	10	ug/L			11/07/16 13:24	30
1,1-Dichloroethene	30	U	30	9.6	ug/L			11/07/16 13:24	30
1,2,4-Trichlorobenzene	30	U	30	15	ug/L			11/07/16 13:24	30
1,2-Dibromo-3-Chloropropane	60	U	60	12	ug/L			11/07/16 13:24	30

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D2-D

Date Collected: 10/31/16 10:12
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-3

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	30	U	30	6.9	ug/L			11/07/16 13:24	30
1,2-Dichloroethane	30	U	30	7.2	ug/L			11/07/16 13:24	30
1,2-Dichloropropane	30	U	30	10	ug/L			11/07/16 13:24	30
1,3-Dichlorobenzene	30	U	30	6.2	ug/L			11/07/16 13:24	30
1,4-Dichlorobenzene	30	U	30	7.3	ug/L			11/07/16 13:24	30
2-Butanone (MEK)	300	U	300	77	ug/L			11/07/16 13:24	30
2-Hexanone	300	U	300	60	ug/L			11/07/16 13:24	30
4-Methyl-2-pentanone (MIBK)	300	U	300	66	ug/L			11/07/16 13:24	30
Acetone	300	U	300	94	ug/L			11/07/16 13:24	30
Benzene	30	U	30	5.5	ug/L			11/07/16 13:24	30
Bromoform	30	U	30	23	ug/L			11/07/16 13:24	30
Bromomethane	30	U	30	18	ug/L			11/07/16 13:24	30
Carbon disulfide	30	U	30	16	ug/L			11/07/16 13:24	30
Carbon tetrachloride	30	U	30	17	ug/L			11/07/16 13:24	30
Chlorobenzene	30	U	30	4.4	ug/L			11/07/16 13:24	30
Chlorodibromomethane	30	U	30	13	ug/L			11/07/16 13:24	30
Chloroethane	30	U	30	17	ug/L			11/07/16 13:24	30
Chloroform	30	U	30	8.0	ug/L			11/07/16 13:24	30
Chloromethane	30	U	30	11	ug/L			11/07/16 13:24	30
cis-1,2-Dichloroethene	**17**	**J**	30	9.1	ug/L			11/07/16 13:24	30
cis-1,3-Dichloropropene	30	U	30	9.6	ug/L			11/07/16 13:24	30
Cyclohexane	30	U	30	8.2	ug/L			11/07/16 13:24	30
Dichlorodifluoromethane	30	U	30	14	ug/L			11/07/16 13:24	30
Dichlorobromomethane	30	U	30	17	ug/L			11/07/16 13:24	30
Ethylbenzene	30	U	30	7.6	ug/L			11/07/16 13:24	30
Isopropylbenzene	30	U	30	6.2	ug/L			11/07/16 13:24	30
Methyl acetate	300	U	300	42	ug/L			11/07/16 13:24	30
Methylcyclohexane	30	U	30	5.6	ug/L			11/07/16 13:24	30
Methyl tert-butyl ether	**7.8**	**J**	30	5.9	ug/L			11/07/16 13:24	30
Methylene Chloride	30	U	30	28	ug/L			11/07/16 13:24	30
Styrene	30	U	30	6.5	ug/L			11/07/16 13:24	30
Tetrachloroethene	30	U	30	7.3	ug/L			11/07/16 13:24	30
Toluene	30	U	30	4.7	ug/L			11/07/16 13:24	30
trans-1,2-Dichloroethene	30	U	30	6.0	ug/L			11/07/16 13:24	30
trans-1,3-Dichloropropene	30	U	30	6.7	ug/L			11/07/16 13:24	30
Trichloroethene	**1300**		30	5.9	ug/L			11/07/16 13:24	30
Trichlorofluoromethane	30	U	30	12	ug/L			11/07/16 13:24	30
Vinyl chloride	30	U	30	5.0	ug/L			11/07/16 13:24	30
Xylenes, Total	60	U	60	8.1	ug/L			11/07/16 13:24	30
Ethylene Dibromide	30	U	30	15	ug/L			11/07/16 13:24	30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*11/07/16 13:24*	*30*
Dibromofluoromethane (Surr)	*88*		*77 - 127*		*11/07/16 13:24*	*30*
4-Bromofluorobenzene (Surr)	*95*		*72 - 120*		*11/07/16 13:24*	*30*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 134*		*11/07/16 13:24*	*30*

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: TB-103116

Date Collected: 10/31/16 00:00
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-4

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 14:31	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 14:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24	ug/L			11/03/16 14:31	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 14:31	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 14:31	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			11/03/16 14:31	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 14:31	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 14:31	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 14:31	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 14:31	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 14:31	1
1,3-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			11/03/16 14:31	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/03/16 14:31	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/03/16 14:31	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 14:31	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 14:31	1
Acetone	10	U	10	3.1	ug/L			11/03/16 14:31	1
Benzene	1.0	U	1.0	0.18	ug/L			11/03/16 14:31	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 14:31	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 14:31	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 14:31	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 14:31	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			11/03/16 14:31	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 14:31	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 14:31	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/03/16 14:31	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 14:31	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 14:31	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 14:31	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 14:31	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 14:31	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 14:31	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 14:31	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 14:31	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 14:31	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 14:31	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			11/03/16 14:31	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 14:31	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 14:31	1
Tetrachloroethene	1.0	U *	1.0	0.24	ug/L			11/03/16 14:31	1
Toluene	1.0	U	1.0	0.16	ug/L			11/03/16 14:31	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 14:31	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 14:31	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 14:31	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 14:31	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 14:31	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 14:31	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 14:31	1

Client Sample ID: TB-103116

Lab Sample ID: 240-71528-4

Date Collected: 10/31/16 00:00

Matrix: Water

Date Received: 11/01/16 09:15

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*80 - 120*		*11/03/16 14:31*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 127*		*11/03/16 14:31*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 120*		*11/03/16 14:31*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 134*		*11/03/16 14:31*	*1*

Client Sample ID: MRC-D3-S

Lab Sample ID: 240-71528-5

Date Collected: 10/31/16 10:45

Matrix: Water

Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 16:21	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 16:21	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**100**	**E**	1.0	0.24	ug/L			11/03/16 16:21	1
1,1,2-Trichloroethane	**1.0**		1.0	0.31	ug/L			11/03/16 16:21	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 16:21	1
1,1-Dichloroethene	**5.6**		1.0	0.32	ug/L			11/03/16 16:21	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 16:21	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 16:21	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 16:21	1
1,2-Dichloroethane	**0.69**	**J ***	1.0	0.24	ug/L			11/03/16 16:21	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 16:21	1
1,3-Dichlorobenzene	**0.42**	**J**	1.0	0.21	ug/L			11/03/16 16:21	1
1,4-Dichlorobenzene	**0.81**	**J**	1.0	0.24	ug/L			11/03/16 16:21	1
2-Butanone (MEK)	**4.9**	**J**	10	2.6	ug/L			11/03/16 16:21	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 16:21	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 16:21	1
Acetone	**9.7**	**J**	10	3.1	ug/L			11/03/16 16:21	1
Benzene	**0.71**	**J**	1.0	0.18	ug/L			11/03/16 16:21	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 16:21	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 16:21	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 16:21	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 16:21	1
Chlorobenzene	**7.0**		1.0	0.15	ug/L			11/03/16 16:21	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 16:21	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 16:21	1
Chloroform	**13**		1.0	0.27	ug/L			11/03/16 16:21	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 16:21	1
cis-1,2-Dichloroethene	**44**		1.0	0.30	ug/L			11/03/16 16:21	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 16:21	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 16:21	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 16:21	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 16:21	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 16:21	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 16:21	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 16:21	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 16:21	1
Methyl tert-butyl ether	**0.55**	**J**	1.0	0.20	ug/L			11/03/16 16:21	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 16:21	1

Client Sample ID: MRC-D3-S

Date Collected: 10/31/16 10:45
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 16:21	1
Tetrachloroethene	**0.38**	**J ***	1.0	0.24	ug/L			11/03/16 16:21	1
Toluene	**0.69**	**J**	1.0	0.16	ug/L			11/03/16 16:21	1
trans-1,2-Dichloroethene	**0.58**	**J**	1.0	0.20	ug/L			11/03/16 16:21	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 16:21	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 16:21	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 16:21	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 16:21	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 16:21	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*80 - 120*		*11/03/16 16:21*	*1*
Dibromofluoromethane (Surr)	*87*		*77 - 127*		*11/03/16 16:21*	*1*
4-Bromofluorobenzene (Surr)	*107*		*72 - 120*		*11/03/16 16:21*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 134*		*11/03/16 16:21*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	100	U	100	27	ug/L			11/06/16 16:20	100
1,1,2,2-Tetrachloroethane	100	U	100	37	ug/L			11/06/16 16:20	100
1,1,2-Trichloro-1,2,2-trifluoroethane	**47**	**J**	100	24	ug/L			11/06/16 16:20	100
1,1,2-Trichloroethane	100	U	100	31	ug/L			11/06/16 16:20	100
1,1-Dichloroethane	100	U	100	34	ug/L			11/06/16 16:20	100
1,1-Dichloroethene	100	U	100	32	ug/L			11/06/16 16:20	100
1,2,4-Trichlorobenzene	100	U	100	49	ug/L			11/06/16 16:20	100
1,2-Dibromo-3-Chloropropane	200	U	200	40	ug/L			11/06/16 16:20	100
1,2-Dichlorobenzene	100	U	100	23	ug/L			11/06/16 16:20	100
1,2-Dichloroethane	100	U	100	24	ug/L			11/06/16 16:20	100
1,2-Dichloropropane	100	U	100	35	ug/L			11/06/16 16:20	100
1,3-Dichlorobenzene	100	U	100	21	ug/L			11/06/16 16:20	100
1,4-Dichlorobenzene	100	U	100	24	ug/L			11/06/16 16:20	100
2-Butanone (MEK)	1000	U	1000	260	ug/L			11/06/16 16:20	100
2-Hexanone	1000	U	1000	200	ug/L			11/06/16 16:20	100
4-Methyl-2-pentanone (MIBK)	1000	U	1000	220	ug/L			11/06/16 16:20	100
Acetone	1000	U *	1000	310	ug/L			11/06/16 16:20	100
Benzene	100	U	100	18	ug/L			11/06/16 16:20	100
Bromoform	100	U	100	76	ug/L			11/06/16 16:20	100
Bromomethane	100	U	100	59	ug/L			11/06/16 16:20	100
Carbon disulfide	100	U	100	53	ug/L			11/06/16 16:20	100
Carbon tetrachloride	100	U	100	56	ug/L			11/06/16 16:20	100
Chlorobenzene	100	U	100	15	ug/L			11/06/16 16:20	100
Chlorodibromomethane	100	U	100	44	ug/L			11/06/16 16:20	100
Chloroethane	100	U	100	58	ug/L			11/06/16 16:20	100
Chloroform	100	U	100	27	ug/L			11/06/16 16:20	100
Chloromethane	100	U	100	38	ug/L			11/06/16 16:20	100
cis-1,2-Dichloroethene	100	U	100	30	ug/L			11/06/16 16:20	100
cis-1,3-Dichloropropene	100	U	100	32	ug/L			11/06/16 16:20	100
Cyclohexane	100	U	100	27	ug/L			11/06/16 16:20	100
Dichlorodifluoromethane	100	U	100	47	ug/L			11/06/16 16:20	100

Client Sample ID: MRC-D3-S

Date Collected: 10/31/16 10:45
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-5

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	100	U	100	57	ug/L			11/06/16 16:20	100
Ethylbenzene	100	U	100	25	ug/L			11/06/16 16:20	100
Isopropylbenzene	100	U	100	21	ug/L			11/06/16 16:20	100
Methyl acetate	1000	U	1000	140	ug/L			11/06/16 16:20	100
Methylcyclohexane	100	U	100	19	ug/L			11/06/16 16:20	100
Methyl tert-butyl ether	100	U	100	20	ug/L			11/06/16 16:20	100
Methylene Chloride	100	U	100	94	ug/L			11/06/16 16:20	100
Styrene	100	U	100	22	ug/L			11/06/16 16:20	100
Tetrachloroethene	100	U	100	24	ug/L			11/06/16 16:20	100
Toluene	100	U	100	16	ug/L			11/06/16 16:20	100
trans-1,2-Dichloroethene	100	U	100	20	ug/L			11/06/16 16:20	100
trans-1,3-Dichloropropene	100	U	100	22	ug/L			11/06/16 16:20	100
Trichloroethene	**12000**	**E B**	100	20	ug/L			11/06/16 16:20	100
Trichlorofluoromethane	100	U	100	40	ug/L			11/06/16 16:20	100
Vinyl chloride	100	U	100	17	ug/L			11/06/16 16:20	100
Xylenes, Total	200	U	200	27	ug/L			11/06/16 16:20	100
Ethylene Dibromide	100	U	100	51	ug/L			11/06/16 16:20	100

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/06/16 16:20*	*100*
Dibromofluoromethane (Surr)	*89*		*77 - 127*		*11/06/16 16:20*	*100*
4-Bromofluorobenzene (Surr)	*94*		*72 - 120*		*11/06/16 16:20*	*100*
1,2-Dichloroethane-d4 (Surr)	*96*		*72 - 134*		*11/06/16 16:20*	*100*

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	500	U	500	140	ug/L			11/06/16 18:37	500
1,1,2,2-Tetrachloroethane	500	U	500	190	ug/L			11/06/16 18:37	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	120	ug/L			11/06/16 18:37	500
1,1,2-Trichloroethane	500	U	500	150	ug/L			11/06/16 18:37	500
1,1-Dichloroethane	500	U	500	170	ug/L			11/06/16 18:37	500
1,1-Dichloroethene	500	U	500	160	ug/L			11/06/16 18:37	500
1,2,4-Trichlorobenzene	500	U	500	250	ug/L			11/06/16 18:37	500
1,2-Dibromo-3-Chloropropane	1000	U	1000	200	ug/L			11/06/16 18:37	500
1,2-Dichlorobenzene	500	U	500	120	ug/L			11/06/16 18:37	500
1,2-Dichloroethane	500	U	500	120	ug/L			11/06/16 18:37	500
1,2-Dichloropropane	500	U	500	170	ug/L			11/06/16 18:37	500
1,3-Dichlorobenzene	500	U	500	100	ug/L			11/06/16 18:37	500
1,4-Dichlorobenzene	500	U	500	120	ug/L			11/06/16 18:37	500
2-Butanone (MEK)	5000	U	5000	1300	ug/L			11/06/16 18:37	500
2-Hexanone	5000	U	5000	1000	ug/L			11/06/16 18:37	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	1100	ug/L			11/06/16 18:37	500
Acetone	5000	U *	5000	1600	ug/L			11/06/16 18:37	500
Benzene	500	U	500	91	ug/L			11/06/16 18:37	500
Bromoform	500	U	500	380	ug/L			11/06/16 18:37	500
Bromomethane	500	U	500	290	ug/L			11/06/16 18:37	500
Carbon disulfide	500	U	500	260	ug/L			11/06/16 18:37	500
Carbon tetrachloride	500	U	500	280	ug/L			11/06/16 18:37	500
Chlorobenzene	500	U	500	73	ug/L			11/06/16 18:37	500
Chlorodibromomethane	500	U	500	220	ug/L			11/06/16 18:37	500

Client Sample ID: MRC-D3-S

Lab Sample ID: 240-71528-5

Date Collected: 10/31/16 10:45
Matrix: Water
Date Received: 11/01/16 09:15

Method: 8260C - Volatile Organic Compounds (GC/MS) - DL2 (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	500	U	500	290	ug/L			11/06/16 18:37	500
Chloroform	500	U	500	130	ug/L			11/06/16 18:37	500
Chloromethane	500	U	500	190	ug/L			11/06/16 18:37	500
cis-1,2-Dichloroethene	500	U	500	150	ug/L			11/06/16 18:37	500
cis-1,3-Dichloropropene	500	U	500	160	ug/L			11/06/16 18:37	500
Cyclohexane	500	U	500	140	ug/L			11/06/16 18:37	500
Dichlorodifluoromethane	500	U	500	240	ug/L			11/06/16 18:37	500
Dichlorobromomethane	500	U	500	290	ug/L			11/06/16 18:37	500
Ethylbenzene	500	U	500	130	ug/L			11/06/16 18:37	500
Isopropylbenzene	500	U	500	100	ug/L			11/06/16 18:37	500
Methyl acetate	5000	U	5000	700	ug/L			11/06/16 18:37	500
Methylcyclohexane	500	U	500	93	ug/L			11/06/16 18:37	500
Methyl tert-butyl ether	500	U	500	98	ug/L			11/06/16 18:37	500
Methylene Chloride	500	U	500	470	ug/L			11/06/16 18:37	500
Styrene	500	U	500	110	ug/L			11/06/16 18:37	500
Tetrachloroethene	500	U	500	120	ug/L			11/06/16 18:37	500
Toluene	500	U	500	78	ug/L			11/06/16 18:37	500
trans-1,2-Dichloroethene	500	U	500	100	ug/L			11/06/16 18:37	500
trans-1,3-Dichloropropene	500	U	500	110	ug/L			11/06/16 18:37	500
Trichloroethene	**11000**	**B**	500	99	ug/L			11/06/16 18:37	500
Trichlorofluoromethane	500	U	500	200	ug/L			11/06/16 18:37	500
Vinyl chloride	500	U	500	84	ug/L			11/06/16 18:37	500
Xylenes, Total	1000	U	1000	140	ug/L			11/06/16 18:37	500
Ethylene Dibromide	500	U	500	260	ug/L			11/06/16 18:37	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*92*		*80 - 120*		*11/06/16 18:37*	*500*
Dibromofluoromethane (Surr)	*88*		*77 - 127*		*11/06/16 18:37*	*500*
4-Bromofluorobenzene (Surr)	*98*		*72 - 120*		*11/06/16 18:37*	*500*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 134*		*11/06/16 18:37*	*500*

Client Sample ID: MRC-D3-I

Lab Sample ID: 240-71528-6

Date Collected: 10/31/16 10:50
Matrix: Water
Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 16:49	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 16:49	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 16:49	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 16:49	1
1,1-Dichloroethene	**1.2**		1.0	0.32	ug/L			11/03/16 16:49	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 16:49	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 16:49	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 16:49	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 16:49	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 16:49	1
1,3-Dichlorobenzene	**0.49**	**J**	1.0	0.21	ug/L			11/03/16 16:49	1
1,4-Dichlorobenzene	**0.25**	**J**	1.0	0.24	ug/L			11/03/16 16:49	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/03/16 16:49	1

Client Sample ID: MRC-D3-I

Date Collected: 10/31/16 10:50
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 16:49	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 16:49	1
Acetone	**3.2**	**J**	10	3.1	ug/L			11/03/16 16:49	1
Benzene	1.0	U	1.0	0.18	ug/L			11/03/16 16:49	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 16:49	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 16:49	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 16:49	1
Carbon tetrachloride	**0.73**	**J**	1.0	0.56	ug/L			11/03/16 16:49	1
Chlorobenzene	**0.24**	**J**	1.0	0.15	ug/L			11/03/16 16:49	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 16:49	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 16:49	1
Chloroform	**3.2**		1.0	0.27	ug/L			11/03/16 16:49	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 16:49	1
cis-1,2-Dichloroethene	**21**		1.0	0.30	ug/L			11/03/16 16:49	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 16:49	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 16:49	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 16:49	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 16:49	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 16:49	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 16:49	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 16:49	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 16:49	1
Methyl tert-butyl ether	**1.3**		1.0	0.20	ug/L			11/03/16 16:49	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 16:49	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 16:49	1
Tetrachloroethene	**0.25**	**J ***	1.0	0.24	ug/L			11/03/16 16:49	1
Toluene	1.0	U	1.0	0.16	ug/L			11/03/16 16:49	1
trans-1,2-Dichloroethene	**0.24**	**J**	1.0	0.20	ug/L			11/03/16 16:49	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 16:49	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 16:49	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 16:49	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 16:49	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 16:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/03/16 16:49*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 127*		*11/03/16 16:49*	*1*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*		*11/03/16 16:49*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 134*		*11/03/16 16:49*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	200	U	200	54	ug/L			11/06/16 19:04	200
1,1,2,2-Tetrachloroethane	200	U	200	74	ug/L			11/06/16 19:04	200
1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	48	ug/L			11/06/16 19:04	200
1,1,2-Trichloroethane	200	U	200	61	ug/L			11/06/16 19:04	200
1,1-Dichloroethane	200	U	200	68	ug/L			11/06/16 19:04	200
1,1-Dichloroethene	200	U	200	64	ug/L			11/06/16 19:04	200
1,2,4-Trichlorobenzene	200	U	200	99	ug/L			11/06/16 19:04	200
1,2-Dibromo-3-Chloropropane	400	U	400	79	ug/L			11/06/16 19:04	200

Client Sample ID: MRC-D3-I

Date Collected: 10/31/16 10:50
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-6

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichlorobenzene	200	U	200	46	ug/L			11/06/16 19:04	200
1,2-Dichloroethane	200	U	200	48	ug/L			11/06/16 19:04	200
1,2-Dichloropropane	200	U	200	69	ug/L			11/06/16 19:04	200
1,3-Dichlorobenzene	200	U	200	41	ug/L			11/06/16 19:04	200
1,4-Dichlorobenzene	200	U	200	49	ug/L			11/06/16 19:04	200
2-Butanone (MEK)	2000	U	2000	510	ug/L			11/06/16 19:04	200
2-Hexanone	2000	U	2000	400	ug/L			11/06/16 19:04	200
4-Methyl-2-pentanone (MIBK)	2000	U	2000	440	ug/L			11/06/16 19:04	200
Acetone	2000	U *	2000	630	ug/L			11/06/16 19:04	200
Benzene	200	U	200	36	ug/L			11/06/16 19:04	200
Bromoform	200	U	200	150	ug/L			11/06/16 19:04	200
Bromomethane	200	U	200	120	ug/L			11/06/16 19:04	200
Carbon disulfide	200	U	200	110	ug/L			11/06/16 19:04	200
Carbon tetrachloride	200	U	200	110	ug/L			11/06/16 19:04	200
Chlorobenzene	200	U	200	29	ug/L			11/06/16 19:04	200
Chlorodibromomethane	200	U	200	87	ug/L			11/06/16 19:04	200
Chloroethane	200	U	200	120	ug/L			11/06/16 19:04	200
Chloroform	200	U	200	53	ug/L			11/06/16 19:04	200
Chloromethane	200	U	200	76	ug/L			11/06/16 19:04	200
cis-1,2-Dichloroethene	200	U	200	61	ug/L			11/06/16 19:04	200
cis-1,3-Dichloropropene	200	U	200	64	ug/L			11/06/16 19:04	200
Cyclohexane	200	U	200	55	ug/L			11/06/16 19:04	200
Dichlorodifluoromethane	200	U	200	94	ug/L			11/06/16 19:04	200
Dichlorobromomethane	200	U	200	110	ug/L			11/06/16 19:04	200
Ethylbenzene	200	U	200	50	ug/L			11/06/16 19:04	200
Isopropylbenzene	200	U	200	41	ug/L			11/06/16 19:04	200
Methyl acetate	2000	U	2000	280	ug/L			11/06/16 19:04	200
Methylcyclohexane	200	U	200	37	ug/L			11/06/16 19:04	200
Methyl tert-butyl ether	200	U	200	39	ug/L			11/06/16 19:04	200
Methylene Chloride	200	U	200	190	ug/L			11/06/16 19:04	200
Styrene	200	U	200	43	ug/L			11/06/16 19:04	200
Tetrachloroethene	200	U	200	49	ug/L			11/06/16 19:04	200
Toluene	200	U	200	31	ug/L			11/06/16 19:04	200
trans-1,2-Dichloroethene	200	U	200	40	ug/L			11/06/16 19:04	200
trans-1,3-Dichloropropene	200	U	200	44	ug/L			11/06/16 19:04	200
Trichloroethene	**6000**	**B**	200	40	ug/L			11/06/16 19:04	200
Trichlorofluoromethane	200	U	200	81	ug/L			11/06/16 19:04	200
Vinyl chloride	200	U	200	34	ug/L			11/06/16 19:04	200
Xylenes, Total	400	U	400	54	ug/L			11/06/16 19:04	200
Ethylene Dibromide	200	U	200	100	ug/L			11/06/16 19:04	200

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*90*		*80 - 120*		*11/06/16 19:04*	*200*
Dibromofluoromethane (Surr)	*89*		*77 - 127*		*11/06/16 19:04*	*200*
4-Bromofluorobenzene (Surr)	*95*		*72 - 120*		*11/06/16 19:04*	*200*
1,2-Dichloroethane-d4 (Surr)	*95*		*72 - 134*		*11/06/16 19:04*	*200*

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D3-D

Date Collected: 10/31/16 11:10
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-7

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 17:17	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 17:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24	ug/L			11/03/16 17:17	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 17:17	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 17:17	1
1,1-Dichloroethene	**0.66**	**J**	1.0	0.32	ug/L			11/03/16 17:17	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 17:17	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 17:17	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 17:17	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 17:17	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 17:17	1
1,3-Dichlorobenzene	**0.27**	**J**	1.0	0.21	ug/L			11/03/16 17:17	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/03/16 17:17	1
2-Butanone (MEK)	**5.1**	**J**	10	2.6	ug/L			11/03/16 17:17	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 17:17	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 17:17	1
Acetone	**8.3**	**J**	10	3.1	ug/L			11/03/16 17:17	1
Benzene	**0.65**	**J**	1.0	0.18	ug/L			11/03/16 17:17	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 17:17	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 17:17	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 17:17	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 17:17	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			11/03/16 17:17	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 17:17	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 17:17	1
Chloroform	**2.1**		1.0	0.27	ug/L			11/03/16 17:17	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 17:17	1
cis-1,2-Dichloroethene	**8.1**		1.0	0.30	ug/L			11/03/16 17:17	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 17:17	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 17:17	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 17:17	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 17:17	1
Ethylbenzene	**0.30**	**J**	1.0	0.25	ug/L			11/03/16 17:17	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 17:17	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 17:17	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 17:17	1
Methyl tert-butyl ether	**7.7**		1.0	0.20	ug/L			11/03/16 17:17	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 17:17	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 17:17	1
Tetrachloroethene	1.0	U *	1.0	0.24	ug/L			11/03/16 17:17	1
Toluene	**0.81**	**J**	1.0	0.16	ug/L			11/03/16 17:17	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 17:17	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 17:17	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 17:17	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 17:17	1
Xylenes, Total	**0.36**	**J**	2.0	0.27	ug/L			11/03/16 17:17	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 17:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/03/16 17:17*	*1*

Client Sample ID: MRC-D3-D

Date Collected: 10/31/16 11:10
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-7

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*89*		*77 - 127*		*11/03/16 17:17*	*1*
4-Bromofluorobenzene (Surr)	*95*		*72 - 120*		*11/03/16 17:17*	*1*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 134*		*11/03/16 17:17*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	30	U	30	8.1	ug/L			11/07/16 13:52	30
1,1,2,2-Tetrachloroethane	30	U	30	11	ug/L			11/07/16 13:52	30
1,1,2-Trichloro-1,2,2-trifluoroethane	30	U	30	7.1	ug/L			11/07/16 13:52	30
1,1,2-Trichloroethane	30	U	30	9.2	ug/L			11/07/16 13:52	30
1,1-Dichloroethane	30	U	30	10	ug/L			11/07/16 13:52	30
1,1-Dichloroethene	30	U	30	9.6	ug/L			11/07/16 13:52	30
1,2,4-Trichlorobenzene	30	U	30	15	ug/L			11/07/16 13:52	30
1,2-Dibromo-3-Chloropropane	60	U	60	12	ug/L			11/07/16 13:52	30
1,2-Dichlorobenzene	30	U	30	6.9	ug/L			11/07/16 13:52	30
1,2-Dichloroethane	30	U	30	7.2	ug/L			11/07/16 13:52	30
1,2-Dichloropropane	30	U	30	10	ug/L			11/07/16 13:52	30
1,3-Dichlorobenzene	30	U	30	6.2	ug/L			11/07/16 13:52	30
1,4-Dichlorobenzene	30	U	30	7.3	ug/L			11/07/16 13:52	30
2-Butanone (MEK)	300	U	300	77	ug/L			11/07/16 13:52	30
2-Hexanone	300	U	300	60	ug/L			11/07/16 13:52	30
4-Methyl-2-pentanone (MIBK)	300	U	300	66	ug/L			11/07/16 13:52	30
Acetone	300	U	300	94	ug/L			11/07/16 13:52	30
Benzene	30	U	30	5.5	ug/L			11/07/16 13:52	30
Bromoform	30	U	30	23	ug/L			11/07/16 13:52	30
Bromomethane	30	U	30	18	ug/L			11/07/16 13:52	30
Carbon disulfide	30	U	30	16	ug/L			11/07/16 13:52	30
Carbon tetrachloride	30	U	30	17	ug/L			11/07/16 13:52	30
Chlorobenzene	30	U	30	4.4	ug/L			11/07/16 13:52	30
Chlorodibromomethane	30	U	30	13	ug/L			11/07/16 13:52	30
Chloroethane	30	U	30	17	ug/L			11/07/16 13:52	30
Chloroform	30	U	30	8.0	ug/L			11/07/16 13:52	30
Chloromethane	30	U	30	11	ug/L			11/07/16 13:52	30
cis-1,2-Dichloroethene	30	U	30	9.1	ug/L			11/07/16 13:52	30
cis-1,3-Dichloropropene	30	U	30	9.6	ug/L			11/07/16 13:52	30
Cyclohexane	30	U	30	8.2	ug/L			11/07/16 13:52	30
Dichlorodifluoromethane	30	U	30	14	ug/L			11/07/16 13:52	30
Dichlorobromomethane	30	U	30	17	ug/L			11/07/16 13:52	30
Ethylbenzene	30	U	30	7.6	ug/L			11/07/16 13:52	30
Isopropylbenzene	30	U	30	6.2	ug/L			11/07/16 13:52	30
Methyl acetate	300	U	300	42	ug/L			11/07/16 13:52	30
Methylcyclohexane	30	U	30	5.6	ug/L			11/07/16 13:52	30
Methyl tert-butyl ether	**9.6**	**J**	30	5.9	ug/L			11/07/16 13:52	30
Methylene Chloride	30	U	30	28	ug/L			11/07/16 13:52	30
Styrene	30	U	30	6.5	ug/L			11/07/16 13:52	30
Tetrachloroethene	30	U	30	7.3	ug/L			11/07/16 13:52	30
Toluene	30	U	30	4.7	ug/L			11/07/16 13:52	30
trans-1,2-Dichloroethene	30	U	30	6.0	ug/L			11/07/16 13:52	30
trans-1,3-Dichloropropene	30	U	30	6.7	ug/L			11/07/16 13:52	30

Client Sample ID: MRC-D3-D — Lab Sample ID: 240-71528-7

Date Collected: 10/31/16 11:10 **Matrix: Water**
Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	**460**		30	5.9	ug/L			11/07/16 13:52	30
Trichlorofluoromethane	30	U	30	12	ug/L			11/07/16 13:52	30
Vinyl chloride	30	U	30	5.0	ug/L			11/07/16 13:52	30
Xylenes, Total	60	U	60	8.1	ug/L			11/07/16 13:52	30
Ethylene Dibromide	30	U	30	15	ug/L			11/07/16 13:52	30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/07/16 13:52*	*30*
Dibromofluoromethane (Surr)	*85*		*77 - 127*		*11/07/16 13:52*	*30*
4-Bromofluorobenzene (Surr)	*90*		*72 - 120*		*11/07/16 13:52*	*30*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 134*		*11/07/16 13:52*	*30*

Client Sample ID: MRC-D4-S — Lab Sample ID: 240-71528-8

Date Collected: 10/31/16 12:52 **Matrix: Water**
Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 17:44	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 17:44	1
1,1,2-Trichloro-1,2,2-trifluoroethane	**87**	**E**	1.0	0.24	ug/L			11/03/16 17:44	1
1,1,2-Trichloroethane	**0.63**	**J**	1.0	0.31	ug/L			11/03/16 17:44	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 17:44	1
1,1-Dichloroethene	**2.4**		1.0	0.32	ug/L			11/03/16 17:44	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 17:44	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 17:44	1
1,2-Dichlorobenzene	**0.31**	**J**	1.0	0.23	ug/L			11/03/16 17:44	1
1,2-Dichloroethane	**0.33**	**J ***	1.0	0.24	ug/L			11/03/16 17:44	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 17:44	1
1,3-Dichlorobenzene	**1.0**		1.0	0.21	ug/L			11/03/16 17:44	1
1,4-Dichlorobenzene	**1.4**		1.0	0.24	ug/L			11/03/16 17:44	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/03/16 17:44	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 17:44	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 17:44	1
Acetone	10	U	10	3.1	ug/L			11/03/16 17:44	1
Benzene	**0.46**	**J**	1.0	0.18	ug/L			11/03/16 17:44	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 17:44	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 17:44	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 17:44	1
Carbon tetrachloride	**0.71**	**J**	1.0	0.56	ug/L			11/03/16 17:44	1
Chlorobenzene	**7.7**		1.0	0.15	ug/L			11/03/16 17:44	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 17:44	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 17:44	1
Chloroform	**6.8**		1.0	0.27	ug/L			11/03/16 17:44	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 17:44	1
cis-1,2-Dichloroethene	**21**		1.0	0.30	ug/L			11/03/16 17:44	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 17:44	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 17:44	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 17:44	1

Client Sample ID: MRC-D4-S

Date Collected: 10/31/16 12:52
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-8

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 17:44	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 17:44	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 17:44	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 17:44	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 17:44	1
Methyl tert-butyl ether	**0.73**	**J**	1.0	0.20	ug/L			11/03/16 17:44	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 17:44	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 17:44	1
Tetrachloroethene	**0.47**	**J ***	1.0	0.24	ug/L			11/03/16 17:44	1
Toluene	1.0	U	1.0	0.16	ug/L			11/03/16 17:44	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 17:44	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 17:44	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 17:44	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 17:44	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 17:44	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 17:44	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*87*		*80 - 120*		*11/03/16 17:44*	*1*
Dibromofluoromethane (Surr)	*88*		*77 - 127*		*11/03/16 17:44*	*1*
4-Bromofluorobenzene (Surr)	*105*		*72 - 120*		*11/03/16 17:44*	*1*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 134*		*11/03/16 17:44*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	500	U	500	140	ug/L			11/06/16 20:54	500
1,1,2,2-Tetrachloroethane	500	U	500	190	ug/L			11/06/16 20:54	500
1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	120	ug/L			11/06/16 20:54	500
1,1,2-Trichloroethane	500	U	500	150	ug/L			11/06/16 20:54	500
1,1-Dichloroethane	500	U	500	170	ug/L			11/06/16 20:54	500
1,1-Dichloroethene	500	U	500	160	ug/L			11/06/16 20:54	500
1,2,4-Trichlorobenzene	500	U	500	250	ug/L			11/06/16 20:54	500
1,2-Dibromo-3-Chloropropane	1000	U	1000	200	ug/L			11/06/16 20:54	500
1,2-Dichlorobenzene	500	U	500	120	ug/L			11/06/16 20:54	500
1,2-Dichloroethane	500	U	500	120	ug/L			11/06/16 20:54	500
1,2-Dichloropropane	500	U	500	170	ug/L			11/06/16 20:54	500
1,3-Dichlorobenzene	500	U	500	100	ug/L			11/06/16 20:54	500
1,4-Dichlorobenzene	500	U	500	120	ug/L			11/06/16 20:54	500
2-Butanone (MEK)	5000	U	5000	1300	ug/L			11/06/16 20:54	500
2-Hexanone	5000	U	5000	1000	ug/L			11/06/16 20:54	500
4-Methyl-2-pentanone (MIBK)	5000	U	5000	1100	ug/L			11/06/16 20:54	500
Acetone	5000	U *	5000	1600	ug/L			11/06/16 20:54	500
Benzene	500	U	500	91	ug/L			11/06/16 20:54	500
Bromoform	500	U	500	380	ug/L			11/06/16 20:54	500
Bromomethane	500	U	500	290	ug/L			11/06/16 20:54	500
Carbon disulfide	500	U	500	260	ug/L			11/06/16 20:54	500
Carbon tetrachloride	500	U	500	280	ug/L			11/06/16 20:54	500
Chlorobenzene	500	U	500	73	ug/L			11/06/16 20:54	500
Chlorodibromomethane	500	U	500	220	ug/L			11/06/16 20:54	500
Chloroethane	500	U	500	290	ug/L			11/06/16 20:54	500

Client Sample ID: MRC-D4-S

Lab Sample ID: 240-71528-8

Date Collected: 10/31/16 12:52

Matrix: Water

Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroform	500	U	500	130	ug/L			11/06/16 20:54	500
Chloromethane	500	U	500	190	ug/L			11/06/16 20:54	500
cis-1,2-Dichloroethene	500	U	500	150	ug/L			11/06/16 20:54	500
cis-1,3-Dichloropropene	500	U	500	160	ug/L			11/06/16 20:54	500
Cyclohexane	500	U	500	140	ug/L			11/06/16 20:54	500
Dichlorodifluoromethane	500	U	500	240	ug/L			11/06/16 20:54	500
Dichlorobromomethane	500	U	500	290	ug/L			11/06/16 20:54	500
Ethylbenzene	500	U	500	130	ug/L			11/06/16 20:54	500
Isopropylbenzene	500	U	500	100	ug/L			11/06/16 20:54	500
Methyl acetate	5000	U	5000	700	ug/L			11/06/16 20:54	500
Methylcyclohexane	500	U	500	93	ug/L			11/06/16 20:54	500
Methyl tert-butyl ether	500	U	500	98	ug/L			11/06/16 20:54	500
Methylene Chloride	500	U	500	470	ug/L			11/06/16 20:54	500
Styrene	500	U	500	110	ug/L			11/06/16 20:54	500
Tetrachloroethene	500	U	500	120	ug/L			11/06/16 20:54	500
Toluene	500	U	500	78	ug/L			11/06/16 20:54	500
trans-1,2-Dichloroethene	500	U	500	100	ug/L			11/06/16 20:54	500
trans-1,3-Dichloropropene	500	U	500	110	ug/L			11/06/16 20:54	500
Trichloroethene	**18000**	**B**	500	99	ug/L			11/06/16 20:54	500
Trichlorofluoromethane	500	U	500	200	ug/L			11/06/16 20:54	500
Vinyl chloride	500	U	500	84	ug/L			11/06/16 20:54	500
Xylenes, Total	1000	U	1000	140	ug/L			11/06/16 20:54	500
Ethylene Dibromide	500	U	500	260	ug/L			11/06/16 20:54	500

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*83*		*80 - 120*		*11/06/16 20:54*	*500*
Dibromofluoromethane (Surr)	*93*		*77 - 127*		*11/06/16 20:54*	*500*
4-Bromofluorobenzene (Surr)	*93*		*72 - 120*		*11/06/16 20:54*	*500*
1,2-Dichloroethane-d4 (Surr)	*100*		*72 - 134*		*11/06/16 20:54*	*500*

Client Sample ID: MRC-D4-I

Lab Sample ID: 240-71528-9

Date Collected: 10/31/16 13:10

Matrix: Water

Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 18:12	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 18:12	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 18:12	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 18:12	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			11/03/16 18:12	1
1,2,4-Trichlorobenzene	**110**	**E**	1.0	0.49	ug/L			11/03/16 18:12	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 18:12	1
1,2-Dichlorobenzene	**8.8**		1.0	0.23	ug/L			11/03/16 18:12	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 18:12	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 18:12	1
1,3-Dichlorobenzene	**46**		1.0	0.21	ug/L			11/03/16 18:12	1
1,4-Dichlorobenzene	**33**		1.0	0.24	ug/L			11/03/16 18:12	1
2-Butanone (MEK)	**9.2**	**J**	10	2.6	ug/L			11/03/16 18:12	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 18:12	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D4-I

Date Collected: 10/31/16 13:10
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 18:12	1
Acetone	**7.7**	**J**	10	3.1	ug/L			11/03/16 18:12	1
Benzene	**1.7**		1.0	0.18	ug/L			11/03/16 18:12	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 18:12	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 18:12	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 18:12	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 18:12	1
Chlorobenzene	**41**		1.0	0.15	ug/L			11/03/16 18:12	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 18:12	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 18:12	1
Chloroform	**0.92**	**J**	1.0	0.27	ug/L			11/03/16 18:12	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 18:12	1
cis-1,2-Dichloroethene	**2.4**		1.0	0.30	ug/L			11/03/16 18:12	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 18:12	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 18:12	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 18:12	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 18:12	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 18:12	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 18:12	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 18:12	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 18:12	1
Methyl tert-butyl ether	**2.9**		1.0	0.20	ug/L			11/03/16 18:12	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 18:12	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 18:12	1
Tetrachloroethene	1.0	U *	1.0	0.24	ug/L			11/03/16 18:12	1
Toluene	**0.39**	**J**	1.0	0.16	ug/L			11/03/16 18:12	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 18:12	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 18:12	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 18:12	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 18:12	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 18:12	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 18:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*11/03/16 18:12*	*1*
Dibromofluoromethane (Surr)	*87*		*77 - 127*		*11/03/16 18:12*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 120*		*11/03/16 18:12*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 134*		*11/03/16 18:12*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	10	U	10	2.7	ug/L			11/06/16 19:32	10
1,1,2,2-Tetrachloroethane	10	U	10	3.7	ug/L			11/06/16 19:32	10
1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	2.4	ug/L			11/06/16 19:32	10
1,1,2-Trichloroethane	10	U	10	3.1	ug/L			11/06/16 19:32	10
1,1-Dichloroethane	10	U	10	3.4	ug/L			11/06/16 19:32	10
1,1-Dichloroethene	10	U	10	3.2	ug/L			11/06/16 19:32	10
1,2,4-Trichlorobenzene	**160**		10	4.9	ug/L			11/06/16 19:32	10
1,2-Dibromo-3-Chloropropane	20	U	20	4.0	ug/L			11/06/16 19:32	10
1,2-Dichlorobenzene	**9.5**	**J**	10	2.3	ug/L			11/06/16 19:32	10

Client Sample ID: MRC-D4-I

Date Collected: 10/31/16 13:10
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-9

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	10	U	10	2.4	ug/L			11/06/16 19:32	10
1,2-Dichloropropane	10	U	10	3.5	ug/L			11/06/16 19:32	10
1,3-Dichlorobenzene	**56**		10	2.1	ug/L			11/06/16 19:32	10
1,4-Dichlorobenzene	**40**		10	2.4	ug/L			11/06/16 19:32	10
2-Butanone (MEK)	100	U	100	26	ug/L			11/06/16 19:32	10
2-Hexanone	100	U	100	20	ug/L			11/06/16 19:32	10
4-Methyl-2-pentanone (MIBK)	100	U	100	22	ug/L			11/06/16 19:32	10
Acetone	100	U *	100	31	ug/L			11/06/16 19:32	10
Benzene	10	U	10	1.8	ug/L			11/06/16 19:32	10
Bromoform	10	U	10	7.6	ug/L			11/06/16 19:32	10
Bromomethane	10	U	10	5.9	ug/L			11/06/16 19:32	10
Carbon disulfide	10	U	10	5.3	ug/L			11/06/16 19:32	10
Carbon tetrachloride	10	U	10	5.6	ug/L			11/06/16 19:32	10
Chlorobenzene	**56**		10	1.5	ug/L			11/06/16 19:32	10
Chlorodibromomethane	10	U	10	4.4	ug/L			11/06/16 19:32	10
Chloroethane	10	U	10	5.8	ug/L			11/06/16 19:32	10
Chloroform	10	U	10	2.7	ug/L			11/06/16 19:32	10
Chloromethane	10	U	10	3.8	ug/L			11/06/16 19:32	10
cis-1,2-Dichloroethene	10	U	10	3.0	ug/L			11/06/16 19:32	10
cis-1,3-Dichloropropene	10	U	10	3.2	ug/L			11/06/16 19:32	10
Cyclohexane	10	U	10	2.7	ug/L			11/06/16 19:32	10
Dichlorodifluoromethane	10	U	10	4.7	ug/L			11/06/16 19:32	10
Dichlorobromomethane	10	U	10	5.7	ug/L			11/06/16 19:32	10
Ethylbenzene	10	U	10	2.5	ug/L			11/06/16 19:32	10
Isopropylbenzene	10	U	10	2.1	ug/L			11/06/16 19:32	10
Methyl acetate	100	U	100	14	ug/L			11/06/16 19:32	10
Methylcyclohexane	10	U	10	1.9	ug/L			11/06/16 19:32	10
Methyl tert-butyl ether	**2.4**	**J**	10	2.0	ug/L			11/06/16 19:32	10
Methylene Chloride	10	U	10	9.4	ug/L			11/06/16 19:32	10
Styrene	10	U	10	2.2	ug/L			11/06/16 19:32	10
Tetrachloroethene	10	U	10	2.4	ug/L			11/06/16 19:32	10
Toluene	10	U	10	1.6	ug/L			11/06/16 19:32	10
trans-1,2-Dichloroethene	10	U	10	2.0	ug/L			11/06/16 19:32	10
trans-1,3-Dichloropropene	10	U	10	2.2	ug/L			11/06/16 19:32	10
Trichloroethene	**77**	**B**	10	2.0	ug/L			11/06/16 19:32	10
Trichlorofluoromethane	10	U	10	4.0	ug/L			11/06/16 19:32	10
Vinyl chloride	10	U	10	1.7	ug/L			11/06/16 19:32	10
Xylenes, Total	20	U	20	2.7	ug/L			11/06/16 19:32	10
Ethylene Dibromide	10	U	10	5.1	ug/L			11/06/16 19:32	10

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*88*		*80 - 120*		*11/06/16 19:32*	*10*
Dibromofluoromethane (Surr)	*94*		*77 - 127*		*11/06/16 19:32*	*10*
4-Bromofluorobenzene (Surr)	*96*		*72 - 120*		*11/06/16 19:32*	*10*
1,2-Dichloroethane-d4 (Surr)	*98*		*72 - 134*		*11/06/16 19:32*	*10*

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D4-D

Date Collected: 10/31/16 13:22
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-10

Matrix: Water

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	0.27	ug/L			11/03/16 18:39	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 18:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24	ug/L			11/03/16 18:39	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 18:39	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 18:39	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			11/03/16 18:39	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 18:39	1
1,2-Dichlorobenzene	**1.4**		1.0	0.23	ug/L			11/03/16 18:39	1
1,2-Dichloroethane	1.0	U *	1.0	0.24	ug/L			11/03/16 18:39	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 18:39	1
1,3-Dichlorobenzene	**12**		1.0	0.21	ug/L			11/03/16 18:39	1
1,4-Dichlorobenzene	**7.7**		1.0	0.24	ug/L			11/03/16 18:39	1
2-Butanone (MEK)	**3.8**	**J**	10	2.6	ug/L			11/03/16 18:39	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 18:39	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 18:39	1
Acetone	**4.3**	**J**	10	3.1	ug/L			11/03/16 18:39	1
Benzene	**0.39**	**J**	1.0	0.18	ug/L			11/03/16 18:39	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 18:39	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 18:39	1
Carbon disulfide	1.0	U *	1.0	0.53	ug/L			11/03/16 18:39	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 18:39	1
Chlorobenzene	**6.3**		1.0	0.15	ug/L			11/03/16 18:39	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 18:39	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 18:39	1
Chloroform	**0.91**	**J**	1.0	0.27	ug/L			11/03/16 18:39	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 18:39	1
cis-1,2-Dichloroethene	**5.4**		1.0	0.30	ug/L			11/03/16 18:39	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 18:39	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 18:39	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 18:39	1
Dichlorobromomethane	1.0	U *	1.0	0.57	ug/L			11/03/16 18:39	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 18:39	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 18:39	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 18:39	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 18:39	1
Methyl tert-butyl ether	**5.7**		1.0	0.20	ug/L			11/03/16 18:39	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 18:39	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 18:39	1
Tetrachloroethene	1.0	U *	1.0	0.24	ug/L			11/03/16 18:39	1
Toluene	**0.23**	**J**	1.0	0.16	ug/L			11/03/16 18:39	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 18:39	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 18:39	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 18:39	1
Vinyl chloride	1.0	U *	1.0	0.17	ug/L			11/03/16 18:39	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 18:39	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 18:39	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*89*		*80 - 120*		*11/03/16 18:39*	*1*
Dibromofluoromethane (Surr)	*86*		*77 - 127*		*11/03/16 18:39*	*1*

Client Sample ID: MRC-D4-D

Date Collected: 10/31/16 13:22
Date Received: 11/01/16 09:15

Lab Sample ID: 240-71528-10

Matrix: Water

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

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*95*		*72 - 120*		*11/03/16 18:39*	*1*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 134*		*11/03/16 18:39*	*1*

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.5	U	2.5	0.68	ug/L			11/06/16 19:59	2.5
1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.93	ug/L			11/06/16 19:59	2.5
1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	0.60	ug/L			11/06/16 19:59	2.5
1,1,2-Trichloroethane	2.5	U	2.5	0.77	ug/L			11/06/16 19:59	2.5
1,1-Dichloroethane	2.5	U	2.5	0.85	ug/L			11/06/16 19:59	2.5
1,1-Dichloroethene	2.5	U	2.5	0.80	ug/L			11/06/16 19:59	2.5
1,2,4-Trichlorobenzene	**27**		2.5	1.2	ug/L			11/06/16 19:59	2.5
1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.99	ug/L			11/06/16 19:59	2.5
1,2-Dichlorobenzene	**1.5**	**J**	2.5	0.58	ug/L			11/06/16 19:59	2.5
1,2-Dichloroethane	2.5	U	2.5	0.60	ug/L			11/06/16 19:59	2.5
1,2-Dichloropropane	2.5	U	2.5	0.86	ug/L			11/06/16 19:59	2.5
1,3-Dichlorobenzene	**12**		2.5	0.52	ug/L			11/06/16 19:59	2.5
1,4-Dichlorobenzene	**7.7**		2.5	0.61	ug/L			11/06/16 19:59	2.5
2-Butanone (MEK)	25	U	25	6.4	ug/L			11/06/16 19:59	2.5
2-Hexanone	25	U	25	5.0	ug/L			11/06/16 19:59	2.5
4-Methyl-2-pentanone (MIBK)	25	U	25	5.5	ug/L			11/06/16 19:59	2.5
Acetone	25	U *	25	7.9	ug/L			11/06/16 19:59	2.5
Benzene	2.5	U	2.5	0.46	ug/L			11/06/16 19:59	2.5
Bromoform	2.5	U	2.5	1.9	ug/L			11/06/16 19:59	2.5
Bromomethane	2.5	U	2.5	1.5	ug/L			11/06/16 19:59	2.5
Carbon disulfide	2.5	U	2.5	1.3	ug/L			11/06/16 19:59	2.5
Carbon tetrachloride	2.5	U	2.5	1.4	ug/L			11/06/16 19:59	2.5
Chlorobenzene	**6.5**		2.5	0.37	ug/L			11/06/16 19:59	2.5
Chlorodibromomethane	2.5	U	2.5	1.1	ug/L			11/06/16 19:59	2.5
Chloroethane	2.5	U	2.5	1.4	ug/L			11/06/16 19:59	2.5
Chloroform	**0.83**	**J**	2.5	0.67	ug/L			11/06/16 19:59	2.5
Chloromethane	2.5	U	2.5	0.95	ug/L			11/06/16 19:59	2.5
cis-1,2-Dichloroethene	**5.1**		2.5	0.76	ug/L			11/06/16 19:59	2.5
cis-1,3-Dichloropropene	2.5	U	2.5	0.80	ug/L			11/06/16 19:59	2.5
Cyclohexane	2.5	U	2.5	0.68	ug/L			11/06/16 19:59	2.5
Dichlorodifluoromethane	2.5	U	2.5	1.2	ug/L			11/06/16 19:59	2.5
Dichlorobromomethane	2.5	U	2.5	1.4	ug/L			11/06/16 19:59	2.5
Ethylbenzene	2.5	U	2.5	0.63	ug/L			11/06/16 19:59	2.5
Isopropylbenzene	2.5	U	2.5	0.51	ug/L			11/06/16 19:59	2.5
Methyl acetate	25	U	25	3.5	ug/L			11/06/16 19:59	2.5
Methylcyclohexane	2.5	U	2.5	0.47	ug/L			11/06/16 19:59	2.5
Methyl tert-butyl ether	**6.0**		2.5	0.49	ug/L			11/06/16 19:59	2.5
Methylene Chloride	2.5	U	2.5	2.4	ug/L			11/06/16 19:59	2.5
Styrene	2.5	U	2.5	0.54	ug/L			11/06/16 19:59	2.5
Tetrachloroethene	2.5	U	2.5	0.61	ug/L			11/06/16 19:59	2.5
Toluene	2.5	U	2.5	0.39	ug/L			11/06/16 19:59	2.5
trans-1,2-Dichloroethene	2.5	U	2.5	0.50	ug/L			11/06/16 19:59	2.5
trans-1,3-Dichloropropene	2.5	U	2.5	0.56	ug/L			11/06/16 19:59	2.5
Trichloroethene	**45**	**B**	2.5	0.50	ug/L			11/06/16 19:59	2.5

Client Sample ID: MRC-D4-D

Lab Sample ID: 240-71528-10

Date Collected: 10/31/16 13:22

Matrix: Water

Date Received: 11/01/16 09:15

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	2.5	U	2.5	1.0	ug/L			11/06/16 19:59	2.5
Vinyl chloride	2.5	U	2.5	0.42	ug/L			11/06/16 19:59	2.5
Xylenes, Total	5.0	U	5.0	0.68	ug/L			11/06/16 19:59	2.5
Ethylene Dibromide	2.5	U	2.5	1.3	ug/L			11/06/16 19:59	2.5

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*82*		*80 - 120*		*11/06/16 19:59*	*2.5*
Dibromofluoromethane (Surr)	*87*		*77 - 127*		*11/06/16 19:59*	*2.5*
4-Bromofluorobenzene (Surr)	*92*		*72 - 120*		*11/06/16 19:59*	*2.5*
1,2-Dichloroethane-d4 (Surr)	*92*		*72 - 134*		*11/06/16 19:59*	*2.5*

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

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

Analyte	RL	MDL	Units	Method
1,1,1-Trichloroethane	1.0	0.27	ug/L	8260C
1,1,2,2-Tetrachloroethane	1.0	0.37	ug/L	8260C
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	0.24	ug/L	8260C
1,1,2-Trichloroethane	1.0	0.31	ug/L	8260C
1,1-Dichloroethane	1.0	0.34	ug/L	8260C
1,1-Dichloroethene	1.0	0.32	ug/L	8260C
1,2,4-Trichlorobenzene	1.0	0.49	ug/L	8260C
1,2-Dibromo-3-Chloropropane	2.0	0.40	ug/L	8260C
1,2-Dichlorobenzene	1.0	0.23	ug/L	8260C
1,2-Dichloroethane	1.0	0.24	ug/L	8260C
1,2-Dichloropropane	1.0	0.35	ug/L	8260C
1,3-Dichlorobenzene	1.0	0.21	ug/L	8260C
1,4-Dichlorobenzene	1.0	0.24	ug/L	8260C
2-Butanone (MEK)	10	2.6	ug/L	8260C
2-Hexanone	10	2.0	ug/L	8260C
4-Methyl-2-pentanone (MIBK)	10	2.2	ug/L	8260C
Acetone	10	3.1	ug/L	8260C
Benzene	1.0	0.18	ug/L	8260C
Bromoform	1.0	0.76	ug/L	8260C
Bromomethane	1.0	0.59	ug/L	8260C
Carbon disulfide	1.0	0.53	ug/L	8260C
Carbon tetrachloride	1.0	0.56	ug/L	8260C
Chlorobenzene	1.0	0.15	ug/L	8260C
Chlorodibromomethane	1.0	0.44	ug/L	8260C
Chloroethane	1.0	0.58	ug/L	8260C
Chloroform	1.0	0.27	ug/L	8260C
Chloromethane	1.0	0.38	ug/L	8260C
cis-1,2-Dichloroethene	1.0	0.30	ug/L	8260C
cis-1,3-Dichloropropene	1.0	0.32	ug/L	8260C
Cyclohexane	1.0	0.27	ug/L	8260C
Dichlorobromomethane	1.0	0.57	ug/L	8260C
Dichlorodifluoromethane	1.0	0.47	ug/L	8260C
Ethylbenzene	1.0	0.25	ug/L	8260C
Ethylene Dibromide	1.0	0.51	ug/L	8260C
Isopropylbenzene	1.0	0.21	ug/L	8260C
Methyl acetate	10	1.4	ug/L	8260C
Methyl tert-butyl ether	1.0	0.20	ug/L	8260C
Methylcyclohexane	1.0	0.19	ug/L	8260C
Methylene Chloride	1.0	0.94	ug/L	8260C
Styrene	1.0	0.22	ug/L	8260C
Tetrachloroethene	1.0	0.24	ug/L	8260C
Toluene	1.0	0.16	ug/L	8260C
trans-1,2-Dichloroethene	1.0	0.20	ug/L	8260C
trans-1,3-Dichloropropene	1.0	0.22	ug/L	8260C
Trichloroethene	1.0	0.20	ug/L	8260C
Trichlorofluoromethane	1.0	0.40	ug/L	8260C
Vinyl chloride	1.0	0.17	ug/L	8260C
Xylenes, Total	2.0	0.27	ug/L	8260C

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

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

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

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DBFM	BFB	12DCE
Lab Sample ID	Client Sample ID	(80-120)	(77-127)	(72-120)	(72-134)
240-71528-1	MRC-D2-S	86	85	98	90
240-71528-1 - DL	MRC-D2-S	91	90	98	96
240-71528-2	MRC-D2-I	89	88	99	95
240-71528-2 - DL	MRC-D2-I	87	86	94	89
240-71528-3	MRC-D2-D	84	85	94	88
240-71528-3 - DL	MRC-D2-D	88	88	95	92
240-71528-4	TB-103116	89	88	93	92
240-71528-5	MRC-D3-S	90	87	107	90
240-71528-5 - DL	MRC-D3-S	86	89	94	96
240-71528-5 - DL2	MRC-D3-S	92	88	98	97
240-71528-6	MRC-D3-I	86	88	96	89
240-71528-6 - DL	MRC-D3-I	90	89	95	95
240-71528-7	MRC-D3-D	86	89	95	89
240-71528-7 - DL	MRC-D3-D	86	85	90	88
240-71528-8	MRC-D4-S	87	88	105	92
240-71528-8 - DL	MRC-D4-S	83	93	93	100
240-71528-9	MRC-D4-I	88	87	93	90
240-71528-9 - DL	MRC-D4-I	88	94	96	98
240-71528-10	MRC-D4-D	89	86	95	88
240-71528-10 - DL	MRC-D4-D	82	87	92	92
LCS 180-193223/4	Lab Control Sample	89	85	97	89
LCS 180-193465/4	Lab Control Sample	83	90	97	91
LCS 180-193502/4	Lab Control Sample	84	86	93	89
LCSD 180-193223/5	Lab Control Sample Dup	98	96	101	97
LCSD 180-193465/14	Lab Control Sample Dup	94	101	104	107
LCSD 180-193502/5	Lab Control Sample Dup	80	90	93	88
MB 180-193223/8	Method Blank	97	91	100	96
MB 180-193465/8	Method Blank	86	90	93	90
MB 180-193502/8	Method Blank	85	82	91	86

Surrogate Legend

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

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

Lab Sample ID: MB 180-193223/8
Matrix: Water
Analysis Batch: 193223

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	1.0	U	1.0	0.27	ug/L			11/03/16 10:48	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/03/16 10:48	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24	ug/L			11/03/16 10:48	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/03/16 10:48	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/03/16 10:48	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			11/03/16 10:48	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/03/16 10:48	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/03/16 10:48	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/03/16 10:48	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/03/16 10:48	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/03/16 10:48	1
1,3-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			11/03/16 10:48	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/03/16 10:48	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/03/16 10:48	1
2-Hexanone	10	U	10	2.0	ug/L			11/03/16 10:48	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/03/16 10:48	1
Acetone	10	U	10	3.1	ug/L			11/03/16 10:48	1
Benzene	1.0	U	1.0	0.18	ug/L			11/03/16 10:48	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/03/16 10:48	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/03/16 10:48	1
Carbon disulfide	1.0	U	1.0	0.53	ug/L			11/03/16 10:48	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/03/16 10:48	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			11/03/16 10:48	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/03/16 10:48	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/03/16 10:48	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/03/16 10:48	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/03/16 10:48	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/03/16 10:48	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/03/16 10:48	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/03/16 10:48	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/03/16 10:48	1
Dichlorobromomethane	1.0	U	1.0	0.57	ug/L			11/03/16 10:48	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/03/16 10:48	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/03/16 10:48	1
Methyl acetate	10	U	10	1.4	ug/L			11/03/16 10:48	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/03/16 10:48	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			11/03/16 10:48	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/03/16 10:48	1
Styrene	1.0	U	1.0	0.22	ug/L			11/03/16 10:48	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			11/03/16 10:48	1
Toluene	1.0	U	1.0	0.16	ug/L			11/03/16 10:48	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 10:48	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/03/16 10:48	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			11/03/16 10:48	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/03/16 10:48	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			11/03/16 10:48	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/03/16 10:48	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/03/16 10:48	1

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	97		80 - 120		11/03/16 10:48	1
Dibromofluoromethane (Surr)	91		77 - 127		11/03/16 10:48	1
4-Bromofluorobenzene (Surr)	100		72 - 120		11/03/16 10:48	1
1,2-Dichloroethane-d4 (Surr)	96		72 - 134		11/03/16 10:48	1

Lab Sample ID: LCS 180-193223/4
Matrix: Water
Analysis Batch: 193223

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	10.0	9.38		ug/L		94	57 - 128
1,1,2,2-Tetrachloroethane	10.0	8.69		ug/L		87	78 - 135
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.0		ug/L		100	72 - 123
1,1,2-Trichloroethane	10.0	9.68		ug/L		97	77 - 127
1,1-Dichloroethane	10.0	9.24		ug/L		92	76 - 126
1,1-Dichloroethene	10.0	8.88		ug/L		89	71 - 122
1,2,4-Trichlorobenzene	10.0	7.41		ug/L		74	51 - 138
1,2-Dibromo-3-Chloropropane	10.0	7.26		ug/L		73	55 - 139
1,2-Dichlorobenzene	10.0	9.27		ug/L		93	80 - 120
1,2-Dichloroethane	10.0	9.27		ug/L		93	72 - 126
1,2-Dichloropropane	10.0	9.49		ug/L		95	78 - 123
1,3-Dichlorobenzene	10.0	9.05		ug/L		90	80 - 120
1,4-Dichlorobenzene	10.0	9.21		ug/L		92	80 - 120
2-Butanone (MEK)	20.0	16.0		ug/L		80	41 - 150
2-Hexanone	20.0	16.0		ug/L		80	40 - 150
4-Methyl-2-pentanone (MIBK)	20.0	16.3		ug/L		82	49 - 147
Acetone	20.0	15.4		ug/L		77	10 - 150
Benzene	10.0	9.70		ug/L		97	80 - 121
Bromoform	10.0	7.16		ug/L		72	62 - 138
Bromomethane	10.0	9.79		ug/L		98	39 - 150
Carbon disulfide	10.0	8.63		ug/L		86	57 - 137
Carbon tetrachloride	10.0	8.54		ug/L		85	59 - 145
Chlorobenzene	10.0	9.65		ug/L		97	80 - 120
Chlorodibromomethane	10.0	8.03		ug/L		80	71 - 134
Chloroethane	10.0	7.73		ug/L		77	53 - 148
Chloroform	10.0	9.43		ug/L		94	78 - 122
Chloromethane	10.0	8.20		ug/L		82	51 - 150
cis-1,2-Dichloroethene	10.0	9.28		ug/L		93	80 - 120
cis-1,3-Dichloropropene	10.0	8.65		ug/L		86	67 - 127
Cyclohexane	10.0	10.6		ug/L		106	65 - 132
Dichlorodifluoromethane	10.0	9.11		ug/L		91	43 - 142
Dichlorobromomethane	10.0	8.00		ug/L		80	72 - 124
Ethylbenzene	10.0	9.80		ug/L		98	80 - 123
Isopropylbenzene	10.0	9.32		ug/L		93	80 - 124
Methyl acetate	50.0	50.8		ug/L		102	65 - 144
Methylcyclohexane	10.0	9.87		ug/L		99	74 - 120
Methyl tert-butyl ether	10.0	10.1		ug/L		101	68 - 124
Methylene Chloride	10.0	9.41		ug/L		94	71 - 129
m-Xylene & p-Xylene	10.0	9.50		ug/L		95	80 - 124
o-Xylene	10.0	9.45		ug/L		94	80 - 123
Styrene	10.0	9.49		ug/L		95	80 - 125
Tetrachloroethene	10.0	9.83		ug/L		98	80 - 122
Toluene	10.0	10.1		ug/L		101	80 - 125

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

Lab Sample ID: LCS 180-193223/4
Matrix: Water
Analysis Batch: 193223

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
trans-1,2-Dichloroethene	10.0	9.18		ug/L		92	80 - 121
trans-1,3-Dichloropropene	10.0	9.32		ug/L		93	63 - 144
Trichloroethene	10.0	9.21		ug/L		92	79 - 120
Trichlorofluoromethane	10.0	8.94		ug/L		89	39 - 150
Vinyl chloride	10.0	8.12		ug/L		81	61 - 138
Xylenes, Total	20.0	19.0		ug/L		95	80 - 123
Ethylene Dibromide	10.0	9.94		ug/L		99	79 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*89*		*80 - 120*
Dibromofluoromethane (Surr)	*85*		*77 - 127*
4-Bromofluorobenzene (Surr)	*97*		*72 - 120*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 134*

Lab Sample ID: LCSD 180-193223/5
Matrix: Water
Analysis Batch: 193223

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane	10.0	11.1		ug/L		111	57 - 128	17	19
1,1,2,2-Tetrachloroethane	10.0	10.1		ug/L		101	78 - 135	15	16
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.8		ug/L		118	72 - 123	16	20
1,1,2-Trichloroethane	10.0	10.9		ug/L		109	77 - 127	12	17
1,1-Dichloroethane	10.0	10.7		ug/L		107	76 - 126	15	22
1,1-Dichloroethene	10.0	10.5		ug/L		105	71 - 122	17	18
1,2,4-Trichlorobenzene	10.0	8.37		ug/L		84	51 - 138	12	35
1,2-Dibromo-3-Chloropropane	10.0	7.60		ug/L		76	55 - 139	5	23
1,2-Dichlorobenzene	10.0	10.2		ug/L		102	80 - 120	9	15
1,2-Dichloroethane	10.0	10.9	*	ug/L		109	72 - 126	16	15
1,2-Dichloropropane	10.0	11.0		ug/L		110	78 - 123	15	15
1,3-Dichlorobenzene	10.0	9.95		ug/L		100	80 - 120	10	15
1,4-Dichlorobenzene	10.0	10.1		ug/L		101	80 - 120	9	15
2-Butanone (MEK)	20.0	17.2		ug/L		86	41 - 150	7	35
2-Hexanone	20.0	16.6		ug/L		83	40 - 150	3	35
4-Methyl-2-pentanone (MIBK)	20.0	17.0		ug/L		85	49 - 147	4	21
Acetone	20.0	16.2		ug/L		81	10 - 150	5	35
Benzene	10.0	11.2		ug/L		112	80 - 121	14	15
Bromoform	10.0	7.99		ug/L		80	62 - 138	11	16
Bromomethane	10.0	12.2		ug/L		122	39 - 150	22	35
Carbon disulfide	10.0	10.3	*	ug/L		103	57 - 137	17	16
Carbon tetrachloride	10.0	10.1		ug/L		101	59 - 145	16	19
Chlorobenzene	10.0	10.8		ug/L		108	80 - 120	11	15
Chlorodibromomethane	10.0	8.83		ug/L		88	71 - 134	9	17
Chloroethane	10.0	8.94		ug/L		89	53 - 148	15	24
Chloroform	10.0	10.6		ug/L		106	78 - 122	12	15
Chloromethane	10.0	9.38		ug/L		94	51 - 150	13	22
cis-1,2-Dichloroethene	10.0	10.9		ug/L		109	80 - 120	16	17

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

Lab Sample ID: LCSD 180-193223/5
Matrix: Water
Analysis Batch: 193223

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
cis-1,3-Dichloropropene	10.0	9.98		ug/L		100	67 - 127	14	18
Cyclohexane	10.0	12.1		ug/L		121	65 - 132	13	17
Dichlorodifluoromethane	10.0	10.6		ug/L		106	43 - 142	15	19
Dichlorobromomethane	10.0	9.46	*	ug/L		95	72 - 124	17	16
Ethylbenzene	10.0	10.9		ug/L		109	80 - 123	11	15
Isopropylbenzene	10.0	10.6		ug/L		106	80 - 124	13	15
Methyl acetate	50.0	58.2		ug/L		116	65 - 144	14	18
Methylcyclohexane	10.0	11.8		ug/L		118	74 - 120	18	20
Methyl tert-butyl ether	10.0	11.6		ug/L		116	68 - 124	14	25
Methylene Chloride	10.0	10.7		ug/L		107	71 - 129	13	19
m-Xylene & p-Xylene	10.0	10.5		ug/L		105	80 - 124	10	17
o-Xylene	10.0	10.6		ug/L		106	80 - 123	11	15
Styrene	10.0	10.7		ug/L		107	80 - 125	12	15
Tetrachloroethene	10.0	11.6	*	ug/L		116	80 - 122	17	15
Toluene	10.0	11.3		ug/L		113	80 - 125	11	15
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	80 - 121	17	18
trans-1,3-Dichloropropene	10.0	10.5		ug/L		105	63 - 144	12	17
Trichloroethene	10.0	10.8		ug/L		108	79 - 120	15	15
Trichlorofluoromethane	10.0	10.5		ug/L		105	39 - 150	16	28
Vinyl chloride	10.0	9.74	*	ug/L		97	61 - 138	18	16
Xylenes, Total	20.0	21.1		ug/L		106	80 - 123	11	15
Ethylene Dibromide	10.0	10.9		ug/L		109	79 - 126	9	16

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*98*		*80 - 120*
Dibromofluoromethane (Surr)	*96*		*77 - 127*
4-Bromofluorobenzene (Surr)	*101*		*72 - 120*
1,2-Dichloroethane-d4 (Surr)	*97*		*72 - 134*

Lab Sample ID: MB 180-193465/8
Matrix: Water
Analysis Batch: 193465

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	1.0	U	1.0	0.27	ug/L			11/06/16 12:38	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/06/16 12:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24	ug/L			11/06/16 12:38	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/06/16 12:38	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/06/16 12:38	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			11/06/16 12:38	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/06/16 12:38	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/06/16 12:38	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/06/16 12:38	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/06/16 12:38	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/06/16 12:38	1
1,3-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			11/06/16 12:38	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/06/16 12:38	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/06/16 12:38	1

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

Lab Sample ID: MB 180-193465/8
Matrix: Water
Analysis Batch: 193465

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	10	U	10	2.0	ug/L			11/06/16 12:38	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/06/16 12:38	1
Acetone	10	U	10	3.1	ug/L			11/06/16 12:38	1
Benzene	1.0	U	1.0	0.18	ug/L			11/06/16 12:38	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/06/16 12:38	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/06/16 12:38	1
Carbon disulfide	1.0	U	1.0	0.53	ug/L			11/06/16 12:38	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/06/16 12:38	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			11/06/16 12:38	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/06/16 12:38	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/06/16 12:38	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/06/16 12:38	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/06/16 12:38	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/06/16 12:38	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/06/16 12:38	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/06/16 12:38	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/06/16 12:38	1
Dichlorobromomethane	1.0	U	1.0	0.57	ug/L			11/06/16 12:38	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/06/16 12:38	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/06/16 12:38	1
Methyl acetate	10	U	10	1.4	ug/L			11/06/16 12:38	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/06/16 12:38	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			11/06/16 12:38	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/06/16 12:38	1
Styrene	1.0	U	1.0	0.22	ug/L			11/06/16 12:38	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			11/06/16 12:38	1
Toluene	1.0	U	1.0	0.16	ug/L			11/06/16 12:38	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/06/16 12:38	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/06/16 12:38	1
Trichloroethene	0.228	J	1.0	0.20	ug/L			11/06/16 12:38	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/06/16 12:38	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			11/06/16 12:38	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/06/16 12:38	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/06/16 12:38	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*86*		*80 - 120*		*11/06/16 12:38*	*1*
Dibromofluoromethane (Surr)	*90*		*77 - 127*		*11/06/16 12:38*	*1*
4-Bromofluorobenzene (Surr)	*93*		*72 - 120*		*11/06/16 12:38*	*1*
1,2-Dichloroethane-d4 (Surr)	*90*		*72 - 134*		*11/06/16 12:38*	*1*

Lab Sample ID: LCS 180-193465/4
Matrix: Water
Analysis Batch: 193465

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	10.0	9.46		ug/L		95	57 - 128
1,1,2,2-Tetrachloroethane	10.0	8.40		ug/L		84	78 - 135

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

Lab Sample ID: LCS 180-193465/4
Matrix: Water
Analysis Batch: 193465

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.03		ug/L		90	72 - 123
1,1,2-Trichloroethane	10.0	9.32		ug/L		93	77 - 127
1,1-Dichloroethane	10.0	9.58		ug/L		96	76 - 126
1,1-Dichloroethene	10.0	8.47		ug/L		85	71 - 122
1,2,4-Trichlorobenzene	10.0	8.78		ug/L		88	51 - 138
1,2-Dibromo-3-Chloropropane	10.0	8.79		ug/L		88	55 - 139
1,2-Dichlorobenzene	10.0	8.99		ug/L		90	80 - 120
1,2-Dichloroethane	10.0	9.56		ug/L		96	72 - 126
1,2-Dichloropropane	10.0	9.77		ug/L		98	78 - 123
1,3-Dichlorobenzene	10.0	8.72		ug/L		87	80 - 120
1,4-Dichlorobenzene	10.0	8.75		ug/L		88	80 - 120
2-Butanone (MEK)	20.0	18.8		ug/L		94	41 - 150
2-Hexanone	20.0	17.1		ug/L		86	40 - 150
4-Methyl-2-pentanone (MIBK)	20.0	16.1		ug/L		80	49 - 147
Acetone	20.0	24.2		ug/L		121	10 - 150
Benzene	10.0	9.47		ug/L		95	80 - 121
Bromoform	10.0	7.73		ug/L		77	62 - 138
Bromomethane	10.0	11.1		ug/L		111	39 - 150
Carbon disulfide	10.0	8.54		ug/L		85	57 - 137
Carbon tetrachloride	10.0	8.50		ug/L		85	59 - 145
Chlorobenzene	10.0	8.98		ug/L		90	80 - 120
Chlorodibromomethane	10.0	8.10		ug/L		81	71 - 134
Chloroethane	10.0	8.21		ug/L		82	53 - 148
Chloroform	10.0	9.43		ug/L		94	78 - 122
Chloromethane	10.0	8.71		ug/L		87	51 - 150
cis-1,2-Dichloroethene	10.0	9.50		ug/L		95	80 - 120
cis-1,3-Dichloropropene	10.0	9.55		ug/L		95	67 - 127
Cyclohexane	10.0	9.24		ug/L		92	65 - 132
Dichlorodifluoromethane	10.0	8.81		ug/L		88	43 - 142
Dichlorobromomethane	10.0	8.58		ug/L		86	72 - 124
Ethylbenzene	10.0	9.22		ug/L		92	80 - 123
Isopropylbenzene	10.0	9.12		ug/L		91	80 - 124
Methyl acetate	50.0	52.6		ug/L		105	65 - 144
Methylcyclohexane	10.0	9.01		ug/L		90	74 - 120
Methyl tert-butyl ether	10.0	10.4		ug/L		104	68 - 124
Methylene Chloride	10.0	9.10		ug/L		91	71 - 129
m-Xylene & p-Xylene	10.0	8.91		ug/L		89	80 - 124
o-Xylene	10.0	9.23		ug/L		92	80 - 123
Styrene	10.0	9.18		ug/L		92	80 - 125
Tetrachloroethene	10.0	9.18		ug/L		92	80 - 122
Toluene	10.0	9.34		ug/L		93	80 - 125
trans-1,2-Dichloroethene	10.0	9.12		ug/L		91	80 - 121
trans-1,3-Dichloropropene	10.0	9.29		ug/L		93	63 - 144
Trichloroethene	10.0	10.0		ug/L		100	79 - 120
Trichlorofluoromethane	10.0	7.99		ug/L		80	39 - 150
Vinyl chloride	10.0	8.15		ug/L		82	61 - 138
Xylenes, Total	20.0	18.1		ug/L		91	80 - 123

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

Lab Sample ID: LCS 180-193465/4
Matrix: Water
Analysis Batch: 193465

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Ethylene Dibromide			10.0	9.61		ug/L		96	79 - 126		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*83*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 127*
4-Bromofluorobenzene (Surr)	*97*		*72 - 120*
1,2-Dichloroethane-d4 (Surr)	*91*		*72 - 134*

Lab Sample ID: LCSD 180-193465/14
Matrix: Water
Analysis Batch: 193465

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			10.0	8.75		ug/L		88	57 - 128	8	19
1,1,2,2-Tetrachloroethane			10.0	8.92		ug/L		89	78 - 135	6	16
1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	7.57		ug/L		76	72 - 123	18	20
1,1,2-Trichloroethane			10.0	9.83		ug/L		98	77 - 127	5	17
1,1-Dichloroethane			10.0	9.28		ug/L		93	76 - 126	3	22
1,1-Dichloroethene			10.0	7.95		ug/L		79	71 - 122	6	18
1,2,4-Trichlorobenzene			10.0	7.88		ug/L		79	51 - 138	11	35
1,2-Dibromo-3-Chloropropane			10.0	8.33		ug/L		83	55 - 139	5	23
1,2-Dichlorobenzene			10.0	9.27		ug/L		93	80 - 120	3	15
1,2-Dichloroethane			10.0	10.3		ug/L		103	72 - 126	7	15
1,2-Dichloropropane			10.0	10.3		ug/L		103	78 - 123	5	15
1,3-Dichlorobenzene			10.0	8.89		ug/L		89	80 - 120	2	15
1,4-Dichlorobenzene			10.0	8.83		ug/L		88	80 - 120	1	15
2-Butanone (MEK)			20.0	17.3		ug/L		87	41 - 150	8	35
2-Hexanone			20.0	16.0		ug/L		80	40 - 150	7	35
4-Methyl-2-pentanone (MIBK)			20.0	16.6		ug/L		83	49 - 147	3	21
Acetone			20.0	16.2	*	ug/L		81	10 - 150	40	35
Benzene			10.0	9.50		ug/L		95	80 - 121	0	15
Bromoform			10.0	7.28		ug/L		73	62 - 138	6	16
Bromomethane			10.0	9.25		ug/L		93	39 - 150	18	35
Carbon disulfide			10.0	7.91		ug/L		79	57 - 137	8	16
Carbon tetrachloride			10.0	7.43		ug/L		74	59 - 145	13	19
Chlorobenzene			10.0	9.23		ug/L		92	80 - 120	3	15
Chlorodibromomethane			10.0	8.09		ug/L		81	71 - 134	0	17
Chloroethane			10.0	7.80		ug/L		78	53 - 148	5	24
Chloroform			10.0	9.56		ug/L		96	78 - 122	1	15
Chloromethane			10.0	8.40		ug/L		84	51 - 150	4	22
cis-1,2-Dichloroethene			10.0	9.62		ug/L		96	80 - 120	1	17
cis-1,3-Dichloropropene			10.0	9.06		ug/L		91	67 - 127	5	18
Cyclohexane			10.0	8.30		ug/L		83	65 - 132	11	17
Dichlorodifluoromethane			10.0	7.59		ug/L		76	43 - 142	15	19
Dichlorobromomethane			10.0	8.66		ug/L		87	72 - 124	1	16
Ethylbenzene			10.0	9.26		ug/L		93	80 - 123	0	15
Isopropylbenzene			10.0	8.68		ug/L		87	80 - 124	5	15

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

Lab Sample ID: LCSD 180-193465/14
Matrix: Water
Analysis Batch: 193465

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Methyl acetate	50.0	54.8		ug/L		110	65 - 144	4	18
Methylcyclohexane	10.0	7.42		ug/L		74	74 - 120	19	20
Methyl tert-butyl ether	10.0	10.7		ug/L		107	68 - 124	3	25
Methylene Chloride	10.0	9.79		ug/L		98	71 - 129	7	19
m-Xylene & p-Xylene	10.0	8.85		ug/L		89	80 - 124	1	17
o-Xylene	10.0	9.07		ug/L		91	80 - 123	2	15
Styrene	10.0	9.14		ug/L		91	80 - 125	0	15
Tetrachloroethene	10.0	8.71		ug/L		87	80 - 122	5	15
Toluene	10.0	9.36		ug/L		94	80 - 125	0	15
trans-1,2-Dichloroethene	10.0	8.76		ug/L		88	80 - 121	4	18
trans-1,3-Dichloropropene	10.0	8.95		ug/L		90	63 - 144	4	17
Trichloroethene	10.0	9.29		ug/L		93	79 - 120	8	15
Trichlorofluoromethane	10.0	7.00		ug/L		70	39 - 150	13	28
Vinyl chloride	10.0	7.67		ug/L		77	61 - 138	6	16
Xylenes, Total	20.0	17.9		ug/L		90	80 - 123	1	15
Ethylene Dibromide	10.0	9.98		ug/L		100	79 - 126	4	16

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*94*		*80 - 120*
Dibromofluoromethane (Surr)	*101*		*77 - 127*
4-Bromofluorobenzene (Surr)	*104*		*72 - 120*
1,2-Dichloroethane-d4 (Surr)	*107*		*72 - 134*

Lab Sample ID: MB 180-193502/8
Matrix: Water
Analysis Batch: 193502

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	1.0	U	1.0	0.27	ug/L			11/07/16 12:01	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37	ug/L			11/07/16 12:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24	ug/L			11/07/16 12:01	1
1,1,2-Trichloroethane	1.0	U	1.0	0.31	ug/L			11/07/16 12:01	1
1,1-Dichloroethane	1.0	U	1.0	0.34	ug/L			11/07/16 12:01	1
1,1-Dichloroethene	1.0	U	1.0	0.32	ug/L			11/07/16 12:01	1
1,2,4-Trichlorobenzene	1.0	U	1.0	0.49	ug/L			11/07/16 12:01	1
1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40	ug/L			11/07/16 12:01	1
1,2-Dichlorobenzene	1.0	U	1.0	0.23	ug/L			11/07/16 12:01	1
1,2-Dichloroethane	1.0	U	1.0	0.24	ug/L			11/07/16 12:01	1
1,2-Dichloropropane	1.0	U	1.0	0.35	ug/L			11/07/16 12:01	1
1,3-Dichlorobenzene	1.0	U	1.0	0.21	ug/L			11/07/16 12:01	1
1,4-Dichlorobenzene	1.0	U	1.0	0.24	ug/L			11/07/16 12:01	1
2-Butanone (MEK)	10	U	10	2.6	ug/L			11/07/16 12:01	1
2-Hexanone	10	U	10	2.0	ug/L			11/07/16 12:01	1
4-Methyl-2-pentanone (MIBK)	10	U	10	2.2	ug/L			11/07/16 12:01	1
Acetone	10	U	10	3.1	ug/L			11/07/16 12:01	1
Benzene	1.0	U	1.0	0.18	ug/L			11/07/16 12:01	1
Bromoform	1.0	U	1.0	0.76	ug/L			11/07/16 12:01	1
Bromomethane	1.0	U	1.0	0.59	ug/L			11/07/16 12:01	1

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

Lab Sample ID: MB 180-193502/8
Matrix: Water
Analysis Batch: 193502

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Carbon disulfide	1.0	U	1.0	0.53	ug/L			11/07/16 12:01	1
Carbon tetrachloride	1.0	U	1.0	0.56	ug/L			11/07/16 12:01	1
Chlorobenzene	1.0	U	1.0	0.15	ug/L			11/07/16 12:01	1
Chlorodibromomethane	1.0	U	1.0	0.44	ug/L			11/07/16 12:01	1
Chloroethane	1.0	U	1.0	0.58	ug/L			11/07/16 12:01	1
Chloroform	1.0	U	1.0	0.27	ug/L			11/07/16 12:01	1
Chloromethane	1.0	U	1.0	0.38	ug/L			11/07/16 12:01	1
cis-1,2-Dichloroethene	1.0	U	1.0	0.30	ug/L			11/07/16 12:01	1
cis-1,3-Dichloropropene	1.0	U	1.0	0.32	ug/L			11/07/16 12:01	1
Cyclohexane	1.0	U	1.0	0.27	ug/L			11/07/16 12:01	1
Dichlorodifluoromethane	1.0	U	1.0	0.47	ug/L			11/07/16 12:01	1
Dichlorobromomethane	1.0	U	1.0	0.57	ug/L			11/07/16 12:01	1
Ethylbenzene	1.0	U	1.0	0.25	ug/L			11/07/16 12:01	1
Isopropylbenzene	1.0	U	1.0	0.21	ug/L			11/07/16 12:01	1
Methyl acetate	10	U	10	1.4	ug/L			11/07/16 12:01	1
Methylcyclohexane	1.0	U	1.0	0.19	ug/L			11/07/16 12:01	1
Methyl tert-butyl ether	1.0	U	1.0	0.20	ug/L			11/07/16 12:01	1
Methylene Chloride	1.0	U	1.0	0.94	ug/L			11/07/16 12:01	1
Styrene	1.0	U	1.0	0.22	ug/L			11/07/16 12:01	1
Tetrachloroethene	1.0	U	1.0	0.24	ug/L			11/07/16 12:01	1
Toluene	1.0	U	1.0	0.16	ug/L			11/07/16 12:01	1
trans-1,2-Dichloroethene	1.0	U	1.0	0.20	ug/L			11/07/16 12:01	1
trans-1,3-Dichloropropene	1.0	U	1.0	0.22	ug/L			11/07/16 12:01	1
Trichloroethene	1.0	U	1.0	0.20	ug/L			11/07/16 12:01	1
Trichlorofluoromethane	1.0	U	1.0	0.40	ug/L			11/07/16 12:01	1
Vinyl chloride	1.0	U	1.0	0.17	ug/L			11/07/16 12:01	1
Xylenes, Total	2.0	U	2.0	0.27	ug/L			11/07/16 12:01	1
Ethylene Dibromide	1.0	U	1.0	0.51	ug/L			11/07/16 12:01	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*85*		*80 - 120*		*11/07/16 12:01*	*1*
Dibromofluoromethane (Surr)	*82*		*77 - 127*		*11/07/16 12:01*	*1*
4-Bromofluorobenzene (Surr)	*91*		*72 - 120*		*11/07/16 12:01*	*1*
1,2-Dichloroethane-d4 (Surr)	*86*		*72 - 134*		*11/07/16 12:01*	*1*

Lab Sample ID: LCS 180-193502/4
Matrix: Water
Analysis Batch: 193502

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	10.0	9.10		ug/L		91	57 - 128
1,1,2,2-Tetrachloroethane	10.0	8.74		ug/L		87	78 - 135
1,1,2-Trichloro-1,2,2-trifluoroetha ne	10.0	8.83		ug/L		88	72 - 123
1,1,2-Trichloroethane	10.0	9.53		ug/L		95	77 - 127
1,1-Dichloroethane	10.0	9.48		ug/L		95	76 - 126
1,1-Dichloroethene	10.0	8.54		ug/L		85	71 - 122
1,2,4-Trichlorobenzene	10.0	8.73		ug/L		87	51 - 138

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

Lab Sample ID: LCS 180-193502/4
Matrix: Water
Analysis Batch: 193502

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2-Dibromo-3-Chloropropane	10.0	7.69		ug/L		77	55 - 139
1,2-Dichlorobenzene	10.0	9.36		ug/L		94	80 - 120
1,2-Dichloroethane	10.0	9.71		ug/L		97	72 - 126
1,2-Dichloropropane	10.0	9.60		ug/L		96	78 - 123
1,3-Dichlorobenzene	10.0	9.21		ug/L		92	80 - 120
1,4-Dichlorobenzene	10.0	8.89		ug/L		89	80 - 120
2-Butanone (MEK)	20.0	20.2		ug/L		101	41 - 150
2-Hexanone	20.0	18.3		ug/L		91	40 - 150
4-Methyl-2-pentanone (MIBK)	20.0	16.3		ug/L		82	49 - 147
Acetone	20.0	25.0		ug/L		125	10 - 150
Benzene	10.0	9.86		ug/L		99	80 - 121
Bromoform	10.0	7.04		ug/L		70	62 - 138
Bromomethane	10.0	9.73		ug/L		97	39 - 150
Carbon disulfide	10.0	8.55		ug/L		85	57 - 137
Carbon tetrachloride	10.0	8.04		ug/L		80	59 - 145
Chlorobenzene	10.0	9.46		ug/L		95	80 - 120
Chlorodibromomethane	10.0	7.82		ug/L		78	71 - 134
Chloroethane	10.0	8.03		ug/L		80	53 - 148
Chloroform	10.0	9.40		ug/L		94	78 - 122
Chloromethane	10.0	8.43		ug/L		84	51 - 150
cis-1,2-Dichloroethene	10.0	9.30		ug/L		93	80 - 120
cis-1,3-Dichloropropene	10.0	8.96		ug/L		90	67 - 127
Cyclohexane	10.0	9.56		ug/L		96	65 - 132
Dichlorodifluoromethane	10.0	8.71		ug/L		87	43 - 142
Dichlorobromomethane	10.0	8.40		ug/L		84	72 - 124
Ethylbenzene	10.0	9.74		ug/L		97	80 - 123
Isopropylbenzene	10.0	9.38		ug/L		94	80 - 124
Methyl acetate	50.0	50.2		ug/L		100	65 - 144
Methylcyclohexane	10.0	8.77		ug/L		88	74 - 120
Methyl tert-butyl ether	10.0	10.1		ug/L		101	68 - 124
Methylene Chloride	10.0	9.48		ug/L		95	71 - 129
m-Xylene & p-Xylene	10.0	9.32		ug/L		93	80 - 124
o-Xylene	10.0	9.71		ug/L		97	80 - 123
Styrene	10.0	9.70		ug/L		97	80 - 125
Tetrachloroethene	10.0	9.83		ug/L		98	80 - 122
Toluene	10.0	9.98		ug/L		100	80 - 125
trans-1,2-Dichloroethene	10.0	9.14		ug/L		91	80 - 121
trans-1,3-Dichloropropene	10.0	9.11		ug/L		91	63 - 144
Trichloroethene	10.0	9.25		ug/L		93	79 - 120
Trichlorofluoromethane	10.0	8.12		ug/L		81	39 - 150
Vinyl chloride	10.0	8.16		ug/L		82	61 - 138
Xylenes, Total	20.0	19.0		ug/L		95	80 - 123
Ethylene Dibromide	10.0	9.62		ug/L		96	79 - 126

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*84*		*80 - 120*
Dibromofluoromethane (Surr)	*86*		*77 - 127*
4-Bromofluorobenzene (Surr)	*93*		*72 - 120*

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

Lab Sample ID: LCS 180-193502/4
Matrix: Water
Analysis Batch: 193502

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

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*89*		*72 - 134*

Lab Sample ID: LCSD 180-193502/5
Matrix: Water
Analysis Batch: 193502

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
1,1,1-Trichloroethane			10.0	8.93		ug/L		89	57 - 128	2	19
1,1,2,2-Tetrachloroethane			10.0	8.74		ug/L		87	78 - 135	0	16
1,1,2-Trichloro-1,2,2-trifluoroethane			10.0	8.54		ug/L		85	72 - 123	3	20
1,1,2-Trichloroethane			10.0	9.55		ug/L		95	77 - 127	0	17
1,1-Dichloroethane			10.0	9.54		ug/L		95	76 - 126	1	22
1,1-Dichloroethene			10.0	8.47		ug/L		85	71 - 122	1	18
1,2,4-Trichlorobenzene			10.0	8.66		ug/L		87	51 - 138	1	35
1,2-Dibromo-3-Chloropropane			10.0	7.47		ug/L		75	55 - 139	3	23
1,2-Dichlorobenzene			10.0	9.04		ug/L		90	80 - 120	4	15
1,2-Dichloroethane			10.0	9.80		ug/L		98	72 - 126	1	15
1,2-Dichloropropane			10.0	10.2		ug/L		102	78 - 123	6	15
1,3-Dichlorobenzene			10.0	8.99		ug/L		90	80 - 120	2	15
1,4-Dichlorobenzene			10.0	9.07		ug/L		91	80 - 120	2	15
2-Butanone (MEK)			20.0	20.4		ug/L		102	41 - 150	1	35
2-Hexanone			20.0	17.5		ug/L		88	40 - 150	4	35
4-Methyl-2-pentanone (MIBK)			20.0	16.2		ug/L		81	49 - 147	1	21
Acetone			20.0	25.6		ug/L		128	10 - 150	2	35
Benzene			10.0	9.87		ug/L		99	80 - 121	0	15
Bromoform			10.0	7.10		ug/L		71	62 - 138	1	16
Bromomethane			10.0	9.65		ug/L		97	39 - 150	1	35
Carbon disulfide			10.0	8.19		ug/L		82	57 - 137	4	16
Carbon tetrachloride			10.0	7.95		ug/L		79	59 - 145	1	19
Chlorobenzene			10.0	9.32		ug/L		93	80 - 120	2	15
Chlorodibromomethane			10.0	7.52		ug/L		75	71 - 134	4	17
Chloroethane			10.0	7.69		ug/L		77	53 - 148	4	24
Chloroform			10.0	9.44		ug/L		94	78 - 122	0	15
Chloromethane			10.0	8.59		ug/L		86	51 - 150	2	22
cis-1,2-Dichloroethene			10.0	9.41		ug/L		94	80 - 120	1	17
cis-1,3-Dichloropropene			10.0	9.00		ug/L		90	67 - 127	0	18
Cyclohexane			10.0	9.12		ug/L		91	65 - 132	5	17
Dichlorodifluoromethane			10.0	8.76		ug/L		88	43 - 142	0	19
Dichlorobromomethane			10.0	8.34		ug/L		83	72 - 124	1	16
Ethylbenzene			10.0	9.47		ug/L		95	80 - 123	3	15
Isopropylbenzene			10.0	8.94		ug/L		89	80 - 124	5	15
Methyl acetate			50.0	51.7		ug/L		103	65 - 144	3	18
Methylcyclohexane			10.0	8.39		ug/L		84	74 - 120	4	20
Methyl tert-butyl ether			10.0	10.3		ug/L		103	68 - 124	1	25
Methylene Chloride			10.0	9.45		ug/L		95	71 - 129	0	19
m-Xylene & p-Xylene			10.0	8.92		ug/L		89	80 - 124	4	17
o-Xylene			10.0	9.32		ug/L		93	80 - 123	4	15

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

Lab Sample ID: LCSD 180-193502/5
Matrix: Water
Analysis Batch: 193502

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

Analyte			Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Styrene			10.0	9.29		ug/L		93	80 - 125	4	15
Tetrachloroethene			10.0	9.30		ug/L		93	80 - 122	6	15
Toluene			10.0	9.60		ug/L		96	80 - 125	4	15
trans-1,2-Dichloroethene			10.0	8.98		ug/L		90	80 - 121	2	18
trans-1,3-Dichloropropene			10.0	8.97		ug/L		90	63 - 144	2	17
Trichloroethene			10.0	9.58		ug/L		96	79 - 120	3	15
Trichlorofluoromethane			10.0	8.23		ug/L		82	39 - 150	1	28
Vinyl chloride			10.0	8.10		ug/L		81	61 - 138	1	16
Xylenes, Total			20.0	18.2		ug/L		91	80 - 123	4	15
Ethylene Dibromide			10.0	9.68		ug/L		97	79 - 126	1	16

Surrogate	*LCSD %Recovery*	*LCSD Qualifier*	*Limits*
Toluene-d8 (Surr)	*80*		*80 - 120*
Dibromofluoromethane (Surr)	*90*		*77 - 127*
4-Bromofluorobenzene (Surr)	*93*		*72 - 120*
1,2-Dichloroethane-d4 (Surr)	*88*		*72 - 134*

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

GC/MS VOA

Analysis Batch: 193223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71528-1	MRC-D2-S	Total/NA	Water	8260C	
240-71528-2	MRC-D2-I	Total/NA	Water	8260C	
240-71528-3	MRC-D2-D	Total/NA	Water	8260C	
240-71528-4	TB-103116	Total/NA	Water	8260C	
240-71528-5	MRC-D3-S	Total/NA	Water	8260C	
240-71528-6	MRC-D3-I	Total/NA	Water	8260C	
240-71528-7	MRC-D3-D	Total/NA	Water	8260C	
240-71528-8	MRC-D4-S	Total/NA	Water	8260C	
240-71528-9	MRC-D4-I	Total/NA	Water	8260C	
240-71528-10	MRC-D4-D	Total/NA	Water	8260C	
MB 180-193223/8	Method Blank	Total/NA	Water	8260C	
LCS 180-193223/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-193223/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 193465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71528-1 - DL	MRC-D2-S	Total/NA	Water	8260C	
240-71528-2 - DL	MRC-D2-I	Total/NA	Water	8260C	
240-71528-5 - DL	MRC-D3-S	Total/NA	Water	8260C	
240-71528-5 - DL2	MRC-D3-S	Total/NA	Water	8260C	
240-71528-6 - DL	MRC-D3-I	Total/NA	Water	8260C	
240-71528-8 - DL	MRC-D4-S	Total/NA	Water	8260C	
240-71528-9 - DL	MRC-D4-I	Total/NA	Water	8260C	
240-71528-10 - DL	MRC-D4-D	Total/NA	Water	8260C	
MB 180-193465/8	Method Blank	Total/NA	Water	8260C	
LCS 180-193465/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-193465/14	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 193502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71528-3 - DL	MRC-D2-D	Total/NA	Water	8260C	
240-71528-7 - DL	MRC-D3-D	Total/NA	Water	8260C	
MB 180-193502/8	Method Blank	Total/NA	Water	8260C	
LCS 180-193502/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-193502/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D2-S — Lab Sample ID: 240-71528-1

Date Collected: 10/31/16 09:45
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 14:59	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	200	193465	11/06/16 18:10	PJJ	TAL PIT

Client Sample ID: MRC-D2-I — Lab Sample ID: 240-71528-2

Date Collected: 10/31/16 09:55
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 15:26	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	40	193465	11/06/16 14:29	PJJ	TAL PIT

Client Sample ID: MRC-D2-D — Lab Sample ID: 240-71528-3

Date Collected: 10/31/16 10:12
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 15:53	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	30	193502	11/07/16 13:24	PJJ	TAL PIT

Client Sample ID: TB-103116 — Lab Sample ID: 240-71528-4

Date Collected: 10/31/16 00:00
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 14:31	PJJ	TAL PIT

Client Sample ID: MRC-D3-S — Lab Sample ID: 240-71528-5

Date Collected: 10/31/16 10:45
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 16:21	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	100	193465	11/06/16 16:20	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL2	500	193465	11/06/16 18:37	PJJ	TAL PIT

Client Sample ID: MRC-D3-I — Lab Sample ID: 240-71528-6

Date Collected: 10/31/16 10:50
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 16:49	PJJ	TAL PIT

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Client Sample ID: MRC-D3-I — Lab Sample ID: 240-71528-6

Date Collected: 10/31/16 10:50
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C	DL	200	193465	11/06/16 19:04	PJJ	TAL PIT

Client Sample ID: MRC-D3-D — Lab Sample ID: 240-71528-7

Date Collected: 10/31/16 11:10
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 17:17	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	30	193502	11/07/16 13:52	PJJ	TAL PIT

Client Sample ID: MRC-D4-S — Lab Sample ID: 240-71528-8

Date Collected: 10/31/16 12:52
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 17:44	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	500	193465	11/06/16 20:54	PJJ	TAL PIT

Client Sample ID: MRC-D4-I — Lab Sample ID: 240-71528-9

Date Collected: 10/31/16 13:10
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 18:12	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	10	193465	11/06/16 19:32	PJJ	TAL PIT

Client Sample ID: MRC-D4-D — Lab Sample ID: 240-71528-10

Date Collected: 10/31/16 13:22
Date Received: 11/01/16 09:15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	193223	11/03/16 18:39	PJJ	TAL PIT
Total/NA	Analysis	8260C	DL	2.5	193465	11/06/16 19:59	PJJ	TAL PIT

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Certification Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Laboratory: TestAmerica Canton

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	01144CA	06-30-14 *
California	State Program	9	2927	04-30-17
Connecticut	State Program	1	PH-0590	12-31-17
Florida	NELAP	4	E87225	06-30-17
Illinois	NELAP	5	200004	07-31-17
Kansas	NELAP	7	E-10336	01-31-17
Kentucky (UST)	State Program	4	58	02-23-17
Kentucky (WW)	State Program	4	98016	12-31-16 *
Minnesota	NELAP	5	039-999-348	12-31-16 *
Minnesota (Petrofund)	State Program	1	3506	07-31-17
Nevada	State Program	9	OH-000482008A	07-31-17
New Jersey	NELAP	2	OH001	06-30-17
New York	NELAP	2	10975	03-31-17
Ohio VAP	State Program	5	CL0024	09-14-17
Oregon	NELAP	10	4062	02-23-17
Pennsylvania	NELAP	3	68-00340	08-31-17
Texas	NELAP	6	T104704517-15-5	08-31-17
USDA	Federal		P330-13-00319	11-26-16 *
Virginia	NELAP	3	460175	09-14-17
Washington	State Program	10	C971	01-12-17
West Virginia DEP	State Program	3	210	12-31-16 *
Wisconsin	State Program	5	999518190	08-31-17

Laboratory: TestAmerica Pittsburgh

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0690	06-27-17
California	State Program	9	2891	03-31-18
Connecticut	State Program	1	PH-0688	09-30-18
Florida	NELAP	4	E871008	06-30-17
Illinois	NELAP	5	200005	06-30-17
Kansas	NELAP	7	E-10350	01-31-17
Louisiana	NELAP	6	04041	06-30-17
New Hampshire	NELAP	1	2030	04-04-17
New Jersey	NELAP	2	PA005	06-30-17
New York	NELAP	2	11182	03-31-17
North Carolina (WW/SW)	State Program	4	434	12-31-16
Pennsylvania	NELAP	3	02-00416	04-30-17
South Carolina	State Program	4	89014	04-30-17
Texas	NELAP	6	T104704528-15-2	03-31-17
US Fish & Wildlife	Federal		LE94312A-1	10-31-17
USDA	Federal		P330-16-00211	06-26-19
Utah	NELAP	8	PA001462015-4	05-31-17
Virginia	NELAP	3	460189	09-14-17
West Virginia DEP	State Program	3	142	01-31-17
Wisconsin	State Program	5	998027800	08-31-17

* Certification renewal pending - certification considered valid.

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT

Protocol References:

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

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71528-1	MRC-D2-S	Water	10/31/16 09:45	11/01/16 09:15
240-71528-2	MRC-D2-I	Water	10/31/16 09:55	11/01/16 09:15
240-71528-3	MRC-D2-D	Water	10/31/16 10:12	11/01/16 09:15
240-71528-4	TB-103116	Water	10/31/16 00:00	11/01/16 09:15
240-71528-5	MRC-D3-S	Water	10/31/16 10:45	11/01/16 09:15
240-71528-6	MRC-D3-I	Water	10/31/16 10:50	11/01/16 09:15
240-71528-7	MRC-D3-D	Water	10/31/16 11:10	11/01/16 09:15
240-71528-8	MRC-D4-S	Water	10/31/16 12:52	11/01/16 09:15
240-71528-9	MRC-D4-I	Water	10/31/16 13:10	11/01/16 09:15
240-71528-10	MRC-D4-D	Water	10/31/16 13:22	11/01/16 09:15

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 189143

Lab Sample ID: IC 180-189143/4 Client Sample ID:

Date Analyzed: 09/26/16 10:49 Lab File ID: 7092604.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.65	Poor chromatography	journetp	09/27/16 07:24
2,2-Dichloropropane	5.95	Poor chromatography	journetp	09/27/16 07:49

Lab Sample ID: IC 180-189143/6 Client Sample ID:

Date Analyzed: 09/26/16 12:39 Lab File ID: 7092606.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2-Dichloropropane	5.91	Poor chromatography	journetp	09/27/16 07:50

Lab Sample ID: IC 180-189143/7 Client Sample ID:

Date Analyzed: 09/26/16 13:06 Lab File ID: 7092607.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	2.72	Poor chromatography	journetp	09/27/16 07:22

Lab Sample ID: IC 180-189143/8 Client Sample ID:

Date Analyzed: 09/26/16 14:00 Lab File ID: 7092608.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.18	Poor chromatography	journetp	09/27/16 07:42

Lab Sample ID: IC 180-189143/9 Client Sample ID:

Date Analyzed: 09/26/16 14:28 Lab File ID: 7092609.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.18	Poor chromatography	journetp	09/27/16 07:39

8260C

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 189143

Lab Sample ID: IC 180-189143/14 Client Sample ID:

Date Analyzed: 09/26/16 17:48 Lab File ID: 7092614.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2-Dichloropropane	5.91	Poor chromatography	journetp	09/27/16 07:17

Lab Sample ID: ICIS 180-189143/16 Client Sample ID:

Date Analyzed: 09/26/16 18:43 Lab File ID: 7092616.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2-Dichloropropane	5.91	Poor chromatography	journetp	09/27/16 07:50

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 193223

Lab Sample ID: CCVIS 180-193223/3 Client Sample ID:

Date Analyzed: 11/03/16 08:32 Lab File ID: 7110303.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Methylene Chloride	4.18	Poor chromatography	journetp	11/03/16 09:14
2,2-Dichloropropane	5.92	Poor chromatography	journetp	11/03/16 09:14

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 193465

Lab Sample ID: CCVIS 180-193465/2 Client Sample ID:

Date Analyzed: 11/06/16 10:07 Lab File ID: 7110602.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2-Dichloropropane	5.91	Poor chromatography	journetp	11/06/16 09:46

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Analysis Batch Number: 193502

Lab Sample ID: CCVIS 180-193502/3 Client Sample ID:

Date Analyzed: 11/07/16 09:44 Lab File ID: 7110703.D GC Column: DB-624 ID: 0.18(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,2-Dichloropropane	5.91	Poor chromatography	journetp	11/07/16 09:19

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VOA8260INT_00061	10/22/16	09/22/16	Methanol, Lot 136118	10 mL	VOA8260INTRES_00126	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00126	08/31/20		Restek, Lot A0113246		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260INT_00062	11/11/16	10/11/16	Methanol, Lot 2019054	10 mL	VOA8260INTRES_00127	1 mL	1,4-Dichlorobenzene-d4	25 ug/mL
							Chlorobenzene-d5	25 ug/mL
							Fluorobenzene (IS)	25 ug/mL
							TBA-d9 (IS)	500 ug/mL
.VOA8260INTRES_00127	08/31/20		Restek, Lot A0113246		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene (IS)	250 ug/mL
							TBA-d9 (IS)	5000 ug/mL
VOA8260SURR_00059	10/22/16	09/22/16	Methanol, Lot 136118	100 mL	VOA8260SURRES_00116	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00116	07/31/20		Restek, Lot A0112455		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260SURR_00060	11/11/16	10/11/16	Methanol, Lot 2019054	100 mL	VOA8260SURRES_00117	1 mL	1,2-Dichloroethane-d4 (Surr)	25 ug/mL
							4-Bromofluorobenzene (Surr)	25 ug/mL
							Dibromofluoromethane (Surr)	25 ug/mL
							Toluene-d8 (Surr)	25 ug/mL
.VOA8260SURRES_00117	07/31/20		Restek, Lot A0112455		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VOA8260VOA2ND_00211	11/04/16	10/31/16	Methanol, Lot 136118	10 mL	VOA8260GAS2ND_00168	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00207	1 mL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							Benzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							o-Xylene	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS2ND_00168	11/30/18		Restek, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00207	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260MEGA2_00052	1 mL	1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							Benzene	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chlorodibromomethane	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dichlorobromomethane	250 ug/mL
							Ethylbenzene	250 ug/mL
							Ethylene Dibromide	250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							o-Xylene	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA2_00052	01/31/17		Restek, Lot A0118163		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
VOA8260VOAPRI_00212	09/27/16	09/20/16	Methanol, Lot 127999	10 mL	VOA8260GAS1ST_00165	0.1 mL	Bromomethane	25 ug/mL
							Butadiene	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Dichlorofluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00210	1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
							1,1,1,2-Tetrachloroethane	25 ug/mL
							1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,1-Dichloropropene	25 ug/mL
							1,2,3-Trichlorobenzene	25 ug/mL
							1,2,3-Trichloropropane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2,4-Trimethylbenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3,5-Trimethylbenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dichloropropane	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	500 ug/mL
							2,2-Dichloropropane	25 ug/mL
							2-Chlorotoluene	25 ug/mL
							2-Methyl-2-propanol	250 ug/mL
							3-Chloro-1-propene	25 ug/mL
							4-Chlorotoluene	25 ug/mL
							4-Isopropyltoluene	25 ug/mL
							Acrylonitrile	250 ug/mL
							Benzene	25 ug/mL
							Bromobenzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorobromomethane	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dibromomethane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethyl ether	25 ug/mL
							Ethyl methacrylate	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexane	25 ug/mL
							Iodomethane	25 ug/mL
							Isobutyl alcohol	625 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							n-Butylbenzene	25 ug/mL
							n-Heptane	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Propylbenzene	25 ug/mL
							Naphthalene	25 ug/mL
							o-Xylene	25 ug/mL
							sec-Butylbenzene	25 ug/mL
							Styrene	25 ug/mL
							tert-Butylbenzene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Tetrahydrofuran	50 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							trans-1,4-Dichloro-2-butene	25 ug/mL
							Trichloroethene	25 ug/mL
.VOA8260GAS1ST_00165	10/31/18		Restek, Lot A0115012		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Butadiene	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Dichlorofluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00210	10/07/16	09/07/16	Methanol, Lot 127999	10 mL	VOA8260KET1ST_00074	0.2 mL	2-Butanone (MEK)	250 ug/mL
							2-Hexanone	250 ug/mL
							4-Methyl-2-pentanone (MIBK)	250 ug/mL
							Acetone	250 ug/mL
					VOA8260MEGA1_00053	1 mL	1,1,1,2-Tetrachloroethane	250 ug/mL
							1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,1-Dichloropropene	250 ug/mL
							1,2,3-Trichlorobenzene	250 ug/mL
							1,2,3-Trichloropropane	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2,4-Trimethylbenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3,5-Trimethylbenzene	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,3-Dichloropropane	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							1,4-Dioxane	5000 ug/mL
							2,2-Dichloropropane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	250 ug/mL
							2-Methyl-2-propanol	2500 ug/mL
							3-Chloro-1-propene	250 ug/mL
							4-Chlorotoluene	250 ug/mL
							4-Isopropyltoluene	250 ug/mL
							Acrylonitrile	2500 ug/mL
							Benzene	250 ug/mL
							Bromobenzene	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chlorobromomethane	250 ug/mL
							Chlorodibromomethane	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dibromomethane	250 ug/mL
							Dichlorobromomethane	250 ug/mL
							Ethyl ether	250 ug/mL
							Ethyl methacrylate	250 ug/mL
							Ethylbenzene	250 ug/mL
							Ethylene Dibromide	250 ug/mL
							Hexachlorobutadiene	250 ug/mL
							Hexane	250 ug/mL
							Iodomethane	250 ug/mL
							Isobutyl alcohol	6250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							n-Butylbenzene	250 ug/mL
							n-Heptane	250 ug/mL
							N-Propylbenzene	250 ug/mL
							Naphthalene	250 ug/mL
							o-Xylene	250 ug/mL
							sec-Butylbenzene	250 ug/mL
							Styrene	250 ug/mL
							tert-Butylbenzene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Tetrahydrofuran	500 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							trans-1,4-Dichloro-2-butene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	250 ug/mL
..VOA8260KET1ST_00074	11/30/18		Restek, Lot A0115554		(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VOA8260MEGA1_00053	03/31/18		Restek, Lot A0108177		(Purchased Reagent)		1,1,1,2-Tetrachloroethane	2500 ug/mL
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,1-Dichloropropene	2500 ug/mL
							1,2,3-Trichlorobenzene	2500 ug/mL
							1,2,3-Trichloropropane	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							2-Methyl-2-propanol	25000 ug/mL
							3-Chloro-1-propene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorobromomethane	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Hexane	2500 ug/mL
							Iodomethane	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							n-Heptane	2500 ug/mL
							N-Propylbenzene	2500 ug/mL
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							trans-1,4-Dichloro-2-butene	2500 ug/mL
							Trichloroethene	2500 ug/mL
VOA8260VOAPRI_00218	11/04/16	10/31/16	Methanol, Lot 136118	10 mL	VOA8260GAS1ST_00170	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00214	1 mL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,4-Dichlorobenzene	25 ug/mL
							Benzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							o-Xylene	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS1ST_00170	04/30/19	Restek, Lot A0118719			(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00214	11/04/16	10/04/16	Methanol, Lot 136118	10 mL	VOA8260MEGA1_00054	1 mL	1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzene	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chlorodibromomethane	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dichlorobromomethane	250 ug/mL
							Ethylbenzene	250 ug/mL
							Ethylene Dibromide	250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							o-Xylene	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00054	03/31/18		Restek, Lot A0108177		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
voaW82602ndRe_00001	11/12/16	11/05/16	Methanol, Lot 2019067	10 mL	VOA8260GAS2ND_00169	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOA2ND_00212	1 mL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							Benzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							o-Xylene	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS2ND_00169	11/30/18		Restek, Lot A0115484		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOA2ND_00212	12/04/16	11/04/16	Methanol, Lot 2019054	10 mL	VOA8260MEGA2_00053	1 mL	1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							Benzene	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chlorodibromomethane	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Cyclohexane	250 ug/mL
							Dichlorobromomethane	250 ug/mL
							Ethylbenzene	250 ug/mL
							Ethylene Dibromide	250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL
							Methylene Chloride	250 ug/mL
							o-Xylene	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA2_00053	01/31/17		Restek, Lot A0118163		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
voaW8260pri_00001	11/12/16	11/05/16	Methanol, Lot 2019067	10 mL	VOA8260GAS1ST_00171	0.1 mL	Bromomethane	25 ug/mL
							Chloroethane	25 ug/mL
							Chloromethane	25 ug/mL
							Dichlorodifluoromethane	25 ug/mL
							Trichlorofluoromethane	25 ug/mL
							Vinyl chloride	25 ug/mL
					VOA8260VOAPRI_00219	1 mL	1,1,1-Trichloroethane	25 ug/mL
							1,1,2,2-Tetrachloroethane	25 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	25 ug/mL
							1,1,2-Trichloroethane	25 ug/mL
							1,1-Dichloroethane	25 ug/mL
							1,1-Dichloroethene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dibromo-3-Chloropropane	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,2-Dichloroethane	25 ug/mL
							1,2-Dichloropropane	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							Benzene	25 ug/mL
							Bromoform	25 ug/mL
							Carbon disulfide	25 ug/mL
							Carbon tetrachloride	25 ug/mL
							Chlorobenzene	25 ug/mL
							Chlorodibromomethane	25 ug/mL
							Chloroform	25 ug/mL
							cis-1,2-Dichloroethene	25 ug/mL
							cis-1,3-Dichloropropene	25 ug/mL
							Cyclohexane	25 ug/mL
							Dichlorobromomethane	25 ug/mL
							Ethylbenzene	25 ug/mL
							Ethylene Dibromide	25 ug/mL
							Isopropylbenzene	25 ug/mL
							m-Xylene & p-Xylene	25 ug/mL
							Methyl acetate	125 ug/mL
							Methyl tert-butyl ether	25 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylcyclohexane	25 ug/mL
							Methylene Chloride	25 ug/mL
							o-Xylene	25 ug/mL
							Styrene	25 ug/mL
							Tetrachloroethene	25 ug/mL
							Toluene	25 ug/mL
							trans-1,2-Dichloroethene	25 ug/mL
							trans-1,3-Dichloropropene	25 ug/mL
							Trichloroethene	25 ug/mL
							Xylenes, Total	50 ug/mL
.VOA8260GAS1ST_00171	04/30/19		Restek, Lot A0118719		(Purchased Reagent)		Bromomethane	2500 ug/mL
							Chloroethane	2500 ug/mL
							Chloromethane	2500 ug/mL
							Dichlorodifluoromethane	2500 ug/mL
							Trichlorofluoromethane	2500 ug/mL
							Vinyl chloride	2500 ug/mL
.VOA8260VOAPRI_00219	12/04/16	11/04/16	Methanol, Lot 2019054	10 mL	VOA8260MEGA1_00055	1 mL	1,1,1-Trichloroethane	250 ug/mL
							1,1,2,2-Tetrachloroethane	250 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	250 ug/mL
							1,1,2-Trichloroethane	250 ug/mL
							1,1-Dichloroethane	250 ug/mL
							1,1-Dichloroethene	250 ug/mL
							1,2,4-Trichlorobenzene	250 ug/mL
							1,2-Dibromo-3-Chloropropane	250 ug/mL
							1,2-Dichlorobenzene	250 ug/mL
							1,2-Dichloroethane	250 ug/mL
							1,2-Dichloropropane	250 ug/mL
							1,3-Dichlorobenzene	250 ug/mL
							1,4-Dichlorobenzene	250 ug/mL
							Benzene	250 ug/mL
							Bromoform	250 ug/mL
							Carbon disulfide	250 ug/mL
							Carbon tetrachloride	250 ug/mL
							Chlorobenzene	250 ug/mL
							Chlorodibromomethane	250 ug/mL
							Chloroform	250 ug/mL
							cis-1,2-Dichloroethene	250 ug/mL
							cis-1,3-Dichloropropene	250 ug/mL
							Cyclohexane	250 ug/mL
							Dichlorobromomethane	250 ug/mL
							Ethylbenzene	250 ug/mL
							Ethylene Dibromide	250 ug/mL
							Isopropylbenzene	250 ug/mL
							m-Xylene & p-Xylene	250 ug/mL
							Methyl acetate	1250 ug/mL
							Methyl tert-butyl ether	250 ug/mL
							Methylcyclohexane	250 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	250 ug/mL
							o-Xylene	250 ug/mL
							Styrene	250 ug/mL
							Tetrachloroethene	250 ug/mL
							Toluene	250 ug/mL
							trans-1,2-Dichloroethene	250 ug/mL
							trans-1,3-Dichloropropene	250 ug/mL
							Trichloroethene	250 ug/mL
							Xylenes, Total	500 ug/mL
..VOA8260MEGA1_00055	03/31/18		Restek, Lot A0108177		(Purchased Reagent)		1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	2500 ug/mL
							1,1,2-Trichloroethane	2500 ug/mL
							1,1-Dichloroethane	2500 ug/mL
							1,1-Dichloroethene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropane	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL
							Chlorodibromomethane	2500 ug/mL
							Chloroform	2500 ug/mL
							cis-1,2-Dichloroethene	2500 ug/mL
							cis-1,3-Dichloropropene	2500 ug/mL
							Cyclohexane	2500 ug/mL
							Dichlorobromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Ethylene Dibromide	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	12500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylcyclohexane	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							o-Xylene	2500 ug/mL
							Styrene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Toluene	2500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Trichloroethene	2500 ug/mL
							Xylenes, Total	5000 ug/mL
voaWket2ndRes_00013	10/20/17	09/20/16	Methanol, Lot 2019052	50 mL	VOA8260KET2ND_00079	0.1 mL	2-Butanone (MEK)	25 ug/mL
							2-Hexanone	25 ug/mL
							4-Methyl-2-pentanone (MIBK)	25 ug/mL
							Acetone	25 ug/mL
.VOA8260KET2ND_00079	11/30/18	Restek, Lot A0115554			(Purchased Reagent)		2-Butanone (MEK)	12500 ug/mL
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL

Method 8260C Low Level

Volatile Organic Compounds (GC/MS) by Method 8260C Low Level

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MRC-D2-S	240-71528-1	85	90	86	98
MRC-D2-S DL	240-71528-1 DL	90	96	91	98
MRC-D2-I	240-71528-2	88	95	89	99
MRC-D2-I DL	240-71528-2 DL	86	89	87	94
MRC-D2-D	240-71528-3	85	88	84	94
MRC-D2-D DL	240-71528-3 DL	88	92	88	95
TB-103116	240-71528-4	88	92	89	93
MRC-D3-S	240-71528-5	87	90	90	107
MRC-D3-S DL	240-71528-5 DL	89	96	86	94
MRC-D3-S DL2	240-71528-5 DL2	88	97	92	98
MRC-D3-I	240-71528-6	88	89	86	96
MRC-D3-I DL	240-71528-6 DL	89	95	90	95
MRC-D3-D	240-71528-7	89	89	86	95
MRC-D3-D DL	240-71528-7 DL	85	88	86	90
MRC-D4-S	240-71528-8	88	92	87	105
MRC-D4-S DL	240-71528-8 DL	93	100	83	93
MRC-D4-I	240-71528-9	87	90	88	93
MRC-D4-I DL	240-71528-9 DL	94	98	88	96
MRC-D4-D	240-71528-10	86	88	89	95
MRC-D4-D DL	240-71528-10 DL	87	92	82	92
	MB 180-193223/8	91	96	97	100
	MB 180-193465/8	90	90	86	93
	MB 180-193502/8	82	86	85	91
	LCS 180-193223/4	85	89	89	97
	LCS 180-193465/4	90	91	83	97
	LCS 180-193502/4	86	89	84	93
	LCSD 180-193223/5	96	97	98	101
	LCSD 180-193465/14	101	107	94	104
	LCSD 180-193502/5	90	88	80	93

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-127
DCA = 1,2-Dichloroethane-d4 (Surr)	72-134
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	72-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110304.D

Lab ID: LCS 180-193223/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.38	94	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.69	87	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.0	100	72-123	
1,1,2-Trichloroethane	10.0	9.68	97	77-127	
1,1-Dichloroethane	10.0	9.24	92	76-126	
1,1-Dichloroethene	10.0	8.88	89	71-122	
1,2,4-Trichlorobenzene	10.0	7.41	74	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.26	73	55-139	
1,2-Dichlorobenzene	10.0	9.27	93	80-120	
1,2-Dichloroethane	10.0	9.27	93	72-126	
1,2-Dichloropropane	10.0	9.49	95	78-123	
1,3-Dichlorobenzene	10.0	9.05	90	80-120	
1,4-Dichlorobenzene	10.0	9.21	92	80-120	
2-Butanone (MEK)	20.0	16.0	80	41-150	
2-Hexanone	20.0	16.0	80	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.3	82	49-147	
Acetone	20.0	15.4	77	10-150	
Benzene	10.0	9.70	97	80-121	
Bromoform	10.0	7.16	72	62-138	
Bromomethane	10.0	9.79	98	39-150	
Carbon disulfide	10.0	8.63	86	57-137	
Carbon tetrachloride	10.0	8.54	85	59-145	
Chlorobenzene	10.0	9.65	97	80-120	
Chlorodibromomethane	10.0	8.03	80	71-134	
Chloroethane	10.0	7.73	77	53-148	
Chloroform	10.0	9.43	94	78-122	
Chloromethane	10.0	8.20	82	51-150	
cis-1,2-Dichloroethene	10.0	9.28	93	80-120	
cis-1,3-Dichloropropene	10.0	8.65	86	67-127	
Cyclohexane	10.0	10.6	106	65-132	
Dichlorodifluoromethane	10.0	9.11	91	43-142	
Dichlorobromomethane	10.0	8.00	80	72-124	
Ethylbenzene	10.0	9.80	98	80-123	
Isopropylbenzene	10.0	9.32	93	80-124	
Methyl acetate	50.0	50.8	102	65-144	
Methylcyclohexane	10.0	9.87	99	74-120	
Methyl tert-butyl ether	10.0	10.1	101	68-124	
Methylene Chloride	10.0	9.41	94	71-129	
m-Xylene & p-Xylene	10.0	9.50	95	80-124	
o-Xylene	10.0	9.45	94	80-123	
Styrene	10.0	9.49	95	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110304.D

Lab ID: LCS 180-193223/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	9.83	98	80-122	
Toluene	10.0	10.1	101	80-125	
trans-1,2-Dichloroethene	10.0	9.18	92	80-121	
trans-1,3-Dichloropropene	10.0	9.32	93	63-144	
Trichloroethene	10.0	9.21	92	79-120	
Trichlorofluoromethane	10.0	8.94	89	39-150	
Vinyl chloride	10.0	8.12	81	61-138	
Xylenes, Total	20.0	19.0	95	80-123	
Ethylene Dibromide	10.0	9.94	99	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110604.D

Lab ID: LCS 180-193465/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.46	95	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.40	84	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.03	90	72-123	
1,1,2-Trichloroethane	10.0	9.32	93	77-127	
1,1-Dichloroethane	10.0	9.58	96	76-126	
1,1-Dichloroethene	10.0	8.47	85	71-122	
1,2,4-Trichlorobenzene	10.0	8.78	88	51-138	
1,2-Dibromo-3-Chloropropane	10.0	8.79	88	55-139	
1,2-Dichlorobenzene	10.0	8.99	90	80-120	
1,2-Dichloroethane	10.0	9.56	96	72-126	
1,2-Dichloropropane	10.0	9.77	98	78-123	
1,3-Dichlorobenzene	10.0	8.72	87	80-120	
1,4-Dichlorobenzene	10.0	8.75	88	80-120	
2-Butanone (MEK)	20.0	18.8	94	41-150	
2-Hexanone	20.0	17.1	86	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.1	80	49-147	
Acetone	20.0	24.2	121	10-150	
Benzene	10.0	9.47	95	80-121	
Bromoform	10.0	7.73	77	62-138	
Bromomethane	10.0	11.1	111	39-150	
Carbon disulfide	10.0	8.54	85	57-137	
Carbon tetrachloride	10.0	8.50	85	59-145	
Chlorobenzene	10.0	8.98	90	80-120	
Chlorodibromomethane	10.0	8.10	81	71-134	
Chloroethane	10.0	8.21	82	53-148	
Chloroform	10.0	9.43	94	78-122	
Chloromethane	10.0	8.71	87	51-150	
cis-1,2-Dichloroethene	10.0	9.50	95	80-120	
cis-1,3-Dichloropropene	10.0	9.55	95	67-127	
Cyclohexane	10.0	9.24	92	65-132	
Dichlorodifluoromethane	10.0	8.81	88	43-142	
Dichlorobromomethane	10.0	8.58	86	72-124	
Ethylbenzene	10.0	9.22	92	80-123	
Isopropylbenzene	10.0	9.12	91	80-124	
Methyl acetate	50.0	52.6	105	65-144	
Methylcyclohexane	10.0	9.01	90	74-120	
Methyl tert-butyl ether	10.0	10.4	104	68-124	
Methylene Chloride	10.0	9.10	91	71-129	
m-Xylene & p-Xylene	10.0	8.91	89	80-124	
o-Xylene	10.0	9.23	92	80-123	
Styrene	10.0	9.18	92	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110604.D

Lab ID: LCS 180-193465/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	9.18	92	80-122	
Toluene	10.0	9.34	93	80-125	
trans-1,2-Dichloroethene	10.0	9.12	91	80-121	
trans-1,3-Dichloropropene	10.0	9.29	93	63-144	
Trichloroethene	10.0	10.0	100	79-120	
Trichlorofluoromethane	10.0	7.99	80	39-150	
Vinyl chloride	10.0	8.15	82	61-138	
Xylenes, Total	20.0	18.1	91	80-123	
Ethylene Dibromide	10.0	9.61	96	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110704.D

Lab ID: LCS 180-193502/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.10	91	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.74	87	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.83	88	72-123	
1,1,2-Trichloroethane	10.0	9.53	95	77-127	
1,1-Dichloroethane	10.0	9.48	95	76-126	
1,1-Dichloroethene	10.0	8.54	85	71-122	
1,2,4-Trichlorobenzene	10.0	8.73	87	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.69	77	55-139	
1,2-Dichlorobenzene	10.0	9.36	94	80-120	
1,2-Dichloroethane	10.0	9.71	97	72-126	
1,2-Dichloropropane	10.0	9.60	96	78-123	
1,3-Dichlorobenzene	10.0	9.21	92	80-120	
1,4-Dichlorobenzene	10.0	8.89	89	80-120	
2-Butanone (MEK)	20.0	20.2	101	41-150	
2-Hexanone	20.0	18.3	91	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.3	82	49-147	
Acetone	20.0	25.0	125	10-150	
Benzene	10.0	9.86	99	80-121	
Bromoform	10.0	7.04	70	62-138	
Bromomethane	10.0	9.73	97	39-150	
Carbon disulfide	10.0	8.55	85	57-137	
Carbon tetrachloride	10.0	8.04	80	59-145	
Chlorobenzene	10.0	9.46	95	80-120	
Chlorodibromomethane	10.0	7.82	78	71-134	
Chloroethane	10.0	8.03	80	53-148	
Chloroform	10.0	9.40	94	78-122	
Chloromethane	10.0	8.43	84	51-150	
cis-1,2-Dichloroethene	10.0	9.30	93	80-120	
cis-1,3-Dichloropropene	10.0	8.96	90	67-127	
Cyclohexane	10.0	9.56	96	65-132	
Dichlorodifluoromethane	10.0	8.71	87	43-142	
Dichlorobromomethane	10.0	8.40	84	72-124	
Ethylbenzene	10.0	9.74	97	80-123	
Isopropylbenzene	10.0	9.38	94	80-124	
Methyl acetate	50.0	50.2	100	65-144	
Methylcyclohexane	10.0	8.77	88	74-120	
Methyl tert-butyl ether	10.0	10.1	101	68-124	
Methylene Chloride	10.0	9.48	95	71-129	
m-Xylene & p-Xylene	10.0	9.32	93	80-124	
o-Xylene	10.0	9.71	97	80-123	
Styrene	10.0	9.70	97	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110704.D

Lab ID: LCS 180-193502/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	9.83	98	80-122	
Toluene	10.0	9.98	100	80-125	
trans-1,2-Dichloroethene	10.0	9.14	91	80-121	
trans-1,3-Dichloropropene	10.0	9.11	91	63-144	
Trichloroethene	10.0	9.25	93	79-120	
Trichlorofluoromethane	10.0	8.12	81	39-150	
Vinyl chloride	10.0	8.16	82	61-138	
Xylenes, Total	20.0	19.0	95	80-123	
Ethylene Dibromide	10.0	9.62	96	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110305.D

Lab ID: LCSD 180-193223/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	11.1	111	17	19	57-128	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	15	16	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.8	118	16	20	72-123	
1,1,2-Trichloroethane	10.0	10.9	109	12	17	77-127	
1,1-Dichloroethane	10.0	10.7	107	15	22	76-126	
1,1-Dichloroethene	10.0	10.5	105	17	18	71-122	
1,2,4-Trichlorobenzene	10.0	8.37	84	12	35	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.60	76	5	23	55-139	
1,2-Dichlorobenzene	10.0	10.2	102	9	15	80-120	
1,2-Dichloroethane	10.0	10.9	109	16	15	72-126	*
1,2-Dichloropropane	10.0	11.0	110	15	15	78-123	
1,3-Dichlorobenzene	10.0	9.95	100	10	15	80-120	
1,4-Dichlorobenzene	10.0	10.1	101	9	15	80-120	
2-Butanone (MEK)	20.0	17.2	86	7	35	41-150	
2-Hexanone	20.0	16.6	83	3	35	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	17.0	85	4	21	49-147	
Acetone	20.0	16.2	81	5	35	10-150	
Benzene	10.0	11.2	112	14	15	80-121	
Bromoform	10.0	7.99	80	11	16	62-138	
Bromomethane	10.0	12.2	122	22	35	39-150	
Carbon disulfide	10.0	10.3	103	17	16	57-137	*
Carbon tetrachloride	10.0	10.1	101	16	19	59-145	
Chlorobenzene	10.0	10.8	108	11	15	80-120	
Chlorodibromomethane	10.0	8.83	88	9	17	71-134	
Chloroethane	10.0	8.94	89	15	24	53-148	
Chloroform	10.0	10.6	106	12	15	78-122	
Chloromethane	10.0	9.38	94	13	22	51-150	
cis-1,2-Dichloroethene	10.0	10.9	109	16	17	80-120	
cis-1,3-Dichloropropene	10.0	9.98	100	14	18	67-127	
Cyclohexane	10.0	12.1	121	13	17	65-132	
Dichlorodifluoromethane	10.0	10.6	106	15	19	43-142	
Dichlorobromomethane	10.0	9.46	95	17	16	72-124	*
Ethylbenzene	10.0	10.9	109	11	15	80-123	
Isopropylbenzene	10.0	10.6	106	13	15	80-124	
Methyl acetate	50.0	58.2	116	14	18	65-144	
Methylcyclohexane	10.0	11.8	118	18	20	74-120	
Methyl tert-butyl ether	10.0	11.6	116	14	25	68-124	
Methylene Chloride	10.0	10.7	107	13	19	71-129	
m-Xylene & p-Xylene	10.0	10.5	105	10	17	80-124	
o-Xylene	10.0	10.6	106	11	15	80-123	
Styrene	10.0	10.7	107	12	15	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110305.D

Lab ID: LCSD 180-193223/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	10.0	11.6	116	17	15	80-122	*
Toluene	10.0	11.3	113	11	15	80-125	
trans-1,2-Dichloroethene	10.0	10.8	108	17	18	80-121	
trans-1,3-Dichloropropene	10.0	10.5	105	12	17	63-144	
Trichloroethene	10.0	10.8	108	15	15	79-120	
Trichlorofluoromethane	10.0	10.5	105	16	28	39-150	
Vinyl chloride	10.0	9.74	97	18	16	61-138	*
Xylenes, Total	20.0	21.1	106	11	15	80-123	
Ethylene Dibromide	10.0	10.9	109	9	16	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110614.D

Lab ID: LCSD 180-193465/14 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	8.75	88	8	19	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.92	89	6	16	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	7.57	76	18	20	72-123	
1,1,2-Trichloroethane	10.0	9.83	98	5	17	77-127	
1,1-Dichloroethane	10.0	9.28	93	3	22	76-126	
1,1-Dichloroethene	10.0	7.95	79	6	18	71-122	
1,2,4-Trichlorobenzene	10.0	7.88	79	11	35	51-138	
1,2-Dibromo-3-Chloropropane	10.0	8.33	83	5	23	55-139	
1,2-Dichlorobenzene	10.0	9.27	93	3	15	80-120	
1,2-Dichloroethane	10.0	10.3	103	7	15	72-126	
1,2-Dichloropropane	10.0	10.3	103	5	15	78-123	
1,3-Dichlorobenzene	10.0	8.89	89	2	15	80-120	
1,4-Dichlorobenzene	10.0	8.83	88	1	15	80-120	
2-Butanone (MEK)	20.0	17.3	87	8	35	41-150	
2-Hexanone	20.0	16.0	80	7	35	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.6	83	3	21	49-147	
Acetone	20.0	16.2	81	40	35	10-150	*
Benzene	10.0	9.50	95	0	15	80-121	
Bromoform	10.0	7.28	73	6	16	62-138	
Bromomethane	10.0	9.25	93	18	35	39-150	
Carbon disulfide	10.0	7.91	79	8	16	57-137	
Carbon tetrachloride	10.0	7.43	74	13	19	59-145	
Chlorobenzene	10.0	9.23	92	3	15	80-120	
Chlorodibromomethane	10.0	8.09	81	0	17	71-134	
Chloroethane	10.0	7.80	78	5	24	53-148	
Chloroform	10.0	9.56	96	1	15	78-122	
Chloromethane	10.0	8.40	84	4	22	51-150	
cis-1,2-Dichloroethene	10.0	9.62	96	1	17	80-120	
cis-1,3-Dichloropropene	10.0	9.06	91	5	18	67-127	
Cyclohexane	10.0	8.30	83	11	17	65-132	
Dichlorodifluoromethane	10.0	7.59	76	15	19	43-142	
Dichlorobromomethane	10.0	8.66	87	1	16	72-124	
Ethylbenzene	10.0	9.26	93	0	15	80-123	
Isopropylbenzene	10.0	8.68	87	5	15	80-124	
Methyl acetate	50.0	54.8	110	4	18	65-144	
Methylcyclohexane	10.0	7.42	74	19	20	74-120	
Methyl tert-butyl ether	10.0	10.7	107	3	25	68-124	
Methylene Chloride	10.0	9.79	98	7	19	71-129	
m-Xylene & p-Xylene	10.0	8.85	89	1	17	80-124	
o-Xylene	10.0	9.07	91	2	15	80-123	
Styrene	10.0	9.14	91	0	15	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110614.D

Lab ID: LCSD 180-193465/14 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	10.0	8.71	87	5	15	80-122	
Toluene	10.0	9.36	94	0	15	80-125	
trans-1,2-Dichloroethene	10.0	8.76	88	4	18	80-121	
trans-1,3-Dichloropropene	10.0	8.95	90	4	17	63-144	
Trichloroethene	10.0	9.29	93	8	15	79-120	
Trichlorofluoromethane	10.0	7.00	70	13	28	39-150	
Vinyl chloride	10.0	7.67	77	6	16	61-138	
Xylenes, Total	20.0	17.9	90	1	15	80-123	
Ethylene Dibromide	10.0	9.98	100	4	16	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110705.D

Lab ID: LCSD 180-193502/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	8.93	89	2	19	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.74	87	0	16	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.54	85	3	20	72-123	
1,1,2-Trichloroethane	10.0	9.55	95	0	17	77-127	
1,1-Dichloroethane	10.0	9.54	95	1	22	76-126	
1,1-Dichloroethene	10.0	8.47	85	1	18	71-122	
1,2,4-Trichlorobenzene	10.0	8.66	87	1	35	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.47	75	3	23	55-139	
1,2-Dichlorobenzene	10.0	9.04	90	4	15	80-120	
1,2-Dichloroethane	10.0	9.80	98	1	15	72-126	
1,2-Dichloropropane	10.0	10.2	102	6	15	78-123	
1,3-Dichlorobenzene	10.0	8.99	90	2	15	80-120	
1,4-Dichlorobenzene	10.0	9.07	91	2	15	80-120	
2-Butanone (MEK)	20.0	20.4	102	1	35	41-150	
2-Hexanone	20.0	17.5	88	4	35	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.2	81	1	21	49-147	
Acetone	20.0	25.6	128	2	35	10-150	
Benzene	10.0	9.87	99	0	15	80-121	
Bromoform	10.0	7.10	71	1	16	62-138	
Bromomethane	10.0	9.65	97	1	35	39-150	
Carbon disulfide	10.0	8.19	82	4	16	57-137	
Carbon tetrachloride	10.0	7.95	79	1	19	59-145	
Chlorobenzene	10.0	9.32	93	2	15	80-120	
Chlorodibromomethane	10.0	7.52	75	4	17	71-134	
Chloroethane	10.0	7.69	77	4	24	53-148	
Chloroform	10.0	9.44	94	0	15	78-122	
Chloromethane	10.0	8.59	86	2	22	51-150	
cis-1,2-Dichloroethene	10.0	9.41	94	1	17	80-120	
cis-1,3-Dichloropropene	10.0	9.00	90	0	18	67-127	
Cyclohexane	10.0	9.12	91	5	17	65-132	
Dichlorodifluoromethane	10.0	8.76	88	0	19	43-142	
Dichlorobromomethane	10.0	8.34	83	1	16	72-124	
Ethylbenzene	10.0	9.47	95	3	15	80-123	
Isopropylbenzene	10.0	8.94	89	5	15	80-124	
Methyl acetate	50.0	51.7	103	3	18	65-144	
Methylcyclohexane	10.0	8.39	84	4	20	74-120	
Methyl tert-butyl ether	10.0	10.3	103	1	25	68-124	
Methylene Chloride	10.0	9.45	95	0	19	71-129	
m-Xylene & p-Xylene	10.0	8.92	89	4	17	80-124	
o-Xylene	10.0	9.32	93	4	15	80-123	
Styrene	10.0	9.29	93	4	15	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110705.D

Lab ID: LCSD 180-193502/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	10.0	9.30	93	6	15	80-122	
Toluene	10.0	9.60	96	4	15	80-125	
trans-1,2-Dichloroethene	10.0	8.98	90	2	18	80-121	
trans-1,3-Dichloropropene	10.0	8.97	90	2	17	63-144	
Trichloroethene	10.0	9.58	96	3	15	79-120	
Trichlorofluoromethane	10.0	8.23	82	1	28	39-150	
Vinyl chloride	10.0	8.10	81	1	16	61-138	
Xylenes, Total	20.0	18.2	91	4	15	80-123	
Ethylene Dibromide	10.0	9.68	97	1	16	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110308.D Lab Sample ID: MB 180-193223/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 11/03/2016 10:48

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-193223/4	7110304.D	11/03/2016 08:59
	LCSD 180-193223/5	7110305.D	11/03/2016 09:26
TB-103116	240-71528-4	7110316.D	11/03/2016 14:31
MRC-D2-S	240-71528-1	7110317.D	11/03/2016 14:59
MRC-D2-I	240-71528-2	7110318.D	11/03/2016 15:26
MRC-D2-D	240-71528-3	7110319.D	11/03/2016 15:53
MRC-D3-S	240-71528-5	7110320.D	11/03/2016 16:21
MRC-D3-I	240-71528-6	7110321.D	11/03/2016 16:49
MRC-D3-D	240-71528-7	7110322.D	11/03/2016 17:17
MRC-D4-S	240-71528-8	7110323.D	11/03/2016 17:44
MRC-D4-I	240-71528-9	7110324.D	11/03/2016 18:12
MRC-D4-D	240-71528-10	7110325.D	11/03/2016 18:39

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110608.D Lab Sample ID: MB 180-193465/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 11/06/2016 12:38

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-193465/4	7110604.D	11/06/2016 10:50
MRC-D2-I DL	240-71528-2 DL	7110612.D	11/06/2016 14:29
	LCSD 180-193465/14	7110614.D	11/06/2016 15:24
MRC-D3-S DL	240-71528-5 DL	7110616.D	11/06/2016 16:20
MRC-D2-S DL	240-71528-1 DL	7110620.D	11/06/2016 18:10
MRC-D3-S DL2	240-71528-5 DL2	7110621.D	11/06/2016 18:37
MRC-D3-I DL	240-71528-6 DL	7110622.D	11/06/2016 19:04
MRC-D4-I DL	240-71528-9 DL	7110623.D	11/06/2016 19:32
MRC-D4-D DL	240-71528-10 DL	7110624.D	11/06/2016 19:59
MRC-D4-S DL	240-71528-8 DL	7110626.D	11/06/2016 20:54

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110708.D Lab Sample ID: MB 180-193502/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 11/07/2016 12:01

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-193502/4	7110704.D	11/07/2016 10:11
	LCSD 180-193502/5	7110705.D	11/07/2016 10:37
MRC-D2-D DL	240-71528-3 DL	7110711.D	11/07/2016 13:24
MRC-D3-D DL	240-71528-7 DL	7110712.D	11/07/2016 13:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7092601.D BFB Injection Date: 09/26/2016

Instrument ID: CHHP7 BFB Injection Time: 08:04

Analysis Batch No.: 189143

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.3
75	30.0 - 60.0 % of mass 95	55.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.4 (0.5) 1
174	50.0 - 120.00 % of mass 95	78.9
175	5.0 - 9.0 % of mass 174	6.2 (7.9) 1
176	95.0 - 101.0 % of mass 174	79.3 (100.5) 1
177	5.0 - 9.0 % of mass 176	5.5 (6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-189143/4	7092604.D	09/26/2016	10:49
	IC 180-189143/6	7092606.D	09/26/2016	12:39
	IC 180-189143/7	7092607.D	09/26/2016	13:06
	IC 180-189143/8	7092608.D	09/26/2016	14:00
	IC 180-189143/9	7092609.D	09/26/2016	14:28
	IC 180-189143/10	7092610.D	09/26/2016	15:04
	IC 180-189143/14	7092614.D	09/26/2016	17:48
	ICIS 180-189143/16	7092616.D	09/26/2016	18:43

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110301.D BFB Injection Date: 11/03/2016

Instrument ID: CHHP7 BFB Injection Time: 07:13

Analysis Batch No.: 193223

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.8
75	30.0 - 60.0 % of mass 95	53.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.1
173	Less than 2.0 % of mass 174	0.2 (0.3) 1
174	50.0 - 120.00 % of mass 95	81.7
175	5.0 - 9.0 % of mass 174	6.1 (7.5) 1
176	95.0 - 101.0 % of mass 174	80.9 (99.1) 1
177	5.0 - 9.0 % of mass 176	5.7 (7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-193223/3	7110303.D	11/03/2016	08:32
	LCS 180-193223/4	7110304.D	11/03/2016	08:59
	LCSD 180-193223/5	7110305.D	11/03/2016	09:26
	MB 180-193223/8	7110308.D	11/03/2016	10:48
TB-103116	240-71528-4	7110316.D	11/03/2016	14:31
MRC-D2-S	240-71528-1	7110317.D	11/03/2016	14:59
MRC-D2-I	240-71528-2	7110318.D	11/03/2016	15:26
MRC-D2-D	240-71528-3	7110319.D	11/03/2016	15:53
MRC-D3-S	240-71528-5	7110320.D	11/03/2016	16:21
MRC-D3-I	240-71528-6	7110321.D	11/03/2016	16:49
MRC-D3-D	240-71528-7	7110322.D	11/03/2016	17:17
MRC-D4-S	240-71528-8	7110323.D	11/03/2016	17:44
MRC-D4-I	240-71528-9	7110324.D	11/03/2016	18:12
MRC-D4-D	240-71528-10	7110325.D	11/03/2016	18:39

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110601.D BFB Injection Date: 11/06/2016

Instrument ID: CHHP7 BFB Injection Time: 09:27

Analysis Batch No.: 193465

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.4	
75	30.0 - 60.0 % of mass 95	53.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	78.9	
175	5.0 - 9.0 % of mass 174	6.2	(7.8) 1
176	95.0 - 101.0 % of mass 174	78.3	(99.2) 1
177	5.0 - 9.0 % of mass 176	5.5	(7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-193465/2	7110602.D	11/06/2016	10:07
	LCS 180-193465/4	7110604.D	11/06/2016	10:50
	MB 180-193465/8	7110608.D	11/06/2016	12:38
MRC-D2-I DL	240-71528-2 DL	7110612.D	11/06/2016	14:29
	LCSD 180-193465/14	7110614.D	11/06/2016	15:24
MRC-D3-S DL	240-71528-5 DL	7110616.D	11/06/2016	16:20
MRC-D2-S DL	240-71528-1 DL	7110620.D	11/06/2016	18:10
MRC-D3-S DL2	240-71528-5 DL2	7110621.D	11/06/2016	18:37
MRC-D3-I DL	240-71528-6 DL	7110622.D	11/06/2016	19:04
MRC-D4-I DL	240-71528-9 DL	7110623.D	11/06/2016	19:32
MRC-D4-D DL	240-71528-10 DL	7110624.D	11/06/2016	19:59
MRC-D4-S DL	240-71528-8 DL	7110626.D	11/06/2016	20:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110701.D BFB Injection Date: 11/07/2016

Instrument ID: CHHP7 BFB Injection Time: 08:22

Analysis Batch No.: 193502

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.7
75	30.0 - 60.0 % of mass 95	53.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.2
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	50.0 - 120.00 % of mass 95	83.6
175	5.0 - 9.0 % of mass 174	6.5 (7.7) 1
176	95.0 - 101.0 % of mass 174	83.6 (100.1) 1
177	5.0 - 9.0 % of mass 176	5.9 (7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-193502/3	7110703.D	11/07/2016	09:44
	LCS 180-193502/4	7110704.D	11/07/2016	10:11
	LCSD 180-193502/5	7110705.D	11/07/2016	10:37
	MB 180-193502/8	7110708.D	11/07/2016	12:01
MRC-D2-D DL	240-71528-3 DL	7110711.D	11/07/2016	13:24
MRC-D3-D DL	240-71528-7 DL	7110712.D	11/07/2016	13:52

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193223/3 Date Analyzed: 11/03/2016 08:32

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110303.D Heated Purge: (Y/N) N

Calibration ID: 32970

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		138900	4.27	139665	7.26	33708	10.36
UPPER LIMIT		277800	4.77	279330	7.76	67416	10.86
LOWER LIMIT		69450	3.77	69833	6.76	16854	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193223/4		134918	4.27	136591	7.26	31411	10.36
LCSD 180-193223/5		121907	4.27	125728	7.26	29737	10.36
MB 180-193223/8		192939	4.26	212813	7.27	47985	10.36
240-71528-4	TB-103116	180553	4.26	214969	7.26	49078	10.36
240-71528-1	MRC-D2-S	160026	4.26	206289	7.27	46109	10.36
240-71528-2	MRC-D2-I	167512	4.26	201571	7.26	46942	10.36
240-71528-3	MRC-D2-D	174592	4.26	202758	7.26	46228	10.36
240-71528-5	MRC-D3-S	156478	4.27	193496	7.27	42375	10.36
240-71528-6	MRC-D3-I	199691	4.26	221472	7.26	50682	10.36
240-71528-7	MRC-D3-D	167493	4.26	204248	7.26	47038	10.36
240-71528-8	MRC-D4-S	142680	4.27	177130	7.27	39832	10.36
240-71528-9	MRC-D4-I	157463	4.26	185826	7.26	42089	10.36
240-71528-10	MRC-D4-D	157740	4.26	190884	7.26	44015	10.36

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193223/3 Date Analyzed: 11/03/2016 08:32

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110303.D Heated Purge: (Y/N) N

Calibration ID: 32970

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		45585	12.71				
UPPER LIMIT		91170	13.21				
LOWER LIMIT		22793	12.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193223/4		42046	12.71				
LCSD 180-193223/5		39822	12.71				
MB 180-193223/8		72640	12.71				
240-71528-4	TB-103116	70933	12.71				
240-71528-1	MRC-D2-S	71133	12.71				
240-71528-2	MRC-D2-I	70261	12.71				
240-71528-3	MRC-D2-D	69510	12.71				
240-71528-5	MRC-D3-S	65289	12.71				
240-71528-6	MRC-D3-I	77117	12.70				
240-71528-7	MRC-D3-D	70284	12.71				
240-71528-8	MRC-D4-S	60770	12.70				
240-71528-9	MRC-D4-I	52037	12.71				
240-71528-10	MRC-D4-D	60373	12.71				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193465/2 Date Analyzed: 11/06/2016 10:07

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110602.D Heated Purge: (Y/N) N

Calibration ID: 32970

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		207646	4.27	185528	7.26	44604	10.36
UPPER LIMIT		415292	4.77	371056	7.76	89208	10.86
LOWER LIMIT		103823	3.77	92764	6.76	22302	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193465/4		199404	4.27	180582	7.25	44041	10.36
MB 180-193465/8		183594	4.26	199628	7.26	46795	10.36
240-71528-2 DL	MRC-D2-I DL	158076	4.25	176770	7.26	40320	10.36
LCSD 180-193465/14		179042	4.28	167527	7.26	40972	10.36
240-71528-5 DL	MRC-D3-S DL	175062	4.27	199815	7.26	46694	10.36
240-71528-1 DL	MRC-D2-S DL	196993	4.26	213186	7.26	47318	10.36
240-71528-5 DL2	MRC-D3-S DL2	194339	4.26	201513	7.26	45632	10.36
240-71528-6 DL	MRC-D3-I DL	176933	4.26	192682	7.26	43893	10.36
240-71528-9 DL	MRC-D4-I DL	176532	4.26	193376	7.26	46364	10.36
240-71528-10 DL	MRC-D4-D DL	173286	4.26	203943	7.26	47771	10.36
240-71528-8 DL	MRC-D4-S DL	177456	4.26	192505	7.26	45848	10.36

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193465/2 Date Analyzed: 11/06/2016 10:07

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110602.D Heated Purge: (Y/N) N

Calibration ID: 32970

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		63622	12.70				
UPPER LIMIT		127244	13.20				
LOWER LIMIT		31811	12.20				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193465/4		59725	12.71				
MB 180-193465/8		68507	12.70				
240-71528-2 DL	MRC-D2-I DL	56866	12.70				
LCSD 180-193465/14		54682	12.70				
240-71528-5 DL	MRC-D3-S DL	68541	12.70				
240-71528-1 DL	MRC-D2-S DL	67613	12.70				
240-71528-5 DL2	MRC-D3-S DL2	67939	12.70				
240-71528-6 DL	MRC-D3-I DL	62933	12.70				
240-71528-9 DL	MRC-D4-I DL	64282	12.70				
240-71528-10 DL	MRC-D4-D DL	66818	12.70				
240-71528-8 DL	MRC-D4-S DL	67574	12.70				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193502/3 Date Analyzed: 11/07/2016 09:44

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110703.D Heated Purge: (Y/N) N

Calibration ID: 32970

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		161401	4.27	145899	7.26	33829	10.36
UPPER LIMIT		322802	4.77	291798	7.76	67658	10.86
LOWER LIMIT		80701	3.77	72950	6.76	16915	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193502/4		159198	4.27	156499	7.26	37177	10.36
LCSD 180-193502/5		155907	4.27	148849	7.26	36269	10.36
MB 180-193502/8		174956	4.26	200654	7.26	45665	10.36
240-71528-3 DL	MRC-D2-D DL	181518	4.25	207795	7.26	47216	10.36
240-71528-7 DL	MRC-D3-D DL	161142	4.26	179393	7.26	40277	10.36

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193502/3 Date Analyzed: 11/07/2016 09:44

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110703.D Heated Purge: (Y/N) N

Calibration ID: 32970

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		46635	12.71				
UPPER LIMIT		93270	13.21				
LOWER LIMIT		23318	12.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193502/4		49866	12.71				
LCSD 180-193502/5		48686	12.71				
MB 180-193502/8		66381	12.71				
240-71528-3 DL	MRC-D2-D DL	68836	12.70				
240-71528-7 DL	MRC-D3-D DL	58379	12.70				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S | Lab Sample ID: 240-71528-1

Matrix: Water | Lab File ID: 7110317.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	25		1.0	0.24
79-00-5	1,1,2-Trichloroethane	0.36	J	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	2.8		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	4.9	J	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	0.81	J	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	4.2		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	27		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S | Lab Sample ID: 240-71528-1

Matrix: Water | Lab File ID: 7110317.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	4.9		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.27	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	*Trichloroethene*	*1300*	*E*	*1.0*	*0.20*
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	85		77-127
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S DL | Lab Sample ID: 240-71528-1 DL

Matrix: Water | Lab File ID: 7110620.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:10

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	200	U	200	54
79-34-5	1,1,2,2-Tetrachloroethane	200	U	200	74
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	48
79-00-5	1,1,2-Trichloroethane	200	U	200	61
75-34-3	1,1-Dichloroethane	200	U	200	68
75-35-4	1,1-Dichloroethene	200	U	200	64
120-82-1	1,2,4-Trichlorobenzene	200	U	200	99
96-12-8	1,2-Dibromo-3-Chloropropane	400	U	400	79
95-50-1	1,2-Dichlorobenzene	200	U	200	46
107-06-2	1,2-Dichloroethane	200	U	200	48
78-87-5	1,2-Dichloropropane	200	U	200	69
541-73-1	1,3-Dichlorobenzene	200	U	200	41
106-46-7	1,4-Dichlorobenzene	200	U	200	49
78-93-3	2-Butanone (MEK)	2000	U	2000	510
591-78-6	2-Hexanone	2000	U	2000	400
108-10-1	4-Methyl-2-pentanone (MIBK)	2000	U	2000	440
67-64-1	Acetone	2000	U *	2000	630
71-43-2	Benzene	200	U	200	36
75-25-2	Bromoform	200	U	200	150
74-83-9	Bromomethane	200	U	200	120
75-15-0	Carbon disulfide	200	U	200	110
56-23-5	Carbon tetrachloride	200	U	200	110
108-90-7	Chlorobenzene	200	U	200	29
124-48-1	Chlorodibromomethane	200	U	200	87
75-00-3	Chloroethane	200	U	200	120
67-66-3	Chloroform	200	U	200	53
74-87-3	Chloromethane	200	U	200	76
156-59-2	cis-1,2-Dichloroethene	200	U	200	61
10061-01-5	cis-1,3-Dichloropropene	200	U	200	64
110-82-7	Cyclohexane	200	U	200	55
75-71-8	Dichlorodifluoromethane	200	U	200	94
75-27-4	Dichlorobromomethane	200	U	200	110
100-41-4	Ethylbenzene	200	U	200	50
98-82-8	Isopropylbenzene	200	U	200	41
79-20-9	Methyl acetate	2000	U	2000	280

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S DL | Lab Sample ID: 240-71528-1 DL

Matrix: Water | Lab File ID: 7110620.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:10

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	200	U	200	37
1634-04-4	Methyl tert-butyl ether	200	U	200	39
75-09-2	Methylene Chloride	200	U	200	190
100-42-5	Styrene	200	U	200	43
127-18-4	Tetrachloroethene	200	U	200	49
108-88-3	Toluene	200	U	200	31
156-60-5	trans-1,2-Dichloroethene	200	U	200	40
10061-02-6	trans-1,3-Dichloropropene	200	U	200	44
79-01-6	Trichloroethene	5100	B	200	40
75-69-4	Trichlorofluoromethane	200	U	200	81
75-01-4	Vinyl chloride	200	U	200	34
1330-20-7	Xylenes, Total	400	U	400	54
106-93-4	Ethylene Dibromide	200	U	200	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-127
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I | Lab Sample ID: 240-71528-2

Matrix: Water | Lab File ID: 7110318.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.1		1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.2		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	11		10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	13		10	3.1
71-43-2	Benzene	1.1		1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	3.2		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	13		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	0.32	J	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I | Lab Sample ID: 240-71528-2

Matrix: Water | Lab File ID: 7110318.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	6.3		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	0.23	J	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	1.2		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	0.52	J	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	99		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I DL | Lab Sample ID: 240-71528-2 DL

Matrix: Water | Lab File ID: 7110612.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 14:29

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-34-5	1,1,2,2-Tetrachloroethane	40	U	40	15
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	40	U	40	9.5
79-00-5	1,1,2-Trichloroethane	40	U	40	12
75-34-3	1,1-Dichloroethane	40	U	40	14
75-35-4	1,1-Dichloroethene	40	U	40	13
120-82-1	1,2,4-Trichlorobenzene	40	U	40	20
96-12-8	1,2-Dibromo-3-Chloropropane	80	U	80	16
95-50-1	1,2-Dichlorobenzene	40	U	40	9.2
107-06-2	1,2-Dichloroethane	40	U	40	9.6
78-87-5	1,2-Dichloropropane	40	U	40	14
541-73-1	1,3-Dichlorobenzene	40	U	40	8.3
106-46-7	1,4-Dichlorobenzene	40	U	40	9.7
78-93-3	2-Butanone (MEK)	400	U	400	100
591-78-6	2-Hexanone	400	U	400	80
108-10-1	4-Methyl-2-pentanone (MIBK)	400	U	400	88
67-64-1	Acetone	400	U *	400	130
71-43-2	Benzene	40	U	40	7.3
75-25-2	Bromoform	40	U	40	30
74-83-9	Bromomethane	40	U	40	23
75-15-0	Carbon disulfide	40	U	40	21
56-23-5	Carbon tetrachloride	40	U	40	22
108-90-7	Chlorobenzene	40	U	40	5.8
124-48-1	Chlorodibromomethane	40	U	40	17
75-00-3	Chloroethane	40	U	40	23
67-66-3	Chloroform	40	U	40	11
74-87-3	Chloromethane	40	U	40	15
156-59-2	cis-1,2-Dichloroethene	13	J	40	12
10061-01-5	cis-1,3-Dichloropropene	40	U	40	13
110-82-7	Cyclohexane	40	U	40	11
75-71-8	Dichlorodifluoromethane	40	U	40	19
75-27-4	Dichlorobromomethane	40	U	40	23
100-41-4	Ethylbenzene	40	U	40	10
98-82-8	Isopropylbenzene	40	U	40	8.2
79-20-9	Methyl acetate	400	U	400	56
108-87-2	Methylcyclohexane	40	U	40	7.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I DL | Lab Sample ID: 240-71528-2 DL

Matrix: Water | Lab File ID: 7110612.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 14:29

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	40	U	40	7.8
75-09-2	Methylene Chloride	40	U	40	38
100-42-5	Styrene	40	U	40	8.6
127-18-4	Tetrachloroethene	40	U	40	9.8
108-88-3	Toluene	40	U	40	6.2
156-60-5	trans-1,2-Dichloroethene	40	U	40	8.0
10061-02-6	trans-1,3-Dichloropropene	40	U	40	8.9
79-01-6	Trichloroethene	1300	B	40	7.9
75-69-4	Trichlorofluoromethane	40	U	40	16
75-01-4	Vinyl chloride	40	U	40	6.7
1330-20-7	Xylenes, Total	80	U	80	11
106-93-4	Ethylene Dibromide	40	U	40	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	87		80-120
1868-53-7	Dibromofluoromethane (Surr)	86		77-127
460-00-4	4-Bromofluorobenzene (Surr)	94		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D | Lab Sample ID: 240-71528-3

Matrix: Water | Lab File ID: 7110319.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	3.3		1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	4.1	J	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	2.0		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	15		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D | Lab Sample ID: 240-71528-3

Matrix: Water | Lab File ID: 7110319.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	7.4		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.17	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	85		77-127
460-00-4	4-Bromofluorobenzene (Surr)	94		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D DL | Lab Sample ID: 240-71528-3 DL

Matrix: Water | Lab File ID: 7110711.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:24

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	30	U	30	8.1
79-34-5	1,1,2,2-Tetrachloroethane	30	U	30	11
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	30	U	30	7.1
79-00-5	1,1,2-Trichloroethane	30	U	30	9.2
75-34-3	1,1-Dichloroethane	30	U	30	10
75-35-4	1,1-Dichloroethene	30	U	30	9.6
120-82-1	1,2,4-Trichlorobenzene	30	U	30	15
96-12-8	1,2-Dibromo-3-Chloropropane	60	U	60	12
95-50-1	1,2-Dichlorobenzene	30	U	30	6.9
107-06-2	1,2-Dichloroethane	30	U	30	7.2
78-87-5	1,2-Dichloropropane	30	U	30	10
541-73-1	1,3-Dichlorobenzene	30	U	30	6.2
106-46-7	1,4-Dichlorobenzene	30	U	30	7.3
78-93-3	2-Butanone (MEK)	300	U	300	77
591-78-6	2-Hexanone	300	U	300	60
108-10-1	4-Methyl-2-pentanone (MIBK)	300	U	300	66
67-64-1	Acetone	300	U	300	94
71-43-2	Benzene	30	U	30	5.5
75-25-2	Bromoform	30	U	30	23
74-83-9	Bromomethane	30	U	30	18
75-15-0	Carbon disulfide	30	U	30	16
56-23-5	Carbon tetrachloride	30	U	30	17
108-90-7	Chlorobenzene	30	U	30	4.4
124-48-1	Chlorodibromomethane	30	U	30	13
75-00-3	Chloroethane	30	U	30	17
67-66-3	Chloroform	30	U	30	8.0
74-87-3	Chloromethane	30	U	30	11
156-59-2	cis-1,2-Dichloroethene	17	J	30	9.1
10061-01-5	cis-1,3-Dichloropropene	30	U	30	9.6
110-82-7	Cyclohexane	30	U	30	8.2
75-71-8	Dichlorodifluoromethane	30	U	30	14
75-27-4	Dichlorobromomethane	30	U	30	17
100-41-4	Ethylbenzene	30	U	30	7.6
98-82-8	Isopropylbenzene	30	U	30	6.2
79-20-9	Methyl acetate	300	U	300	42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D DL | Lab Sample ID: 240-71528-3 DL

Matrix: Water | Lab File ID: 7110711.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:24

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	30	U	30	5.6
1634-04-4	Methyl tert-butyl ether	7.8	J	30	5.9
75-09-2	Methylene Chloride	30	U	30	28
100-42-5	Styrene	30	U	30	6.5
127-18-4	Tetrachloroethene	30	U	30	7.3
108-88-3	Toluene	30	U	30	4.7
156-60-5	trans-1,2-Dichloroethene	30	U	30	6.0
10061-02-6	trans-1,3-Dichloropropene	30	U	30	6.7
79-01-6	Trichloroethene	1300		30	5.9
75-69-4	Trichlorofluoromethane	30	U	30	12
75-01-4	Vinyl chloride	30	U	30	5.0
1330-20-7	Xylenes, Total	60	U	60	8.1
106-93-4	Ethylene Dibromide	30	U	30	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: TB-103116 | Lab Sample ID: 240-71528-4

Matrix: Water | Lab File ID: 7110316.D

Analysis Method: 8260C | Date Collected: 10/31/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: TB-103116 | Lab Sample ID: 240-71528-4

Matrix: Water | Lab File ID: 7110316.D

Analysis Method: 8260C | Date Collected: 10/31/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S | Lab Sample ID: 240-71528-5

Matrix: Water | Lab File ID: 7110320.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	*1,1,2-Trichloro-1,2,2-trifluoroethane*	*100*	*E*	*1.0*	*0.24*
79-00-5	1,1,2-Trichloroethane	1.0		1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	5.6		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	0.69	J *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.42	J	1.0	0.21
106-46-7	1,4-Dichlorobenzene	0.81	J	1.0	0.24
78-93-3	2-Butanone (MEK)	4.9	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	9.7	J	10	3.1
71-43-2	Benzene	0.71	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	7.0		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	13		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	44		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S | Lab Sample ID: 240-71528-5

Matrix: Water | Lab File ID: 7110320.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	0.55	J	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	0.38	J *	1.0	0.24
108-88-3	Toluene	0.69	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	0.58	J	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		77-127
460-00-4	4-Bromofluorobenzene (Surr)	107		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL | Lab Sample ID: 240-71528-5 DL

Matrix: Water | Lab File ID: 7110616.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 16:20

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	100	U	100	27
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	47	J	100	24
79-00-5	1,1,2-Trichloroethane	100	U	100	31
75-34-3	1,1-Dichloroethane	100	U	100	34
75-35-4	1,1-Dichloroethene	100	U	100	32
120-82-1	1,2,4-Trichlorobenzene	100	U	100	49
96-12-8	1,2-Dibromo-3-Chloropropane	200	U	200	40
95-50-1	1,2-Dichlorobenzene	100	U	100	23
107-06-2	1,2-Dichloroethane	100	U	100	24
78-87-5	1,2-Dichloropropane	100	U	100	35
541-73-1	1,3-Dichlorobenzene	100	U	100	21
106-46-7	1,4-Dichlorobenzene	100	U	100	24
78-93-3	2-Butanone (MEK)	1000	U	1000	260
591-78-6	2-Hexanone	1000	U	1000	200
108-10-1	4-Methyl-2-pentanone (MIBK)	1000	U	1000	220
67-64-1	Acetone	1000	U *	1000	310
71-43-2	Benzene	100	U	100	18
75-25-2	Bromoform	100	U	100	76
74-83-9	Bromomethane	100	U	100	59
75-15-0	Carbon disulfide	100	U	100	53
56-23-5	Carbon tetrachloride	100	U	100	56
108-90-7	Chlorobenzene	100	U	100	15
124-48-1	Chlorodibromomethane	100	U	100	44
75-00-3	Chloroethane	100	U	100	58
67-66-3	Chloroform	100	U	100	27
74-87-3	Chloromethane	100	U	100	38
156-59-2	cis-1,2-Dichloroethene	100	U	100	30
10061-01-5	cis-1,3-Dichloropropene	100	U	100	32
110-82-7	Cyclohexane	100	U	100	27
75-71-8	Dichlorodifluoromethane	100	U	100	47
75-27-4	Dichlorobromomethane	100	U	100	57
100-41-4	Ethylbenzene	100	U	100	25
98-82-8	Isopropylbenzene	100	U	100	21
79-20-9	Methyl acetate	1000	U	1000	140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL | Lab Sample ID: 240-71528-5 DL

Matrix: Water | Lab File ID: 7110616.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 16:20

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	*Methylcyclohexane*	*100*	*U*	*100*	*19*
1634-04-4	*Methyl tert-butyl ether*	*100*	*U*	*100*	*20*
75-09-2	*Methylene Chloride*	*100*	*U*	*100*	*94*
100-42-5	*Styrene*	*100*	*U*	*100*	*22*
127-18-4	*Tetrachloroethene*	*100*	*U*	*100*	*24*
108-88-3	*Toluene*	*100*	*U*	*100*	*16*
156-60-5	*trans-1,2-Dichloroethene*	*100*	*U*	*100*	*20*
10061-02-6	*trans-1,3-Dichloropropene*	*100*	*U*	*100*	*22*
79-01-6	*Trichloroethene*	*12000*	*E B*	*100*	*20*
75-69-4	*Trichlorofluoromethane*	*100*	*U*	*100*	*40*
75-01-4	*Vinyl chloride*	*100*	*U*	*100*	*17*
1330-20-7	*Xylenes, Total*	*200*	*U*	*200*	*27*
106-93-4	*Ethylene Dibromide*	*100*	*U*	*100*	*51*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		77-127
460-00-4	4-Bromofluorobenzene (Surr)	94		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL2 | Lab Sample ID: 240-71528-5 DL2

Matrix: Water | Lab File ID: 7110621.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:37

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	500	U	500	140
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	190
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	120
79-00-5	1,1,2-Trichloroethane	500	U	500	150
75-34-3	1,1-Dichloroethane	500	U	500	170
75-35-4	1,1-Dichloroethene	500	U	500	160
120-82-1	1,2,4-Trichlorobenzene	500	U	500	250
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U	1000	200
95-50-1	1,2-Dichlorobenzene	500	U	500	120
107-06-2	1,2-Dichloroethane	500	U	500	120
78-87-5	1,2-Dichloropropane	500	U	500	170
541-73-1	1,3-Dichlorobenzene	500	U	500	100
106-46-7	1,4-Dichlorobenzene	500	U	500	120
78-93-3	2-Butanone (MEK)	5000	U	5000	1300
591-78-6	2-Hexanone	5000	U	5000	1000
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	1100
67-64-1	Acetone	5000	U *	5000	1600
71-43-2	Benzene	500	U	500	91
75-25-2	Bromoform	500	U	500	380
74-83-9	Bromomethane	500	U	500	290
75-15-0	Carbon disulfide	500	U	500	260
56-23-5	Carbon tetrachloride	500	U	500	280
108-90-7	Chlorobenzene	500	U	500	73
124-48-1	Chlorodibromomethane	500	U	500	220
75-00-3	Chloroethane	500	U	500	290
67-66-3	Chloroform	500	U	500	130
74-87-3	Chloromethane	500	U	500	190
156-59-2	cis-1,2-Dichloroethene	500	U	500	150
10061-01-5	cis-1,3-Dichloropropene	500	U	500	160
110-82-7	Cyclohexane	500	U	500	140
75-71-8	Dichlorodifluoromethane	500	U	500	240
75-27-4	Dichlorobromomethane	500	U	500	290
100-41-4	Ethylbenzene	500	U	500	130
98-82-8	Isopropylbenzene	500	U	500	100
79-20-9	Methyl acetate	5000	U	5000	700

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL2 | Lab Sample ID: 240-71528-5 DL2

Matrix: Water | Lab File ID: 7110621.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:37

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	500	U	500	93
1634-04-4	Methyl tert-butyl ether	500	U	500	98
75-09-2	Methylene Chloride	500	U	500	470
100-42-5	Styrene	500	U	500	110
127-18-4	Tetrachloroethene	500	U	500	120
108-88-3	Toluene	500	U	500	78
156-60-5	trans-1,2-Dichloroethene	500	U	500	100
10061-02-6	trans-1,3-Dichloropropene	500	U	500	110
79-01-6	Trichloroethene	11000	B	500	99
75-69-4	Trichlorofluoromethane	500	U	500	200
75-01-4	Vinyl chloride	500	U	500	84
1330-20-7	Xylenes, Total	1000	U	1000	140
106-93-4	Ethylene Dibromide	500	U	500	260

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I | Lab Sample ID: 240-71528-6

Matrix: Water | Lab File ID: 7110321.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.2		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.49	J	1.0	0.21
106-46-7	1,4-Dichlorobenzene	0.25	J	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	3.2	J	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	0.73	J	1.0	0.56
108-90-7	Chlorobenzene	0.24	J	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	3.2		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	21		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.3		1.0	0.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I | Lab Sample ID: 240-71528-6

Matrix: Water | Lab File ID: 7110321.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	0.25	J *	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	0.24	J	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I DL | Lab Sample ID: 240-71528-6 DL

Matrix: Water | Lab File ID: 7110622.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:04

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	200	U	200	54
79-34-5	1,1,2,2-Tetrachloroethane	200	U	200	74
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	48
79-00-5	1,1,2-Trichloroethane	200	U	200	61
75-34-3	1,1-Dichloroethane	200	U	200	68
75-35-4	1,1-Dichloroethene	200	U	200	64
120-82-1	1,2,4-Trichlorobenzene	200	U	200	99
96-12-8	1,2-Dibromo-3-Chloropropane	400	U	400	79
95-50-1	1,2-Dichlorobenzene	200	U	200	46
107-06-2	1,2-Dichloroethane	200	U	200	48
78-87-5	1,2-Dichloropropane	200	U	200	69
541-73-1	1,3-Dichlorobenzene	200	U	200	41
106-46-7	1,4-Dichlorobenzene	200	U	200	49
78-93-3	2-Butanone (MEK)	2000	U	2000	510
591-78-6	2-Hexanone	2000	U	2000	400
108-10-1	4-Methyl-2-pentanone (MIBK)	2000	U	2000	440
67-64-1	Acetone	2000	U *	2000	630
71-43-2	Benzene	200	U	200	36
75-25-2	Bromoform	200	U	200	150
74-83-9	Bromomethane	200	U	200	120
75-15-0	Carbon disulfide	200	U	200	110
56-23-5	Carbon tetrachloride	200	U	200	110
108-90-7	Chlorobenzene	200	U	200	29
124-48-1	Chlorodibromomethane	200	U	200	87
75-00-3	Chloroethane	200	U	200	120
67-66-3	Chloroform	200	U	200	53
74-87-3	Chloromethane	200	U	200	76
156-59-2	cis-1,2-Dichloroethene	200	U	200	61
10061-01-5	cis-1,3-Dichloropropene	200	U	200	64
110-82-7	Cyclohexane	200	U	200	55
75-71-8	Dichlorodifluoromethane	200	U	200	94
75-27-4	Dichlorobromomethane	200	U	200	110
100-41-4	Ethylbenzene	200	U	200	50
98-82-8	Isopropylbenzene	200	U	200	41
79-20-9	Methyl acetate	2000	U	2000	280

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I DL | Lab Sample ID: 240-71528-6 DL

Matrix: Water | Lab File ID: 7110622.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:04

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	200	U	200	37
1634-04-4	Methyl tert-butyl ether	200	U	200	39
75-09-2	Methylene Chloride	200	U	200	190
100-42-5	Styrene	200	U	200	43
127-18-4	Tetrachloroethene	200	U	200	49
108-88-3	Toluene	200	U	200	31
156-60-5	trans-1,2-Dichloroethene	200	U	200	40
10061-02-6	trans-1,3-Dichloropropene	200	U	200	44
79-01-6	Trichloroethene	6000	B	200	40
75-69-4	Trichlorofluoromethane	200	U	200	81
75-01-4	Vinyl chloride	200	U	200	34
1330-20-7	Xylenes, Total	400	U	400	54
106-93-4	Ethylene Dibromide	200	U	200	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D | Lab Sample ID: 240-71528-7

Matrix: Water | Lab File ID: 7110322.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	0.66	J	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.27	J	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	5.1	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	8.3	J	10	3.1
71-43-2	Benzene	0.65	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	2.1		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	8.1		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	0.30	J	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D | Lab Sample ID: 240-71528-7

Matrix: Water | Lab File ID: 7110322.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	7.7		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.81	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	0.36	J	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D DL | Lab Sample ID: 240-71528-7 DL

Matrix: Water | Lab File ID: 7110712.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:52

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	30	U	30	8.1
79-34-5	1,1,2,2-Tetrachloroethane	30	U	30	11
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	30	U	30	7.1
79-00-5	1,1,2-Trichloroethane	30	U	30	9.2
75-34-3	1,1-Dichloroethane	30	U	30	10
75-35-4	1,1-Dichloroethene	30	U	30	9.6
120-82-1	1,2,4-Trichlorobenzene	30	U	30	15
96-12-8	1,2-Dibromo-3-Chloropropane	60	U	60	12
95-50-1	1,2-Dichlorobenzene	30	U	30	6.9
107-06-2	1,2-Dichloroethane	30	U	30	7.2
78-87-5	1,2-Dichloropropane	30	U	30	10
541-73-1	1,3-Dichlorobenzene	30	U	30	6.2
106-46-7	1,4-Dichlorobenzene	30	U	30	7.3
78-93-3	2-Butanone (MEK)	300	U	300	77
591-78-6	2-Hexanone	300	U	300	60
108-10-1	4-Methyl-2-pentanone (MIBK)	300	U	300	66
67-64-1	Acetone	300	U	300	94
71-43-2	Benzene	30	U	30	5.5
75-25-2	Bromoform	30	U	30	23
74-83-9	Bromomethane	30	U	30	18
75-15-0	Carbon disulfide	30	U	30	16
56-23-5	Carbon tetrachloride	30	U	30	17
108-90-7	Chlorobenzene	30	U	30	4.4
124-48-1	Chlorodibromomethane	30	U	30	13
75-00-3	Chloroethane	30	U	30	17
67-66-3	Chloroform	30	U	30	8.0
74-87-3	Chloromethane	30	U	30	11
156-59-2	cis-1,2-Dichloroethene	30	U	30	9.1
10061-01-5	cis-1,3-Dichloropropene	30	U	30	9.6
110-82-7	Cyclohexane	30	U	30	8.2
75-71-8	Dichlorodifluoromethane	30	U	30	14
75-27-4	Dichlorobromomethane	30	U	30	17
100-41-4	Ethylbenzene	30	U	30	7.6
98-82-8	Isopropylbenzene	30	U	30	6.2
79-20-9	Methyl acetate	300	U	300	42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D DL | Lab Sample ID: 240-71528-7 DL

Matrix: Water | Lab File ID: 7110712.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:52

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	30	U	30	5.6
1634-04-4	Methyl tert-butyl ether	9.6	J	30	5.9
75-09-2	Methylene Chloride	30	U	30	28
100-42-5	Styrene	30	U	30	6.5
127-18-4	Tetrachloroethene	30	U	30	7.3
108-88-3	Toluene	30	U	30	4.7
156-60-5	trans-1,2-Dichloroethene	30	U	30	6.0
10061-02-6	trans-1,3-Dichloropropene	30	U	30	6.7
79-01-6	Trichloroethene	460		30	5.9
75-69-4	Trichlorofluoromethane	30	U	30	12
75-01-4	Vinyl chloride	30	U	30	5.0
1330-20-7	Xylenes, Total	60	U	60	8.1
106-93-4	Ethylene Dibromide	30	U	30	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	85		77-127
460-00-4	4-Bromofluorobenzene (Surr)	90		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S | Lab Sample ID: 240-71528-8

Matrix: Water | Lab File ID: 7110323.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	*1,1,2-Trichloro-1,2,2-trifluoroethane*	*87*	*E*	*1.0*	*0.24*
79-00-5	1,1,2-Trichloroethane	0.63	J	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	2.4		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	0.31	J	1.0	0.23
107-06-2	1,2-Dichloroethane	0.33	J *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0		1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.4		1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	0.46	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	0.71	J	1.0	0.56
108-90-7	Chlorobenzene	7.7		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	6.8		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	21		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S | Lab Sample ID: 240-71528-8

Matrix: Water | Lab File ID: 7110323.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	0.73	J	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	0.47	J *	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	87		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	105		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S DL | Lab Sample ID: 240-71528-8 DL

Matrix: Water | Lab File ID: 7110626.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 20:54

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	500	U	500	140
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	190
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	120
79-00-5	1,1,2-Trichloroethane	500	U	500	150
75-34-3	1,1-Dichloroethane	500	U	500	170
75-35-4	1,1-Dichloroethene	500	U	500	160
120-82-1	1,2,4-Trichlorobenzene	500	U	500	250
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U	1000	200
95-50-1	1,2-Dichlorobenzene	500	U	500	120
107-06-2	1,2-Dichloroethane	500	U	500	120
78-87-5	1,2-Dichloropropane	500	U	500	170
541-73-1	1,3-Dichlorobenzene	500	U	500	100
106-46-7	1,4-Dichlorobenzene	500	U	500	120
78-93-3	2-Butanone (MEK)	5000	U	5000	1300
591-78-6	2-Hexanone	5000	U	5000	1000
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	1100
67-64-1	Acetone	5000	U *	5000	1600
71-43-2	Benzene	500	U	500	91
75-25-2	Bromoform	500	U	500	380
74-83-9	Bromomethane	500	U	500	290
75-15-0	Carbon disulfide	500	U	500	260
56-23-5	Carbon tetrachloride	500	U	500	280
108-90-7	Chlorobenzene	500	U	500	73
124-48-1	Chlorodibromomethane	500	U	500	220
75-00-3	Chloroethane	500	U	500	290
67-66-3	Chloroform	500	U	500	130
74-87-3	Chloromethane	500	U	500	190
156-59-2	cis-1,2-Dichloroethene	500	U	500	150
10061-01-5	cis-1,3-Dichloropropene	500	U	500	160
110-82-7	Cyclohexane	500	U	500	140
75-71-8	Dichlorodifluoromethane	500	U	500	240
75-27-4	Dichlorobromomethane	500	U	500	290
100-41-4	Ethylbenzene	500	U	500	130
98-82-8	Isopropylbenzene	500	U	500	100
79-20-9	Methyl acetate	5000	U	5000	700

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S DL | Lab Sample ID: 240-71528-8 DL

Matrix: Water | Lab File ID: 7110626.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 20:54

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	500	U	500	93
1634-04-4	Methyl tert-butyl ether	500	U	500	98
75-09-2	Methylene Chloride	500	U	500	470
100-42-5	Styrene	500	U	500	110
127-18-4	Tetrachloroethene	500	U	500	120
108-88-3	Toluene	500	U	500	78
156-60-5	trans-1,2-Dichloroethene	500	U	500	100
10061-02-6	trans-1,3-Dichloropropene	500	U	500	110
79-01-6	Trichloroethene	18000	B	500	99
75-69-4	Trichlorofluoromethane	500	U	500	200
75-01-4	Vinyl chloride	500	U	500	84
1330-20-7	Xylenes, Total	1000	U	1000	140
106-93-4	Ethylene Dibromide	500	U	500	260

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	83		80-120
1868-53-7	Dibromofluoromethane (Surr)	93		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I | Lab Sample ID: 240-71528-9

Matrix: Water | Lab File ID: 7110324.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	*1,2,4-Trichlorobenzene*	*110*	*E*	*1.0*	*0.49*
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	8.8		1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	46		1.0	0.21
106-46-7	1,4-Dichlorobenzene	33		1.0	0.24
78-93-3	2-Butanone (MEK)	9.2	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	7.7	J	10	3.1
71-43-2	Benzene	1.7		1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	41		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	0.92	J	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	2.4		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	2.9		1.0	0.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I | Lab Sample ID: 240-71528-9

Matrix: Water | Lab File ID: 7110324.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.39	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I DL | Lab Sample ID: 240-71528-9 DL

Matrix: Water | Lab File ID: 7110623.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:32

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	10	U	10	2.7
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	3.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	2.4
79-00-5	1,1,2-Trichloroethane	10	U	10	3.1
75-34-3	1,1-Dichloroethane	10	U	10	3.4
75-35-4	1,1-Dichloroethene	10	U	10	3.2
120-82-1	1,2,4-Trichlorobenzene	160		10	4.9
96-12-8	1,2-Dibromo-3-Chloropropane	20	U	20	4.0
95-50-1	1,2-Dichlorobenzene	9.5	J	10	2.3
107-06-2	1,2-Dichloroethane	10	U	10	2.4
78-87-5	1,2-Dichloropropane	10	U	10	3.5
541-73-1	1,3-Dichlorobenzene	56		10	2.1
106-46-7	1,4-Dichlorobenzene	40		10	2.4
78-93-3	2-Butanone (MEK)	100	U	100	26
591-78-6	2-Hexanone	100	U	100	20
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	22
67-64-1	Acetone	100	U *	100	31
71-43-2	Benzene	10	U	10	1.8
75-25-2	Bromoform	10	U	10	7.6
74-83-9	Bromomethane	10	U	10	5.9
75-15-0	Carbon disulfide	10	U	10	5.3
56-23-5	Carbon tetrachloride	10	U	10	5.6
108-90-7	Chlorobenzene	56		10	1.5
124-48-1	Chlorodibromomethane	10	U	10	4.4
75-00-3	Chloroethane	10	U	10	5.8
67-66-3	Chloroform	10	U	10	2.7
74-87-3	Chloromethane	10	U	10	3.8
156-59-2	cis-1,2-Dichloroethene	10	U	10	3.0
10061-01-5	cis-1,3-Dichloropropene	10	U	10	3.2
110-82-7	Cyclohexane	10	U	10	2.7
75-71-8	Dichlorodifluoromethane	10	U	10	4.7
75-27-4	Dichlorobromomethane	10	U	10	5.7
100-41-4	Ethylbenzene	10	U	10	2.5
98-82-8	Isopropylbenzene	10	U	10	2.1
79-20-9	Methyl acetate	100	U	100	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I DL | Lab Sample ID: 240-71528-9 DL

Matrix: Water | Lab File ID: 7110623.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:32

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	10	U	10	1.9
1634-04-4	Methyl tert-butyl ether	2.4	J	10	2.0
75-09-2	Methylene Chloride	10	U	10	9.4
100-42-5	Styrene	10	U	10	2.2
127-18-4	Tetrachloroethene	10	U	10	2.4
108-88-3	Toluene	10	U	10	1.6
156-60-5	trans-1,2-Dichloroethene	10	U	10	2.0
10061-02-6	trans-1,3-Dichloropropene	10	U	10	2.2
79-01-6	Trichloroethene	77	B	10	2.0
75-69-4	Trichlorofluoromethane	10	U	10	4.0
75-01-4	Vinyl chloride	10	U	10	1.7
1330-20-7	Xylenes, Total	20	U	20	2.7
106-93-4	Ethylene Dibromide	10	U	10	5.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		77-127
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D | Lab Sample ID: 240-71528-10

Matrix: Water | Lab File ID: 7110325.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.4		1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	12		1.0	0.21
106-46-7	1,4-Dichlorobenzene	7.7		1.0	0.24
78-93-3	2-Butanone (MEK)	3.8	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	4.3	J	10	3.1
71-43-2	Benzene	0.39	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	6.3		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	0.91	J	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	5.4		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D | Lab Sample ID: 240-71528-10

Matrix: Water | Lab File ID: 7110325.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	5.7		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.23	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	86		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D DL | Lab Sample ID: 240-71528-10 DL

Matrix: Water | Lab File ID: 7110624.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:59

Soil Aliquot Vol: | Dilution Factor: 2.5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	0.68
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.93
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	0.60
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	0.77
75-34-3	1,1-Dichloroethane	2.5	U	2.5	0.85
75-35-4	1,1-Dichloroethene	2.5	U	2.5	0.80
120-82-1	1,2,4-Trichlorobenzene	27		2.5	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.99
95-50-1	1,2-Dichlorobenzene	1.5	J	2.5	0.58
107-06-2	1,2-Dichloroethane	2.5	U	2.5	0.60
78-87-5	1,2-Dichloropropane	2.5	U	2.5	0.86
541-73-1	1,3-Dichlorobenzene	12		2.5	0.52
106-46-7	1,4-Dichlorobenzene	7.7		2.5	0.61
78-93-3	2-Butanone (MEK)	25	U	25	6.4
591-78-6	2-Hexanone	25	U	25	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	25	U	25	5.5
67-64-1	Acetone	25	U *	25	7.9
71-43-2	Benzene	2.5	U	2.5	0.46
75-25-2	Bromoform	2.5	U	2.5	1.9
74-83-9	Bromomethane	2.5	U	2.5	1.5
75-15-0	Carbon disulfide	2.5	U	2.5	1.3
56-23-5	Carbon tetrachloride	2.5	U	2.5	1.4
108-90-7	Chlorobenzene	6.5		2.5	0.37
124-48-1	Chlorodibromomethane	2.5	U	2.5	1.1
75-00-3	Chloroethane	2.5	U	2.5	1.4
67-66-3	Chloroform	0.83	J	2.5	0.67
74-87-3	Chloromethane	2.5	U	2.5	0.95
156-59-2	cis-1,2-Dichloroethene	5.1		2.5	0.76
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	0.80
110-82-7	Cyclohexane	2.5	U	2.5	0.68
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	1.2
75-27-4	Dichlorobromomethane	2.5	U	2.5	1.4
100-41-4	Ethylbenzene	2.5	U	2.5	0.63
98-82-8	Isopropylbenzene	2.5	U	2.5	0.51
79-20-9	Methyl acetate	25	U	25	3.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D DL | Lab Sample ID: 240-71528-10 DL

Matrix: Water | Lab File ID: 7110624.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:59

Soil Aliquot Vol: | Dilution Factor: 2.5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	2.5	U	2.5	0.47
1634-04-4	Methyl tert-butyl ether	6.0		2.5	0.49
75-09-2	Methylene Chloride	2.5	U	2.5	2.4
100-42-5	Styrene	2.5	U	2.5	0.54
127-18-4	Tetrachloroethene	2.5	U	2.5	0.61
108-88-3	Toluene	2.5	U	2.5	0.39
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	0.50
10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	0.56
79-01-6	Trichloroethene	45	B	2.5	0.50
75-69-4	Trichlorofluoromethane	2.5	U	2.5	1.0
75-01-4	Vinyl chloride	2.5	U	2.5	0.42
1330-20-7	Xylenes, Total	5.0	U	5.0	0.68
106-93-4	Ethylene Dibromide	2.5	U	2.5	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	82		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		77-127
460-00-4	4-Bromofluorobenzene (Surr)	92		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189143/4	7092604.D
Level 2	IC 180-189143/14	7092614.D
Level 3	ICIS 180-189143/16	7092616.D
Level 4	IC 180-189143/6	7092606.D
Level 5	IC 180-189143/7	7092607.D
Level 6	IC 180-189143/8	7092608.D
Level 7	IC 180-189143/9	7092609.D
Level 8	IC 180-189143/10	7092610.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2179 0.3141	0.2842 0.3492	0.2337 0.3123	0.2879	0.2871	Ave		0.2858			0.1000	15.0		20.0			
Chloromethane	0.2676 0.3036	0.3162 0.3345	0.2777 0.2907	0.2984	0.2934	Ave		0.2978			0.1000	7.1		20.0			
Vinyl chloride	0.2365 0.2921	0.3117 0.3146	0.2595 0.2817	0.2850	0.2858	Ave		0.2834			0.1000	9.1		20.0			
1,3-Butadiene	0.2510 0.2653	0.2811 0.2833	0.2224 0.2370	0.2670	0.2634	Ave		0.2588			0.0100	8.1		20.0			
Bromomethane	0.1332 0.1082	0.1406 0.1179	0.1121 0.0941	0.1036	0.1075	Ave		0.1147			0.0500	13.5		20.0			
Chloroethane	0.1146 0.1697	0.1821 0.1891	0.1507 0.1630	0.1642	0.1655	Ave		0.1624			0.0500	14.0		20.0			
Dichlorofluoromethane	0.3260 0.4070	0.4841 0.4543	0.4227 0.4156	0.3989	0.4053	Ave		0.4142			0.0100	11.1		20.0			
Trichlorofluoromethane	0.1629 0.2581	0.3173 +++++	0.2730 +++++	0.2975	0.3075	Lin2	-0.656	0.3010			0.1000				0.9900		0.9900
Ethyl ether	0.1691 0.2325	0.2645 0.2560	0.2470 0.2227	0.2195	0.2225	Ave		0.2292			0.0100	12.9		20.0			
1,1-Dichloroethene	0.1820 0.2431	0.2930 0.2607	0.2415 0.2544	0.2383	0.2366	Ave		0.2437			0.1000	12.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1432 0.2053	0.2504 0.2236	0.2205 0.2197	0.2063	0.2049	Ave		0.2092			0.1000	14.6		20.0			
Acetone	0.1137 0.1090	0.1641 0.1204	0.1455 0.1131	0.1235	0.1149	Ave		0.1255			0.0500	15.3		20.0			
Iodomethane	0.3033 0.3568	0.4649 0.3899	0.4058 0.3722	0.3643	0.3601	Ave		0.3772			0.0100	12.3		20.0			
Carbon disulfide	0.5459 0.6651	0.8723 0.7283	0.7393 0.7185	0.6767	0.6756	Ave		0.7027			0.1000	13.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Allyl chloride	0.1264 0.1695	0.1947 0.1771	0.1703 0.1723	0.1619	0.1580	Ave		0.1663			0.0100	11.7		20.0			
Methyl acetate	0.2021 0.2400	0.3351 0.2587	0.2979 0.2283	0.2739	0.2613	Ave		0.2622			0.1000	15.8		20.0			
Methylene Chloride	0.1657 0.2791	0.3776 0.3034	0.3220 0.2852	0.2857	0.2797	Lin1	-0.152	0.2930			0.1000				0.9930		0.9900
tert-Butyl alcohol	0.7004 1.0374	1.3485 1.1265	1.1211 1.2340	0.9915	0.9727	Ave		1.0665			0.0100	18.2		20.0			
Acrylonitrile	0.1004 0.1158	0.1675 0.1230	0.1468 0.1117	0.1312	0.1257	Ave		0.1278			0.0100	16.6		20.0			
trans-1,2-Dichloroethene	0.2070 0.2103	0.3081 0.2228	0.2478 0.2148	0.2240	0.2172	Ave		0.2315			0.1000	14.4		20.0			
Methyl tert-butyl ether	0.5980 0.7181	1.0129 0.7858	0.9069 0.7187	0.7901	0.7461	Ave		0.7846			0.1000	16.1		20.0			
Hexane	0.1791 0.2303	0.2985 0.2527	0.2432 0.2616	0.2270	0.2278	Ave		0.2400			0.0100	14.2		20.0			
1,1-Dichloroethane	0.3729 0.4479	0.5422 0.4886	0.4921 0.4641	0.4521	0.4458	Ave		0.4632			0.2000	10.5		20.0			
2,2-Dichloropropane	0.0183 0.1894	0.1972 0.2080	0.1542 0.1951	0.1743	0.1715	Lin1	-0.912	0.1975			0.0100				0.9940		0.9900
cis-1,2-Dichloroethene	0.2103 0.2851	0.3563 0.3022	0.3193 0.2809	0.2825	0.2813	Ave		0.2897			0.1000	14.3		20.0			
2-Butanone (MEK)	0.1774 0.1696	0.2692 0.1920	0.2260 0.1765	0.1933	0.1816	Ave		0.1982			0.0500	16.9		20.0			
Chlorobromomethane	0.1026 0.1362	0.1700 0.1460	0.1545 0.1374	0.1365	0.1361	Ave		0.1399			0.0100	13.8		20.0			
Tetrahydrofuran	0.0915 0.1153	0.1533 0.1253	0.1422 0.1173	0.1290	0.1201	Ave		0.1242			0.0100	14.9		20.0			
Chloroform	0.3686 0.4556	0.6018 0.4922	0.5261 0.4640	0.4652	0.4524	Ave		0.4782			0.2000	14.0		20.0			
1,1,1-Trichloroethane	0.2516 0.3202	0.3902 0.3556	0.3326 0.3371	0.3210	0.3272	Ave		0.3294			0.1000	11.9		20.0			
Cyclohexane	0.2582 0.3084	0.4063 0.3262	0.3307 0.3225	0.3227	0.3119	Ave		0.3234			0.1000	12.6		20.0			
Carbon tetrachloride	0.2161 0.2595	0.3362 0.2850	0.2745 0.2827	0.2636	0.2573	Ave		0.2719			0.1000	12.4		20.0			
1,1-Dichloropropene	0.2683 0.2953	0.4162 0.3202	0.3356 0.3040	0.3127	0.3029	Ave		0.3194			0.0100	13.7		20.0			
Isobutyl alcohol	0.0052 0.0103	0.0126 0.0111	0.0114 0.0111	0.0110	0.0104	Lin2	-0.727	0.0115			0.0100				0.9910		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Benzene	0.8519 0.8869	1.2881 0.9392	1.0876 0.8750	0.9525	0.9293	Ave		0.9763			0.5000	14.9		20.0			
1,2-Dichloroethane	0.2963 0.3563	0.4841 0.3880	0.4278 0.3603	0.3758	0.3534	Ave		0.3803			0.1000	14.7		20.0			
n-Heptane	0.0511 0.1681	0.2154 0.1849	0.1846 0.1906	0.1682	0.1669	Lin1	-0.482	0.1842			0.0100				0.9930		0.9900
Trichloroethene	0.2014 0.2497	0.3308 0.2665	0.2825 0.2643	0.2443	0.2424	Ave		0.2602			0.2000	14.3		20.0			
Methylcyclohexane	0.2438 0.3060	0.3963 0.3365	0.3092 0.3372	0.3076	0.3002	Ave		0.3171			0.1000	13.6		20.0			
1,2-Dichloropropane	0.2169 0.2362	0.3474 0.2510	0.2990 0.2404	0.2514	0.2447	Ave		0.2609			0.1000	16.1		20.0			
1,4-Dioxane	0.0020 0.0030	0.0031 0.0031	0.0031 0.0028	0.0036	0.0034	Ave		0.0030		*	0.0100	15.9		20.0			
Dibromomethane	0.1323 0.1691	0.2289 0.1851	0.2063 0.1736	0.1808	0.1744	Ave		0.1813			0.0100	15.5		20.0			
Dichlorobromomethane	0.2782 0.3609	0.4768 0.3958	0.4304 0.3917	0.3572	0.3617	Ave		0.3816			0.2000	15.3		20.0			
cis-1,3-Dichloropropene	0.3385 0.4467	0.5671 0.4988	0.5002 0.4839	0.4443	0.4379	Ave		0.4647			0.2000	14.2		20.0			
4-Methyl-2-pentanone (MIBK)	1.6126 1.3798	2.2490 1.5915	1.9413 1.3932	1.5617	1.5200	Ave		1.6561			0.1000	17.9		20.0			
Toluene	3.8305 3.6064	5.7820 3.9227	4.7202 3.5596	3.9784	3.8922	Ave		4.1615			0.4000	17.9		20.0			
trans-1,3-Dichloropropene	1.2011 1.5998	2.0335 1.8165	1.7676 1.6710	1.6105	1.5864	Ave		1.6608			0.1000	14.4		20.0			
Ethyl methacrylate	1.3328 1.6159	2.2860 1.8233	2.0513 1.6282	1.7983	1.6913	Ave		1.7784			0.0100	16.3		20.0			
1,1,2-Trichloroethane	0.9148 0.9675	1.4957 1.0751	1.2663 0.9952	1.0856	1.0206	Ave		1.1026			0.1000	17.3		20.0			
Tetrachloroethene	0.6669 0.6914	0.9814 0.7628	0.8037 0.7154	0.7531	0.7358	Ave		0.7638			0.2000	12.8		20.0			
1,3-Dichloropropane	1.6617 1.7212	2.6097 1.9152	2.2145 1.7245	1.8712	1.7929	Ave		1.9389			0.0100	16.6		20.0			
2-Hexanone	1.1486 0.9578	1.5985 1.1140	1.3512 0.9908	1.1176	1.0543	Ave		1.1666			0.1000	18.1		20.0			
Chlorodibromomethane	0.9163 1.0604	1.4978 1.2053	1.3052 1.1406	1.1048	1.0696	Ave		1.1625			0.1000	15.2		20.0			
Ethylene Dibromide	0.8602 1.0575	1.5658 1.2147	1.3738 1.1576	1.1406	1.0786	Ave		1.1811			0.1000	18.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Chlorobenzene	2.1373 2.4716	3.7502 2.7756	3.1254 2.5699	2.6668	2.5606	Ave		2.7572			0.5000	17.7		20.0			
1,1,1,2-Tetrachloroethane	0.7418 0.8210	1.2658 0.9063	1.0565 0.8704	0.8828	0.8542	Ave		0.9249			0.0100	17.7		20.0			
Ethylbenzene	1.0703 1.2112	1.9048 1.3306	1.5639 1.2366	1.3548	1.3186	Ave		1.3739			0.1000	18.7		20.0			
m-Xylene & p-Xylene	1.4944 1.5914	2.3486 1.7707	1.9790 1.6645	1.6860	1.6595	Ave		1.7743			0.1000	15.3		20.0			
o-Xylene	1.4433 1.6680	2.5343 1.8502	2.1049 1.7621	1.7713	1.7577	Ave		1.8615			0.3000	17.6		20.0			
Styrene	2.5047 2.6078	4.1985 2.8599	3.4341 2.5920	2.9259	2.8733	Ave		2.9995			0.3000	18.8		20.0			
Bromoform	0.5810 0.8562	1.1761 0.9661	0.9929 0.9368	0.8817	0.8334	Ave		0.9030			0.1000	18.7		20.0			
Isopropylbenzene	3.6138 3.8657	5.9360 4.2285	4.7808 4.0055	4.2275	4.1180	Ave		4.3470			0.1000	16.7		20.0			
Bromobenzene	0.6911 0.8461	1.1413 0.9466	0.9772 0.8998	0.8425	0.8492	Ave		0.8992			0.0100	14.5		20.0			
1,1,2,2-Tetrachloroethane	1.2649 1.3620	2.2817 +++++	1.9504 +++++	1.6093	1.5076	Qua	6.0786	1.7793	-0.002649		0.3000				0.9910		0.9900
trans-1,4-Dichloro-2-butene	0.2209 0.3370	0.4326 0.3765	0.3829 0.3771	0.3312	0.3193	Ave		0.3472			0.0100	18.0		20.0			
1,2,3-Trichloropropane	0.3076 0.3677	0.5199 0.3988	0.4322 0.3952	0.3730	0.3560	Ave		0.3938			0.0100	15.9		20.0			
N-Propylbenzene	0.6255 0.7475	1.0051 0.8170	0.8094 0.8203	0.7297	0.7460	Ave		0.7876			0.0100	13.8		20.0			
2-Chlorotoluene	0.6043 0.7165	0.9337 0.7843	0.7905 0.7979	0.6883	0.7128	Ave		0.7535			0.0100	12.9		20.0			
1,3,5-Trimethylbenzene	1.9636 2.4649	3.3566 2.6964	2.7316 2.6708	2.4263	2.4303	Ave		2.5925			0.0100	15.2		20.0			
4-Chlorotoluene	0.5700 0.7022	0.9908 0.7736	0.8267 0.7665	0.6900	0.6893	Ave		0.7511			0.0100	16.4		20.0			
tert-Butylbenzene	1.6167 2.0569	2.5893 2.2904	2.1566 2.3010	1.9874	2.0667	Ave		2.1331			0.0100	13.3		20.0			
1,2,4-Trimethylbenzene	2.1170 2.5820	3.4836 2.8188	2.8895 2.7477	2.5886	2.5961	Ave		2.7279			0.0100	14.1		20.0			
sec-Butylbenzene	2.1916 2.8490	3.7515 3.1128	2.9348 3.1568	2.7594	2.8204	Ave		2.9470			0.0100	14.9		20.0			
1,3-Dichlorobenzene	1.2146 1.4932	2.0458 1.6497	1.6722 1.6012	1.4765	1.4856	Ave		1.5798			0.6000	15.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Isopropyltoluene	1.8414 2.1722	3.0088 2.3588	2.4452 2.4015	2.1851	2.2070	Ave		2.3275			0.0100	14.3		20.0			
1,4-Dichlorobenzene	1.1438 1.4044	1.9856 1.5595	1.6515 1.5384	1.4049	1.3896	Ave		1.5097			0.5000	16.2		20.0			
n-Butylbenzene	1.5412 2.0938	2.6771 2.2980	2.1689 2.3193	2.0379	2.0433	Ave		2.1475			0.0100	15.0		20.0			
1,2-Dichlorobenzene	1.1859 1.4372	2.0459 1.5750	1.7348 1.5244	1.4647	1.4721	Ave		1.5550			0.4000	16.1		20.0			
1,2-Dibromo-3-Chloropropane	0.1880 0.3257	0.3659 0.3745	0.3367 +++++	0.3072	0.3062	Ave		0.3149			0.0500	19.7		20.0			
1,2,4-Trichlorobenzene	0.7459 0.9592	1.1515 1.0660	1.0018 1.0987	0.9431	0.9193	Ave		0.9857			0.2000	12.8		20.0			
Hexachlorobutadiene	0.2786 0.3397	0.4515 0.3690	0.3594 0.4164	0.3444	0.3335	Ave		0.3616			0.0100	14.6		20.0			
Naphthalene	2.0818 2.5039	3.0098 2.7201	2.8047 2.7449	2.6949	2.5403	Ave		2.6376			0.0100	10.4		20.0			
1,2,3-Trichlorobenzene	0.6066 0.7449	0.8796 0.8211	0.8137 0.8417	0.7756	0.7371	Ave		0.7775			0.0100	10.8		20.0			
Dibromofluoromethane (Surr)	+++++ 0.1893	0.2501 0.1863	0.2425 +++++	0.1875	0.1916	Ave		0.2079				14.4		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2697	0.3592 0.2719	0.3600 +++++	0.2830	0.2793	Ave		0.3039				14.3		20.0			
Toluene-d8 (Surr)	+++++ 2.8356	4.1505 2.8439	3.6997 +++++	2.8849	3.0262	Lin2	39.984	2.6134							0.9900		0.9900
4-Bromofluorobenzene (Surr)	+++++ 1.1601	1.5804 1.2107	1.4387 1.0659	1.1662	1.1881	Ave		1.2586				14.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189143/4	7092604.D
Level 2	IC 180-189143/14	7092614.D
Level 3	ICIS 180-189143/16	7092616.D
Level 4	IC 180-189143/6	7092606.D
Level 5	IC 180-189143/7	7092607.D
Level 6	IC 180-189143/8	7092608.D
Level 7	IC 180-189143/9	7092609.D
Level 8	IC 180-189143/10	7092610.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	5373 147580	17668 196608	27592 246134	56275	70426	5.00 175	25.0 200	50.0 250	75.0	100
Chloromethane	FB	Ave	6597 142653	19662 188354	32790 229066	58312	71982	5.00 175	25.0 200	50.0 250	75.0	100
Vinyl chloride	FB	Ave	5830 137251	19378 177148	30630 222030	55708	70111	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Butadiene	FB	Ave	6189 124635	17478 159516	26261 186743	52187	64625	5.00 175	25.0 200	50.0 250	75.0	100
Bromomethane	FB	Ave	3284 50827	8742 66410	13235 74141	20255	26364	5.00 175	25.0 200	50.0 250	75.0	100
Chloroethane	FB	Ave	2824 79752	11319 106488	17793 128444	32095	40612	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorofluoromethane	FB	Ave	8038 191210	30100 255802	49901 327499	77971	99443	5.00 175	25.0 200	50.0 250	75.0	100
Trichlorofluoromethane	FB	Lin2	4016 121248	19727 +++++	32233 +++++	58148	75448	5.00 175	25.0 +++++	50.0 +++++	75.0	100
Ethyl ether	FB	Ave	4169 109240	16447 144171	29165 175523	42897	54579	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethene	FB	Ave	4486 114233	18217 146785	28515 200509	46574	58043	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	3531 96460	15570 125927	26029 173145	40312	50266	5.00 175	25.0 200	50.0 250	75.0	100
Acetone	FB	Ave	14020 102450	20409 135647	34347 178335	48275	56381	25.0 350	50.0 400	100 500	150	200
Iodomethane	FB	Ave	7478 167653	28903 219526	47904 293342	71205	88344	5.00 175	25.0 200	50.0 250	75.0	100
Carbon disulfide	FB	Ave	13457 312501	54237 410098	87279 566189	132262	165750	5.00 175	25.0 200	50.0 250	75.0	100
Allyl chloride	FB	Ave	3116 79636	12106 99700	20109 135814	31648	38773	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
Methyl acetate	FB	Ave	24909 563838	104159 728494	175850 899672	267628	320511	25.0 875	125 1000	250 1250	375	500
Methylene Chloride	FB	Lin1	4085 131134	23479 170843	38012 224771	55833	68624	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butyl alcohol	TBAd 9	Ave	6027 178267	28223 236816	47042 366676	76568	93960	50.0 1750	250 2000	500 2500	750	1000
Acrylonitrile	FB	Ave	24756 544117	104171 692464	173272 880562	256377	308403	50.0 1750	250 2000	500 2500	750	1000
trans-1,2-Dichloroethene	FB	Ave	5102 98812	19157 125462	29252 169291	43781	53295	5.00 175	25.0 200	50.0 250	75.0	100
Methyl tert-butyl ether	FB	Ave	14743 337408	62978 442465	107060 566387	154429	183042	5.00 175	25.0 200	50.0 250	75.0	100
Hexane	FB	Ave	4415 108204	18559 142317	28711 206128	44359	55882	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloroethane	FB	Ave	9192 210418	33714 275145	58096 365764	88368	109381	5.00 175	25.0 200	50.0 250	75.0	100
2,2-Dichloropropane	FB	Lin1	450 88992	12260 117133	18205 153765	34068	42066	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,2-Dichloroethene	FB	Ave	5184 133933	22150 170179	37690 221379	55205	69018	5.00 175	25.0 200	50.0 250	75.0	100
2-Butanone (MEK)	FB	Ave	21866 159402	33481 216172	53363 278243	75546	89099	25.0 350	50.0 400	100 500	150	200
Chlorobromomethane	FB	Ave	2530 63983	10567 82199	18245 108284	26669	33392	5.00 175	25.0 200	50.0 250	75.0	100
Tetrahydrofuran	FB	Ave	4510 108358	19066 141096	33575 184867	50435	58918	10.0 350	50.0 400	100 500	150	200
Chloroform	FB	Ave	9087 214070	37419 277167	62110 365642	90930	110983	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1-Trichloroethane	FB	Ave	6202 150418	24261 200243	39261 265655	62745	80285	5.00 175	25.0 200	50.0 250	75.0	100
Cyclohexane	FB	Ave	6365 144917	25259 183685	39045 254134	63075	76517	5.00 175	25.0 200	50.0 250	75.0	100
Carbon tetrachloride	FB	Ave	5328 121928	20901 160488	32410 222751	51519	63114	5.00 175	25.0 200	50.0 250	75.0	100
1,1-Dichloropropene	FB	Ave	6615 138733	25878 180319	39617 239540	61108	74323	5.00 175	25.0 200	50.0 250	75.0	100
Isobutyl alcohol	FB	Lin2	3215 121215	19514 155974	33609 217753	53546	63757	125 4375	625 5000	1250 6250	1875	2500
Benzene	FB	Ave	21003 416703	80087 528831	128404 689565	186164	227979	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloroethane	FB	Ave	7305 167406	30097 218497	50500 283930	73445	86712	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
n-Heptane	FB	Lin1	1260 78971	13394 104095	21797 150222	32868	40957	5.00 175	25.0 200	50.0 250	75.0	100
Trichloroethene	FB	Ave	4964 117295	20566 150092	33350 208324	47738	59468	5.00 175	25.0 200	50.0 250	75.0	100
Methylcyclohexane	FB	Ave	6011 143774	24638 189470	36503 265728	60120	73642	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichloropropane	FB	Ave	5346 110954	21601 141337	35294 189426	49127	60041	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dioxane	FB	Ave	990 28127	3862 34578	7403 44443	14123	16890	100 3500	500 4000	1000 5000	1500	2000
Dibromomethane	FB	Ave	3262 79433	14230 104239	24356 136801	35338	42777	5.00 175	25.0 200	50.0 250	75.0	100
Dichlorobromomethane	FB	Ave	6859 169544	29648 222853	50809 308720	69806	88731	5.00 175	25.0 200	50.0 250	75.0	100
cis-1,3-Dichloropropene	FB	Ave	8346 209863	35257 280868	59047 381353	86828	107428	5.00 175	25.0 200	50.0 250	75.0	100
4-Methyl-2-pentanone (MIBK)	CBNZ d5	Ave	43715 323394	64114 435900	109462 552987	146553	180442	25.0 350	50.0 400	100 500	150	200
Toluene	CBNZ d5	Ave	20768 422627	82417 537212	133078 706441	186673	231018	5.00 175	25.0 200	50.0 250	75.0	100
trans-1,3-Dichloropropene	CBNZ d5	Ave	6512 187476	28985 248765	49833 331618	75566	94159	5.00 175	25.0 200	50.0 250	75.0	100
Ethyl methacrylate	CBNZ d5	Ave	7226 189368	32584 249704	57832 323125	84380	100388	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2-Trichloroethane	CBNZ d5	Ave	4960 113378	21319 147235	35700 197512	50940	60579	5.00 175	25.0 200	50.0 250	75.0	100
Tetrachloroethene	CBNZ d5	Ave	3616 81020	13989 104458	22659 141986	35338	43673	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichloropropane	CBNZ d5	Ave	9009 201704	37199 262279	62432 342249	87801	106418	5.00 175	25.0 200	50.0 250	75.0	100
2-Hexanone	CBNZ d5	Ave	31137 224488	45571 305130	76190 393263	104877	125159	25.0 350	50.0 400	100 500	150	200
Chlorodibromomethane	CBNZ d5	Ave	4968 124262	21349 165064	36797 226362	51841	63487	5.00 175	25.0 200	50.0 250	75.0	100
Ethylene Dibromide	CBNZ d5	Ave	4664 123930	22319 166344	38731 229728	53517	64017	5.00 175	25.0 200	50.0 250	75.0	100
Chlorobenzene	CBNZ d5	Ave	11588 289645	53455 380113	88114 510030	125128	151983	5.00 175	25.0 200	50.0 250	75.0	100
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	4022 96208	18043 124120	29786 172735	41422	50702	5.00 175	25.0 200	50.0 250	75.0	100
Ethylbenzene	CBNZ d5	Ave	5803 141934	27151 182219	44092 245418	63569	78266	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
m-Xylene & p-Xylene	CBNZ d5	Ave	8102 186487	33477 242487	55795 330337	79109	98500	5.00 175	25.0 200	50.0 250	75.0	100
o-Xylene	CBNZ d5	Ave	7825 195470	36124 253387	59343 349704	83111	104326	5.00 175	25.0 200	50.0 250	75.0	100
Styrene	CBNZ d5	Ave	13580 305595	59846 391651	96818 514416	137287	170541	5.00 175	25.0 200	50.0 250	75.0	100
Bromoform	CBNZ d5	Ave	3150 100332	16764 132299	27992 185923	41372	49466	5.00 175	25.0 200	50.0 250	75.0	100
Isopropylbenzene	CBNZ d5	Ave	19593 453012	84612 579090	134785 794923	198361	244418	5.00 175	25.0 200	50.0 250	75.0	100
Bromobenzene	DCBd 4	Ave	5302 118103	22727 156174	38502 208054	52803	64007	5.00 175	25.0 200	50.0 250	75.0	100
1,1,2,2-Tetrachloroethane	CBNZ d5	Qua	6858 159606	32524 +++++	54988 +++++	75509	89482	5.00 175	25.0 +++++	50.0 +++++	75.0	100
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1695 47034	8614 62115	15084 87193	20755	24064	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichloropropane	DCBd 4	Ave	2360 51331	10353 65791	17030 91370	23378	26833	5.00 175	25.0 200	50.0 250	75.0	100
N-Propylbenzene	DCBd 4	Ave	4799 104347	20015 134791	31891 189663	45733	56227	5.00 175	25.0 200	50.0 250	75.0	100
2-Chlorotoluene	DCBd 4	Ave	4636 100009	18592 129387	31145 184492	43137	53722	5.00 175	25.0 200	50.0 250	75.0	100
1,3,5-Trimethylbenzene	DCBd 4	Ave	15064 344062	66840 444837	107623 617548	152060	183170	5.00 175	25.0 200	50.0 250	75.0	100
4-Chlorotoluene	DCBd 4	Ave	4373 98023	19729 127625	32573 177224	43246	51953	5.00 175	25.0 200	50.0 250	75.0	100
tert-Butylbenzene	DCBd 4	Ave	12403 287115	51560 377863	84969 532047	124556	155767	5.00 175	25.0 200	50.0 250	75.0	100
1,2,4-Trimethylbenzene	DCBd 4	Ave	16241 360419	69368 465030	113845 635333	162229	195666	5.00 175	25.0 200	50.0 250	75.0	100
sec-Butylbenzene	DCBd 4	Ave	16813 397684	74703 513534	115630 729928	172933	212575	5.00 175	25.0 200	50.0 250	75.0	100
1,3-Dichlorobenzene	DCBd 4	Ave	9318 208438	40738 272153	65883 370232	92537	111967	5.00 175	25.0 200	50.0 250	75.0	100
4-Isopropyltoluene	DCBd 4	Ave	14127 303217	59915 389149	96337 555281	136945	166341	5.00 175	25.0 200	50.0 250	75.0	100
1,4-Dichlorobenzene	DCBd 4	Ave	8775 196032	39539 257286	65068 355718	88050	104734	5.00 175	25.0 200	50.0 250	75.0	100
n-Butylbenzene	DCBd 4	Ave	11824 292261	53310 379120	85454 536287	127721	154000	5.00 175	25.0 200	50.0 250	75.0	100
1,2-Dichlorobenzene	DCBd 4	Ave	9098 200611	40741 259844	68348 352490	91792	110949	5.00 175	25.0 200	50.0 250	75.0	100

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	1442 45465	7286 61784	13267 +++++	19253	23077	5.00 175	25.0 200	50.0 +++++	75.0	100
1,2,4-Trichlorobenzene	DCBd 4	Ave	5722 133891	22930 175859	39470 254042	59103	69289	5.00 175	25.0 200	50.0 250	75.0	100
Hexachlorobutadiene	DCBd 4	Ave	2137 47424	8990 60882	14159 96287	21583	25136	5.00 175	25.0 200	50.0 250	75.0	100
Naphthalene	DCBd 4	Ave	15971 349513	59934 448752	110503 634700	168894	191462	5.00 175	25.0 200	50.0 250	75.0	100
1,2,3-Trichlorobenzene	DCBd 4	Ave	4654 103975	17515 135457	32060 194612	48611	55553	5.00 175	25.0 200	50.0 250	75.0	100
Dibromofluoromethane (Surr)	FB	Ave	+++++ 88948	15547 104928	28627 +++++	36637	46998	+++++ 175	25.0 200	50.0 +++++	75.0	100
1,2-Dichloroethane-d4 (Surr)	FB	Ave	+++++ 126719	22335 153116	42501 +++++	55308	68525	+++++ 175	25.0 200	50.0 +++++	75.0	100
Toluene-d8 (Surr)	CBNZ d5	Lin2	+++++ 332295	59161 389469	104307 +++++	135365	179615	+++++ 175	25.0 200	50.0 +++++	75.0	100
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	+++++ 135945	22527 165803	40562 211548	54719	70521	+++++ 175	25.0 200	50.0 250	75.0	100

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Lin2 = Linear 1/conc^2 ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
READBACK PERCENT ERROR

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189143/4	7092604.D
Level 2	IC 180-189143/14	7092614.D
Level 3	ICIS 180-189143/16	7092616.D
Level 4	IC 180-189143/6	7092606.D
Level 5	IC 180-189143/7	7092607.D
Level 6	IC 180-189143/8	7092608.D
Level 7	IC 180-189143/9	7092609.D
Level 8	IC 180-189143/10	7092610.D

ANALYTE	PERCENT ERROR						PERCENT ERROR LIMIT					
	LVL 1 # LVL 7 #	LVL 2 # LVL 8 #	LVL 3 #	LVL 4 #	LVL 5 #	LVL 6 #	LVL 1 LVL 7	LVL 2 LVL 8	LVL 3	LVL 4	LVL 5	LVL 6
Trichlorofluoromethane	-2.3 +++++	14.1 +++++	-4.9	1.8	4.4	-13.0	40	40	40	40	40	40
Methylene Chloride	-33.1 3.8	31.0 -2.4	10.9	-1.8	-4.0	-4.4	40 40	40 40	40	40	40	40
2,2-Dichloropropane	1.6 7.6	18.3 0.7	-12.7	-5.6	-8.6	-1.4	30 30	30 30	30	30	30	30
Isobutyl alcohol	-3.7 -2.0	19.8 -2.5	4.5	-0.9	-6.7	-8.5	40 40	40 40	40	40	40	40
n-Heptane	-19.9 1.7	27.4 4.5	5.5	-5.2	-6.7	-7.2	30 30	30 30	30	30	30	30
1,1,2,2-Tetrachloroethane	-97.2 * +++++	19.9 +++++	12.1	-3.8	-5.3	1.4	70	70	70	70	70	70
Toluene-d8 (Surr)	+++++ 1.2	-2.4 +++++	11.0	-10.0	0.5	-0.2	 30	30	30	30	30	30

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193223/3 Calibration Date: 11/03/2016 08:32

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2858	0.2565	0.1000	8.97	10.0	-10.3	20.0
Chloromethane	Ave	0.2978	0.2521	0.1000	8.47	10.0	-15.3	20.0
Vinyl chloride	Ave	0.2834	0.2340	0.1000	8.26	10.0	-17.4	20.0
Bromomethane	Ave	0.1147	0.1111	0.0500	9.69	10.0	-3.1	20.0
Chloroethane	Ave	0.1624	0.1277	0.0500	7.87	10.0	-21.3*	20.0
Trichlorofluoromethane	Lin2		0.2535	0.1000	8.86	10.0	-11.4	20.0
Ethyl ether	Ave	0.2292	0.2171	0.0100	9.47	10.0	-5.3	20.0
1,1-Dichloroethene	Ave	0.2437	0.2187	0.1000	8.98	10.0	-10.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2092	0.2068	0.1000	9.88	10.0	-1.2	20.0
Acetone	Ave	0.1255	0.0951	0.0500	15.2	20.0	-24.2*	20.0
Iodomethane	Ave	0.3772	0.3362	0.0100	8.91	10.0	-10.9	20.0
Carbon disulfide	Ave	0.7027	0.6163	0.1000	8.77	10.0	-12.3	20.0
Allyl chloride	Ave	0.1663	0.1477	0.0100	8.88	10.0	-11.2	20.0
Methyl acetate	Ave	0.2622	0.2674	0.1000	51.0	50.0	2.0	20.0
Methylene Chloride	Lin1		0.2668	0.1000	9.21	10.0	-7.9	20.0
tert-Butyl alcohol	Ave	1.067	0.8965	0.0100	84.1	100	-15.9	20.0
Acrylonitrile	Ave	0.1278	0.1263	0.0100	98.9	100	-1.1	20.0
trans-1,2-Dichloroethene	Ave	0.2315	0.2097	0.1000	9.06	10.0	-9.4	20.0
Methyl tert-butyl ether	Ave	0.7846	0.7729	0.1000	9.85	10.0	-1.5	20.0
Hexane	Ave	0.2400	0.2273	0.0100	9.47	10.0	-5.3	20.0
1,1-Dichloroethane	Ave	0.4632	0.4256	0.2000	9.19	10.0	-8.1	20.0
2,2-Dichloropropane	Lin1		0.2062	0.0100	11.4	10.0	13.7	20.0
cis-1,2-Dichloroethene	Ave	0.2897	0.2720	0.1000	9.39	10.0	-6.1	20.0
2-Butanone (MEK)	Ave	0.1982	0.1583	0.0500	16.0	20.0	-20.1*	20.0
Chlorobromomethane	Ave	0.1399	0.1317	0.0100	9.41	10.0	-5.9	20.0
Tetrahydrofuran	Ave	0.1242	0.1205	0.0100	19.4	20.0	-3.0	20.0
Chloroform	Ave	0.4782	0.4388	0.2000	9.17	10.0	-8.3	20.0
1,1,1-Trichloroethane	Ave	0.3294	0.3111	0.1000	9.44	10.0	-5.6	20.0
Cyclohexane	Ave	0.3234	0.3235	0.1000	10.0	10.0	0.0	20.0
Carbon tetrachloride	Ave	0.2719	0.2264	0.1000	8.33	10.0	-16.7	20.0
1,1-Dichloropropene	Ave	0.3194	0.3108	0.0100	9.73	10.0	-2.7	20.0
Isobutyl alcohol	Lin2		0.0130	0.0100	295	250	18.1	20.0
Benzene	Ave	0.9763	0.9502	0.5000	9.73	10.0	-2.7	20.0
1,2-Dichloroethane	Ave	0.3803	0.3495	0.1000	9.19	10.0	-8.1	20.0
n-Heptane	Lin1		0.1777	0.0100	10.2	10.0	1.7	20.0
Trichloroethene	Ave	0.2602	0.2436	0.2000	9.36	10.0	-6.4	20.0
Methylcyclohexane	Ave	0.3171	0.3036	0.1000	9.57	10.0	-4.3	20.0
1,2-Dichloropropane	Ave	0.2609	0.2432	0.1000	9.32	10.0	-6.8	20.0
1,4-Dioxane	Ave	0.0030	0.0035*	0.0100	234	200	17.2	20.0
Dibromomethane	Ave	0.1813	0.1625	0.0100	8.96	10.0	-10.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193223/3 Calibration Date: 11/03/2016 08:32

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorobromomethane	Ave	0.3816	0.3119	0.2000	8.17	10.0	-18.3	20.0
cis-1,3-Dichloropropene	Ave	0.4647	0.4066	0.2000	8.75	10.0	-12.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.656	1.260	0.1000	15.2	20.0	-23.9*	20.0
Toluene	Ave	4.162	3.979	0.4000	9.56	10.0	-4.4	20.0
trans-1,3-Dichloropropene	Ave	1.661	1.495	0.1000	9.00	10.0	-10.0	20.0
Ethyl methacrylate	Ave	1.778	1.717	0.0100	9.66	10.0	-3.4	20.0
1,1,2-Trichloroethane	Ave	1.103	1.030	0.1000	9.34	10.0	-6.6	20.0
Tetrachloroethene	Ave	0.7638	0.7391	0.2000	9.68	10.0	-3.2	20.0
1,3-Dichloropropane	Ave	1.939	1.793	0.0100	9.25	10.0	-7.5	20.0
2-Hexanone	Ave	1.167	0.8795	0.1000	15.1	20.0	-24.6*	20.0
Chlorodibromomethane	Ave	1.163	0.9012	0.1000	7.75	10.0	-22.5*	20.0
Ethylene Dibromide	Ave	1.181	1.081	0.1000	9.16	10.0	-8.4	20.0
Chlorobenzene	Ave	2.757	2.460	0.5000	8.92	10.0	-10.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9249	0.7743	0.0100	8.37	10.0	-16.3	20.0
Ethylbenzene	Ave	1.374	1.242	0.1000	9.04	10.0	-9.6	20.0
m-Xylene & p-Xylene	Ave	1.774	1.557	0.1000	8.78	10.0	-12.2	20.0
o-Xylene	Ave	1.861	1.691	0.3000	9.08	10.0	-9.2	20.0
Styrene	Ave	3.000	2.654	0.3000	8.85	10.0	-11.5	20.0
Bromoform	Ave	0.9030	0.6194	0.1000	6.86	10.0	-31.4*	20.0
Isopropylbenzene	Ave	4.347	3.878	0.1000	8.92	10.0	-10.8	20.0
1,1,2,2-Tetrachloroethane	Qua		1.463	0.3000	8.02	10.0	-19.8	20.0
Bromobenzene	Ave	0.8992	0.7823	0.0100	8.70	10.0	-13.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3472	0.2893	0.0100	8.33	10.0	-16.7	20.0
1,2,3-Trichloropropane	Ave	0.3938	0.3374	0.0100	8.57	10.0	-14.3	20.0
N-Propylbenzene	Ave	0.7876	0.6745	0.0100	8.56	10.0	-14.4	20.0
2-Chlorotoluene	Ave	0.7535	0.6321	0.0100	8.39	10.0	-16.1	20.0
1,3,5-Trimethylbenzene	Ave	2.593	2.152	0.0100	8.30	10.0	-17.0	20.0
4-Chlorotoluene	Ave	0.7511	0.6544	0.0100	8.71	10.0	-12.9	20.0
tert-Butylbenzene	Ave	2.133	1.760	0.0100	8.25	10.0	-17.5	20.0
1,2,4-Trimethylbenzene	Ave	2.728	2.320	0.0100	8.50	10.0	-15.0	20.0
sec-Butylbenzene	Ave	2.947	2.396	0.0100	8.13	10.0	-18.7	20.0
1,3-Dichlorobenzene	Ave	1.580	1.359	0.6000	8.60	10.0	-14.0	20.0
4-Isopropyltoluene	Ave	2.328	1.886	0.0100	8.10	10.0	-19.0	20.0
1,4-Dichlorobenzene	Ave	1.510	1.289	0.5000	8.54	10.0	-14.6	20.0
n-Butylbenzene	Ave	2.147	1.704	0.0100	7.94	10.0	-20.6*	20.0
1,2-Dichlorobenzene	Ave	1.555	1.381	0.4000	8.88	10.0	-11.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3149	0.2151	0.0500	6.83	10.0	-31.7*	20.0
1,2,4-Trichlorobenzene	Ave	0.9857	0.7027	0.2000	7.13	10.0	-28.7*	20.0
Hexachlorobutadiene	Ave	0.3616	0.2946	0.0100	8.15	10.0	-18.5	20.0
Naphthalene	Ave	2.638	1.868	0.0100	7.08	10.0	-29.2*	20.0
1,2,3-Trichlorobenzene	Ave	0.7775	0.5431	0.0100	6.99	10.0	-30.1*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193223/3 Calibration Date: 11/03/2016 08:32

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2079	0.1774		8.53	10.0	-14.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3039	0.2669		8.78	10.0	-12.2	20.0
Toluene-d8 (Surr)	Lin2		2.950		8.23	10.0	-17.7	20.0
4-Bromofluorobenzene (Surr)	Ave	1.259	1.147		9.11	10.0	-8.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193465/2 Calibration Date: 11/06/2016 10:07

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2858	0.2693	0.1000	9.42	10.0	-5.8	20.0
Chloromethane	Ave	0.2978	0.2648	0.1000	8.89	10.0	-11.1	20.0
Vinyl chloride	Ave	0.2834	0.2438	0.1000	8.60	10.0	-14.0	20.0
Bromomethane	Ave	0.1147	0.1348	0.0500	11.8	10.0	17.6	20.0
Chloroethane	Ave	0.1624	0.1322	0.0500	8.14	10.0	-18.6	20.0
Trichlorofluoromethane	Lin2		0.2445	0.1000	8.56	10.0	-14.4	20.0
Ethyl ether	Ave	0.2292	0.1994	0.0100	8.70	10.0	-13.0	20.0
1,1-Dichloroethene	Ave	0.2437	0.2154	0.1000	8.84	10.0	-11.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2092	0.1926	0.1000	9.20	10.0	-8.0	20.0
Acetone	Ave	0.1255	0.1566	0.0500	24.9	20.0	24.7*	20.0
Iodomethane	Ave	0.3772	0.3267	0.0100	8.66	10.0	-13.4	20.0
Carbon disulfide	Ave	0.7027	0.6267	0.1000	8.92	10.0	-10.8	20.0
Allyl chloride	Ave	0.1663	0.1461	0.0100	8.79	10.0	-12.1	20.0
Methyl acetate	Ave	0.2622	0.2607	0.1000	49.7	50.0	-0.6	20.0
Methylene Chloride	Lin1		0.2588	0.1000	8.94	10.0	-10.6	20.0
tert-Butyl alcohol	Ave	1.067	0.8865	0.0100	83.1	100	-16.9	20.0
Acrylonitrile	Ave	0.1278	0.1240	0.0100	97.0	100	-3.0	20.0
trans-1,2-Dichloroethene	Ave	0.2315	0.2131	0.1000	9.21	10.0	-7.9	20.0
Methyl tert-butyl ether	Ave	0.7846	0.7800	0.1000	9.94	10.0	-0.6	20.0
Hexane	Ave	0.2400	0.2160	0.0100	9.00	10.0	-10.0	20.0
1,1-Dichloroethane	Ave	0.4632	0.4337	0.2000	9.36	10.0	-6.4	20.0
2,2-Dichloropropane	Lin1		0.2202	0.0100	12.1	10.0	20.7*	20.0
cis-1,2-Dichloroethene	Ave	0.2897	0.2702	0.1000	9.33	10.0	-6.7	20.0
2-Butanone (MEK)	Ave	0.1982	0.1933	0.0500	19.5	20.0	-2.5	20.0
Chlorobromomethane	Ave	0.1399	0.1318	0.0100	9.42	10.0	-5.8	20.0
Tetrahydrofuran	Ave	0.1242	0.1250	0.0100	20.1	20.0	0.6	20.0
Chloroform	Ave	0.4782	0.4481	0.2000	9.37	10.0	-6.3	20.0
1,1,1-Trichloroethane	Ave	0.3294	0.3197	0.1000	9.71	10.0	-2.9	20.0
Cyclohexane	Ave	0.3234	0.3175	0.1000	9.82	10.0	-1.8	20.0
Carbon tetrachloride	Ave	0.2719	0.2405	0.1000	8.85	10.0	-11.5	20.0
1,1-Dichloropropene	Ave	0.3194	0.3063	0.0100	9.59	10.0	-4.1	20.0
Isobutyl alcohol	Lin2		0.0132	0.0100	301	250	20.6*	20.0
Benzene	Ave	0.9763	0.9205	0.5000	9.43	10.0	-5.7	20.0
1,2-Dichloroethane	Ave	0.3803	0.3467	0.1000	9.12	10.0	-8.8	20.0
n-Heptane	Lin1		0.1612	0.0100	9.28	10.0	-7.2	20.0
Trichloroethene	Ave	0.2602	0.2497	0.2000	9.59	10.0	-4.1	20.0
Methylcyclohexane	Ave	0.3171	0.2983	0.1000	9.41	10.0	-5.9	20.0
1,2-Dichloropropane	Ave	0.2609	0.2458	0.1000	9.42	10.0	-5.8	20.0
1,4-Dioxane	Ave	0.0030	0.0043*	0.0100	285	200	42.7*	20.0
Dibromomethane	Ave	0.1813	0.1683	0.0100	9.28	10.0	-7.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193465/2 Calibration Date: 11/06/2016 10:07

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorobromomethane	Ave	0.3816	0.3217	0.2000	8.43	10.0	-15.7	20.0
cis-1,3-Dichloropropene	Ave	0.4647	0.4300	0.2000	9.25	10.0	-7.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.656	1.288	0.1000	15.6	20.0	-22.2*	20.0
Toluene	Ave	4.162	3.920	0.4000	9.42	10.0	-5.8	20.0
trans-1,3-Dichloropropene	Ave	1.661	1.578	0.1000	9.50	10.0	-5.0	20.0
Ethyl methacrylate	Ave	1.778	1.717	0.0100	9.65	10.0	-3.5	20.0
1,1,2-Trichloroethane	Ave	1.103	1.006	0.1000	9.12	10.0	-8.8	20.0
Tetrachloroethene	Ave	0.7638	0.7015	0.2000	9.18	10.0	-8.2	20.0
1,3-Dichloropropane	Ave	1.939	1.799	0.0100	9.28	10.0	-7.2	20.0
2-Hexanone	Ave	1.167	1.021	0.1000	17.5	20.0	-12.5	20.0
Chlorodibromomethane	Ave	1.163	0.9579	0.1000	8.24	10.0	-17.6	20.0
Ethylene Dibromide	Ave	1.181	1.121	0.1000	9.49	10.0	-5.1	20.0
Chlorobenzene	Ave	2.757	2.481	0.5000	9.00	10.0	-10.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9249	0.7991	0.0100	8.64	10.0	-13.6	20.0
Ethylbenzene	Ave	1.374	1.287	0.1000	9.37	10.0	-6.3	20.0
m-Xylene & p-Xylene	Ave	1.774	1.598	0.1000	9.01	10.0	-9.9	20.0
o-Xylene	Ave	1.861	1.730	0.3000	9.29	10.0	-7.1	20.0
Styrene	Ave	3.000	2.737	0.3000	9.12	10.0	-8.8	20.0
Bromoform	Ave	0.9030	0.7025	0.1000	7.78	10.0	-22.2*	20.0
Isopropylbenzene	Ave	4.347	4.013	0.1000	9.23	10.0	-7.7	20.0
1,1,2,2-Tetrachloroethane	Qua		1.490	0.3000	8.19	10.0	-18.1	20.0
Bromobenzene	Ave	0.8992	0.7975	0.0100	8.87	10.0	-11.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3472	0.2705	0.0100	7.79	10.0	-22.1*	20.0
1,2,3-Trichloropropane	Ave	0.3938	0.3365	0.0100	8.55	10.0	-14.5	20.0
N-Propylbenzene	Ave	0.7876	0.6281	0.0100	7.98	10.0	-20.2*	20.0
2-Chlorotoluene	Ave	0.7535	0.6195	0.0100	8.22	10.0	-17.8	20.0
1,3,5-Trimethylbenzene	Ave	2.593	2.110	0.0100	8.14	10.0	-18.6	20.0
4-Chlorotoluene	Ave	0.7511	0.6153	0.0100	8.19	10.0	-18.1	20.0
tert-Butylbenzene	Ave	2.133	1.733	0.0100	8.13	10.0	-18.7	20.0
1,2,4-Trimethylbenzene	Ave	2.728	2.263	0.0100	8.29	10.0	-17.1	20.0
sec-Butylbenzene	Ave	2.947	2.389	0.0100	8.11	10.0	-18.9	20.0
1,3-Dichlorobenzene	Ave	1.580	1.310	0.6000	8.29	10.0	-17.1	20.0
4-Isopropyltoluene	Ave	2.328	1.880	0.0100	8.08	10.0	-19.2	20.0
1,4-Dichlorobenzene	Ave	1.510	1.242	0.5000	8.23	10.0	-17.7	20.0
n-Butylbenzene	Ave	2.147	1.713	0.0100	7.98	10.0	-20.2*	20.0
1,2-Dichlorobenzene	Ave	1.555	1.317	0.4000	8.47	10.0	-15.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3149	0.2583	0.0500	8.20	10.0	-18.0	20.0
1,2,4-Trichlorobenzene	Ave	0.9857	0.7534	0.2000	7.64	10.0	-23.6*	20.0
Hexachlorobutadiene	Ave	0.3616	0.3134	0.0100	8.67	10.0	-13.3	20.0
Naphthalene	Ave	2.638	4.826	0.0100	18.3	10.0	83.0*	20.0
1,2,3-Trichlorobenzene	Ave	0.7775	0.5448	0.0100	7.01	10.0	-29.9*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193465/2 Calibration Date: 11/06/2016 10:07

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2079	0.1844		8.87	10.0	-11.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3039	0.2719		8.95	10.0	-10.5	20.0
Toluene-d8 (Surr)	Lin2		2.975		8.32	10.0	-16.8	20.0
4-Bromofluorobenzene (Surr)	Ave	1.259	1.246		9.90	10.0	-1.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193502/3 Calibration Date: 11/07/2016 09:44

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110703.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2858	0.3032	0.1000	10.6	10.0	6.1	20.0
Chloromethane	Ave	0.2978	0.2735	0.1000	9.18	10.0	-8.2	20.0
Vinyl chloride	Ave	0.2834	0.2515	0.1000	8.87	10.0	-11.3	20.0
Bromomethane	Ave	0.1147	0.1104	0.0500	9.63	10.0	-3.7	20.0
Chloroethane	Ave	0.1624	0.1309	0.0500	8.06	10.0	-19.4	20.0
Trichlorofluoromethane	Lin2		0.2623	0.1000	9.15	10.0	-8.5	20.0
Ethyl ether	Ave	0.2292	0.2022	0.0100	8.82	10.0	-11.8	20.0
1,1-Dichloroethene	Ave	0.2437	0.2182	0.1000	8.95	10.0	-10.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2092	0.2131	0.1000	10.2	10.0	1.8	20.0
Acetone	Ave	0.1255	0.1670	0.0500	26.6	20.0	33.0*	20.0
Iodomethane	Ave	0.3772	0.3315	0.0100	8.79	10.0	-12.1	20.0
Carbon disulfide	Ave	0.7027	0.6291	0.1000	8.95	10.0	-10.5	20.0
Allyl chloride	Ave	0.1663	0.1435	0.0100	8.63	10.0	-13.7	20.0
Methyl acetate	Ave	0.2622	0.2740	0.1000	52.2	50.0	4.5	20.0
Methylene Chloride	Lin1		0.2673	0.1000	9.23	10.0	-7.7	20.0
tert-Butyl alcohol	Ave	1.067	0.9118	0.0100	85.5	100	-14.5	20.0
Acrylonitrile	Ave	0.1278	0.1308	0.0100	102	100	2.4	20.0
trans-1,2-Dichloroethene	Ave	0.2315	0.2178	0.1000	9.41	10.0	-5.9	20.0
Methyl tert-butyl ether	Ave	0.7846	0.7736	0.1000	9.86	10.0	-1.4	20.0
Hexane	Ave	0.2400	0.2459	0.0100	10.2	10.0	2.4	20.0
1,1-Dichloroethane	Ave	0.4632	0.4437	0.2000	9.58	10.0	-4.2	20.0
2,2-Dichloropropane	Lin1		0.1801	0.0100	10.0	10.0	0.4	20.0
cis-1,2-Dichloroethene	Ave	0.2897	0.2689	0.1000	9.28	10.0	-7.2	20.0
2-Butanone (MEK)	Ave	0.1982	0.2101	0.0500	21.2	20.0	6.0	20.0
Chlorobromomethane	Ave	0.1399	0.1327	0.0100	9.49	10.0	-5.1	20.0
Tetrahydrofuran	Ave	0.1242	0.1306	0.0100	21.0	20.0	5.1	20.0
Chloroform	Ave	0.4782	0.4436	0.2000	9.28	10.0	-7.2	20.0
1,1,1-Trichloroethane	Ave	0.3294	0.3112	0.1000	9.45	10.0	-5.5	20.0
Cyclohexane	Ave	0.3234	0.3473	0.1000	10.7	10.0	7.4	20.0
Carbon tetrachloride	Ave	0.2719	0.2337	0.1000	8.59	10.0	-14.1	20.0
1,1-Dichloropropene	Ave	0.3194	0.3241	0.0100	10.1	10.0	1.5	20.0
Isobutyl alcohol	Lin2		0.0140	0.0100	317	250	26.9*	20.0
Benzene	Ave	0.9763	0.9559	0.5000	9.79	10.0	-2.1	20.0
1,2-Dichloroethane	Ave	0.3803	0.3570	0.1000	9.39	10.0	-6.1	20.0
n-Heptane	Lin1		0.2032	0.0100	11.6	10.0	15.6	20.0
Trichloroethene	Ave	0.2602	0.2550	0.2000	9.80	10.0	-2.0	20.0
Methylcyclohexane	Ave	0.3171	0.3233	0.1000	10.2	10.0	2.0	20.0
1,2-Dichloropropane	Ave	0.2609	0.2463	0.1000	9.44	10.0	-5.6	20.0
Dibromomethane	Ave	0.1813	0.1684	0.0100	9.29	10.0	-7.1	20.0
1,4-Dioxane	Ave	0.0030	0.0045*	0.0100	297	200	48.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193502/3 Calibration Date: 11/07/2016 09:44

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110703.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorobromomethane	Ave	0.3816	0.3122	0.2000	8.18	10.0	-18.2	20.0
cis-1,3-Dichloropropene	Ave	0.4647	0.4100	0.2000	8.82	10.0	-11.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.656	1.439	0.1000	17.4	20.0	-13.1	20.0
Toluene	Ave	4.162	4.166	0.4000	10.0	10.0	0.1	20.0
trans-1,3-Dichloropropene	Ave	1.661	1.525	0.1000	9.19	10.0	-8.1	20.0
Ethyl methacrylate	Ave	1.778	1.786	0.0100	10.0	10.0	0.4	20.0
1,1,2-Trichloroethane	Ave	1.103	1.046	0.1000	9.49	10.0	-5.1	20.0
Tetrachloroethene	Ave	0.7638	0.7791	0.2000	10.2	10.0	2.0	20.0
1,3-Dichloropropane	Ave	1.939	1.918	0.0100	9.89	10.0	-1.1	20.0
2-Hexanone	Ave	1.167	1.134	0.1000	19.4	20.0	-2.8	20.0
Chlorodibromomethane	Ave	1.163	0.9024	0.1000	7.76	10.0	-22.4*	20.0
Ethylene Dibromide	Ave	1.181	1.138	0.1000	9.64	10.0	-3.6	20.0
Chlorobenzene	Ave	2.757	2.613	0.5000	9.48	10.0	-5.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9249	0.8100	0.0100	8.76	10.0	-12.4	20.0
Ethylbenzene	Ave	1.374	1.335	0.1000	9.72	10.0	-2.8	20.0
m-Xylene & p-Xylene	Ave	1.774	1.680	0.1000	9.47	10.0	-5.3	20.0
o-Xylene	Ave	1.861	1.806	0.3000	9.70	10.0	-3.0	20.0
Styrene	Ave	3.000	2.915	0.3000	9.72	10.0	-2.8	20.0
Bromoform	Ave	0.9030	0.6463	0.1000	7.16	10.0	-28.4*	20.0
Isopropylbenzene	Ave	4.347	4.190	0.1000	9.64	10.0	-3.6	20.0
Bromobenzene	Ave	0.8992	0.8249	0.0100	9.17	10.0	-8.3	20.0
1,1,2,2-Tetrachloroethane	Qua		1.614	0.3000	8.99	10.0	-10.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3472	0.3051	0.0100	8.79	10.0	-12.1	20.0
1,2,3-Trichloropropane	Ave	0.3938	0.3777	0.0100	9.59	10.0	-4.1	20.0
N-Propylbenzene	Ave	0.7876	0.7024	0.0100	8.92	10.0	-10.8	20.0
2-Chlorotoluene	Ave	0.7535	0.6703	0.0100	8.90	10.0	-11.0	20.0
1,3,5-Trimethylbenzene	Ave	2.593	2.279	0.0100	8.79	10.0	-12.1	20.0
4-Chlorotoluene	Ave	0.7511	0.6704	0.0100	8.92	10.0	-10.8	20.0
tert-Butylbenzene	Ave	2.133	1.866	0.0100	8.75	10.0	-12.5	20.0
1,2,4-Trimethylbenzene	Ave	2.728	2.463	0.0100	9.03	10.0	-9.7	20.0
sec-Butylbenzene	Ave	2.947	2.589	0.0100	8.78	10.0	-12.2	20.0
1,3-Dichlorobenzene	Ave	1.580	1.412	0.6000	8.94	10.0	-10.6	20.0
4-Isopropyltoluene	Ave	2.328	2.008	0.0100	8.63	10.0	-13.7	20.0
1,4-Dichlorobenzene	Ave	1.510	1.339	0.5000	8.87	10.0	-11.3	20.0
n-Butylbenzene	Ave	2.147	1.842	0.0100	8.58	10.0	-14.2	20.0
1,2-Dichlorobenzene	Ave	1.555	1.422	0.4000	9.14	10.0	-8.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3149	0.2557	0.0500	8.12	10.0	-18.8	20.0
1,2,4-Trichlorobenzene	Ave	0.9857	0.8377	0.2000	8.50	10.0	-15.0	20.0
Hexachlorobutadiene	Ave	0.3616	0.3468	0.0100	9.59	10.0	-4.1	20.0
Naphthalene	Ave	2.638	2.458	0.0100	9.32	10.0	-6.8	20.0
1,2,3-Trichlorobenzene	Ave	0.7775	0.6640	0.0100	8.54	10.0	-14.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193502/3 Calibration Date: 11/07/2016 09:44

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110703.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2079	0.1801		8.67	10.0	-13.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3039	0.2665		8.77	10.0	-12.3	20.0
Toluene-d8 (Surr)	Lin2		3.008		8.45	10.0	-15.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.259	1.206		9.58	10.0	-4.2	20.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193223/8

Matrix: Water | Lab File ID: 7110308.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 10:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193223/8

Matrix: Water | Lab File ID: 7110308.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 10:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	91		77-127
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193465/8

Matrix: Water | Lab File ID: 7110608.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 12:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193465/8

Matrix: Water | Lab File ID: 7110608.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 12:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.228	J	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193502/8

Matrix: Water | Lab File ID: 7110708.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 12:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193502/8

Matrix: Water | Lab File ID: 7110708.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 12:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	85		80-120
1868-53-7	Dibromofluoromethane (Surr)	82		77-127
460-00-4	4-Bromofluorobenzene (Surr)	91		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-193223/4

Matrix: Water | Lab File ID: 7110304.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 08:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	9.38		1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	8.69		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10.0		1.0	0.24
79-00-5	1,1,2-Trichloroethane	9.68		1.0	0.31
75-34-3	1,1-Dichloroethane	9.24		1.0	0.34
75-35-4	1,1-Dichloroethene	8.88		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	7.41		1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	7.26		2.0	0.40
95-50-1	1,2-Dichlorobenzene	9.27		1.0	0.23
107-06-2	1,2-Dichloroethane	9.27		1.0	0.24
78-87-5	1,2-Dichloropropane	9.49		1.0	0.35
541-73-1	1,3-Dichlorobenzene	9.05		1.0	0.21
106-46-7	1,4-Dichlorobenzene	9.21		1.0	0.24
78-93-3	2-Butanone (MEK)	16.0		10	2.6
591-78-6	2-Hexanone	16.0		10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	16.3		10	2.2
67-64-1	Acetone	15.4		10	3.1
71-43-2	Benzene	9.70		1.0	0.18
75-25-2	Bromoform	7.16		1.0	0.76
74-83-9	Bromomethane	9.79		1.0	0.59
75-15-0	Carbon disulfide	8.63		1.0	0.53
56-23-5	Carbon tetrachloride	8.54		1.0	0.56
108-90-7	Chlorobenzene	9.65		1.0	0.15
124-48-1	Chlorodibromomethane	8.03		1.0	0.44
75-00-3	Chloroethane	7.73		1.0	0.58
67-66-3	Chloroform	9.43		1.0	0.27
74-87-3	Chloromethane	8.20		1.0	0.38
156-59-2	cis-1,2-Dichloroethene	9.28		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	8.65		1.0	0.32
110-82-7	Cyclohexane	10.6		1.0	0.27
75-71-8	Dichlorodifluoromethane	9.11		1.0	0.47
75-27-4	Dichlorobromomethane	8.00		1.0	0.57
100-41-4	Ethylbenzene	9.80		1.0	0.25
98-82-8	Isopropylbenzene	9.32		1.0	0.21
79-20-9	Methyl acetate	50.8		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh
Job No.: 240-71528-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 180-193223/4
Matrix: Water
Lab File ID: 7110304.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/03/2016 08:59
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 193223
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	9.87		1.0	0.19
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.20
75-09-2	Methylene Chloride	9.41		1.0	0.94
100-42-5	Styrene	9.49		1.0	0.22
127-18-4	Tetrachloroethene	9.83		1.0	0.24
108-88-3	Toluene	10.1		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	9.18		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	9.32		1.0	0.22
79-01-6	Trichloroethene	9.21		1.0	0.20
75-69-4	Trichlorofluoromethane	8.94		1.0	0.40
75-01-4	Vinyl chloride	8.12		1.0	0.17
1330-20-7	Xylenes, Total	19.0		2.0	0.27
106-93-4	Ethylene Dibromide	9.94		1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	85		77-127
460-00-4	4-Bromofluorobenzene (Surr)	97		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-193465/4

Matrix: Water | Lab File ID: 7110604.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 10:50

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	9.46		1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	8.40		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	9.03		1.0	0.24
79-00-5	1,1,2-Trichloroethane	9.32		1.0	0.31
75-34-3	1,1-Dichloroethane	9.58		1.0	0.34
75-35-4	1,1-Dichloroethene	8.47		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	8.78		1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	8.79		2.0	0.40
95-50-1	1,2-Dichlorobenzene	8.99		1.0	0.23
107-06-2	1,2-Dichloroethane	9.56		1.0	0.24
78-87-5	1,2-Dichloropropane	9.77		1.0	0.35
541-73-1	1,3-Dichlorobenzene	8.72		1.0	0.21
106-46-7	1,4-Dichlorobenzene	8.75		1.0	0.24
78-93-3	2-Butanone (MEK)	18.8		10	2.6
591-78-6	2-Hexanone	17.1		10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	16.1		10	2.2
67-64-1	Acetone	24.2		10	3.1
71-43-2	Benzene	9.47		1.0	0.18
75-25-2	Bromoform	7.73		1.0	0.76
74-83-9	Bromomethane	11.1		1.0	0.59
75-15-0	Carbon disulfide	8.54		1.0	0.53
56-23-5	Carbon tetrachloride	8.50		1.0	0.56
108-90-7	Chlorobenzene	8.98		1.0	0.15
124-48-1	Chlorodibromomethane	8.10		1.0	0.44
75-00-3	Chloroethane	8.21		1.0	0.58
67-66-3	Chloroform	9.43		1.0	0.27
74-87-3	Chloromethane	8.71		1.0	0.38
156-59-2	cis-1,2-Dichloroethene	9.50		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	9.55		1.0	0.32
110-82-7	Cyclohexane	9.24		1.0	0.27
75-71-8	Dichlorodifluoromethane	8.81		1.0	0.47
75-27-4	Dichlorobromomethane	8.58		1.0	0.57
100-41-4	Ethylbenzene	9.22		1.0	0.25
98-82-8	Isopropylbenzene	9.12		1.0	0.21
79-20-9	Methyl acetate	52.6		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh
Job No.: 240-71528-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 180-193465/4
Matrix: Water
Lab File ID: 7110604.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/06/2016 10:50
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 193465
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	9.01		1.0	0.19
1634-04-4	Methyl tert-butyl ether	10.4		1.0	0.20
75-09-2	Methylene Chloride	9.10		1.0	0.94
100-42-5	Styrene	9.18		1.0	0.22
127-18-4	Tetrachloroethene	9.18		1.0	0.24
108-88-3	Toluene	9.34		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	9.12		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	9.29		1.0	0.22
79-01-6	Trichloroethene	10.0		1.0	0.20
75-69-4	Trichlorofluoromethane	7.99		1.0	0.40
75-01-4	Vinyl chloride	8.15		1.0	0.17
1330-20-7	Xylenes, Total	18.1		2.0	0.27
106-93-4	Ethylene Dibromide	9.61		1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	83		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-127
460-00-4	4-Bromofluorobenzene (Surr)	97		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCS 180-193502/4

Matrix: Water | Lab File ID: 7110704.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 10:11

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	9.10		1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	8.74		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	8.83		1.0	0.24
79-00-5	1,1,2-Trichloroethane	9.53		1.0	0.31
75-34-3	1,1-Dichloroethane	9.48		1.0	0.34
75-35-4	1,1-Dichloroethene	8.54		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	8.73		1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	7.69		2.0	0.40
95-50-1	1,2-Dichlorobenzene	9.36		1.0	0.23
107-06-2	1,2-Dichloroethane	9.71		1.0	0.24
78-87-5	1,2-Dichloropropane	9.60		1.0	0.35
541-73-1	1,3-Dichlorobenzene	9.21		1.0	0.21
106-46-7	1,4-Dichlorobenzene	8.89		1.0	0.24
78-93-3	2-Butanone (MEK)	20.2		10	2.6
591-78-6	2-Hexanone	18.3		10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	16.3		10	2.2
67-64-1	Acetone	25.0		10	3.1
71-43-2	Benzene	9.86		1.0	0.18
75-25-2	Bromoform	7.04		1.0	0.76
74-83-9	Bromomethane	9.73		1.0	0.59
75-15-0	Carbon disulfide	8.55		1.0	0.53
56-23-5	Carbon tetrachloride	8.04		1.0	0.56
108-90-7	Chlorobenzene	9.46		1.0	0.15
124-48-1	Chlorodibromomethane	7.82		1.0	0.44
75-00-3	Chloroethane	8.03		1.0	0.58
67-66-3	Chloroform	9.40		1.0	0.27
74-87-3	Chloromethane	8.43		1.0	0.38
156-59-2	cis-1,2-Dichloroethene	9.30		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	8.96		1.0	0.32
110-82-7	Cyclohexane	9.56		1.0	0.27
75-71-8	Dichlorodifluoromethane	8.71		1.0	0.47
75-27-4	Dichlorobromomethane	8.40		1.0	0.57
100-41-4	Ethylbenzene	9.74		1.0	0.25
98-82-8	Isopropylbenzene	9.38		1.0	0.21
79-20-9	Methyl acetate	50.2		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh
Job No.: 240-71528-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCS 180-193502/4
Matrix: Water
Lab File ID: 7110704.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/07/2016 10:11
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 193502
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	8.77		1.0	0.19
1634-04-4	Methyl tert-butyl ether	10.1		1.0	0.20
75-09-2	Methylene Chloride	9.48		1.0	0.94
100-42-5	Styrene	9.70		1.0	0.22
127-18-4	Tetrachloroethene	9.83		1.0	0.24
108-88-3	Toluene	9.98		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	9.14		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	9.11		1.0	0.22
79-01-6	Trichloroethene	9.25		1.0	0.20
75-69-4	Trichlorofluoromethane	8.12		1.0	0.40
75-01-4	Vinyl chloride	8.16		1.0	0.17
1330-20-7	Xylenes, Total	19.0		2.0	0.27
106-93-4	Ethylene Dibromide	9.62		1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	86		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-193223/5

Matrix: Water | Lab File ID: 7110305.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 09:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	11.1		1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	10.1		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	11.8		1.0	0.24
79-00-5	1,1,2-Trichloroethane	10.9		1.0	0.31
75-34-3	1,1-Dichloroethane	10.7		1.0	0.34
75-35-4	1,1-Dichloroethene	10.5		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	8.37		1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	7.60		2.0	0.40
95-50-1	1,2-Dichlorobenzene	10.2		1.0	0.23
107-06-2	1,2-Dichloroethane	10.9		1.0	0.24
78-87-5	1,2-Dichloropropane	11.0		1.0	0.35
541-73-1	1,3-Dichlorobenzene	9.95		1.0	0.21
106-46-7	1,4-Dichlorobenzene	10.1		1.0	0.24
78-93-3	2-Butanone (MEK)	17.2		10	2.6
591-78-6	2-Hexanone	16.6		10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	17.0		10	2.2
67-64-1	Acetone	16.2		10	3.1
71-43-2	Benzene	11.2		1.0	0.18
75-25-2	Bromoform	7.99		1.0	0.76
74-83-9	Bromomethane	12.2		1.0	0.59
75-15-0	Carbon disulfide	10.3		1.0	0.53
56-23-5	Carbon tetrachloride	10.1		1.0	0.56
108-90-7	Chlorobenzene	10.8		1.0	0.15
124-48-1	Chlorodibromomethane	8.83		1.0	0.44
75-00-3	Chloroethane	8.94		1.0	0.58
67-66-3	Chloroform	10.6		1.0	0.27
74-87-3	Chloromethane	9.38		1.0	0.38
156-59-2	cis-1,2-Dichloroethene	10.9		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	9.98		1.0	0.32
110-82-7	Cyclohexane	12.1		1.0	0.27
75-71-8	Dichlorodifluoromethane	10.6		1.0	0.47
75-27-4	Dichlorobromomethane	9.46		1.0	0.57
100-41-4	Ethylbenzene	10.9		1.0	0.25
98-82-8	Isopropylbenzene	10.6		1.0	0.21
79-20-9	Methyl acetate	58.2		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh
Job No.: 240-71528-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 180-193223/5
Matrix: Water
Lab File ID: 7110305.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/03/2016 09:26
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 193223
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	11.8		1.0	0.19
1634-04-4	Methyl tert-butyl ether	11.6		1.0	0.20
75-09-2	Methylene Chloride	10.7		1.0	0.94
100-42-5	Styrene	10.7		1.0	0.22
127-18-4	Tetrachloroethene	11.6		1.0	0.24
108-88-3	Toluene	11.3		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	10.8		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	10.5		1.0	0.22
79-01-6	Trichloroethene	10.8		1.0	0.20
75-69-4	Trichlorofluoromethane	10.5		1.0	0.40
75-01-4	Vinyl chloride	9.74		1.0	0.17
1330-20-7	Xylenes, Total	21.1		2.0	0.27
106-93-4	Ethylene Dibromide	10.9		1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	98		80-120
1868-53-7	Dibromofluoromethane (Surr)	96		77-127
460-00-4	4-Bromofluorobenzene (Surr)	101		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-193465/14

Matrix: Water | Lab File ID: 7110614.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 15:24

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	8.75		1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	8.92		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	7.57		1.0	0.24
79-00-5	1,1,2-Trichloroethane	9.83		1.0	0.31
75-34-3	1,1-Dichloroethane	9.28		1.0	0.34
75-35-4	1,1-Dichloroethene	7.95		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	7.88		1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	8.33		2.0	0.40
95-50-1	1,2-Dichlorobenzene	9.27		1.0	0.23
107-06-2	1,2-Dichloroethane	10.3		1.0	0.24
78-87-5	1,2-Dichloropropane	10.3		1.0	0.35
541-73-1	1,3-Dichlorobenzene	8.89		1.0	0.21
106-46-7	1,4-Dichlorobenzene	8.83		1.0	0.24
78-93-3	2-Butanone (MEK)	17.3		10	2.6
591-78-6	2-Hexanone	16.0		10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	16.6		10	2.2
67-64-1	Acetone	16.2		10	3.1
71-43-2	Benzene	9.50		1.0	0.18
75-25-2	Bromoform	7.28		1.0	0.76
74-83-9	Bromomethane	9.25		1.0	0.59
75-15-0	Carbon disulfide	7.91		1.0	0.53
56-23-5	Carbon tetrachloride	7.43		1.0	0.56
108-90-7	Chlorobenzene	9.23		1.0	0.15
124-48-1	Chlorodibromomethane	8.09		1.0	0.44
75-00-3	Chloroethane	7.80		1.0	0.58
67-66-3	Chloroform	9.56		1.0	0.27
74-87-3	Chloromethane	8.40		1.0	0.38
156-59-2	cis-1,2-Dichloroethene	9.62		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	9.06		1.0	0.32
110-82-7	Cyclohexane	8.30		1.0	0.27
75-71-8	Dichlorodifluoromethane	7.59		1.0	0.47
75-27-4	Dichlorobromomethane	8.66		1.0	0.57
100-41-4	Ethylbenzene	9.26		1.0	0.25
98-82-8	Isopropylbenzene	8.68		1.0	0.21
79-20-9	Methyl acetate	54.8		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh
Job No.: 240-71528-1
SDG No.:
Client Sample ID:
Lab Sample ID: LCSD 180-193465/14
Matrix: Water
Lab File ID: 7110614.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/06/2016 15:24
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 193465
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	7.42		1.0	0.19
1634-04-4	Methyl tert-butyl ether	10.7		1.0	0.20
75-09-2	Methylene Chloride	9.79		1.0	0.94
100-42-5	Styrene	9.14		1.0	0.22
127-18-4	Tetrachloroethene	8.71		1.0	0.24
108-88-3	Toluene	9.36		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	8.76		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	8.95		1.0	0.22
79-01-6	Trichloroethene	9.29		1.0	0.20
75-69-4	Trichlorofluoromethane	7.00		1.0	0.40
75-01-4	Vinyl chloride	7.67		1.0	0.17
1330-20-7	Xylenes, Total	17.9		2.0	0.27
106-93-4	Ethylene Dibromide	9.98		1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	94		80-120
1868-53-7	Dibromofluoromethane (Surr)	101		77-127
460-00-4	4-Bromofluorobenzene (Surr)	104		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	107		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-193502/5

Matrix: Water | Lab File ID: 7110705.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 10:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	8.93		1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	8.74		1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	8.54		1.0	0.24
79-00-5	1,1,2-Trichloroethane	9.55		1.0	0.31
75-34-3	1,1-Dichloroethane	9.54		1.0	0.34
75-35-4	1,1-Dichloroethene	8.47		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	8.66		1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	7.47		2.0	0.40
95-50-1	1,2-Dichlorobenzene	9.04		1.0	0.23
107-06-2	1,2-Dichloroethane	9.80		1.0	0.24
78-87-5	1,2-Dichloropropane	10.2		1.0	0.35
541-73-1	1,3-Dichlorobenzene	8.99		1.0	0.21
106-46-7	1,4-Dichlorobenzene	9.07		1.0	0.24
78-93-3	2-Butanone (MEK)	20.4		10	2.6
591-78-6	2-Hexanone	17.5		10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	16.2		10	2.2
67-64-1	Acetone	25.6		10	3.1
71-43-2	Benzene	9.87		1.0	0.18
75-25-2	Bromoform	7.10		1.0	0.76
74-83-9	Bromomethane	9.65		1.0	0.59
75-15-0	Carbon disulfide	8.19		1.0	0.53
56-23-5	Carbon tetrachloride	7.95		1.0	0.56
108-90-7	Chlorobenzene	9.32		1.0	0.15
124-48-1	Chlorodibromomethane	7.52		1.0	0.44
75-00-3	Chloroethane	7.69		1.0	0.58
67-66-3	Chloroform	9.44		1.0	0.27
74-87-3	Chloromethane	8.59		1.0	0.38
156-59-2	cis-1,2-Dichloroethene	9.41		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	9.00		1.0	0.32
110-82-7	Cyclohexane	9.12		1.0	0.27
75-71-8	Dichlorodifluoromethane	8.76		1.0	0.47
75-27-4	Dichlorobromomethane	8.34		1.0	0.57
100-41-4	Ethylbenzene	9.47		1.0	0.25
98-82-8	Isopropylbenzene	8.94		1.0	0.21
79-20-9	Methyl acetate	51.7		10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: LCSD 180-193502/5

Matrix: Water | Lab File ID: 7110705.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 10:37

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	8.39		1.0	0.19
1634-04-4	Methyl tert-butyl ether	10.3		1.0	0.20
75-09-2	Methylene Chloride	9.45		1.0	0.94
100-42-5	Styrene	9.29		1.0	0.22
127-18-4	Tetrachloroethene	9.30		1.0	0.24
108-88-3	Toluene	9.60		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	8.98		1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	8.97		1.0	0.22
79-01-6	Trichloroethene	9.58		1.0	0.20
75-69-4	Trichlorofluoromethane	8.23		1.0	0.40
75-01-4	Vinyl chloride	8.10		1.0	0.17
1330-20-7	Xylenes, Total	18.2		2.0	0.27
106-93-4	Ethylene Dibromide	9.68		1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	80		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-134

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 09/26/2016 08:04

Analysis Batch Number: 189143 End Date: 09/28/2016 11:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-189143/1		09/26/2016 08:04	1	7092601.D	DB-624 0.18(mm)
IC 180-189143/4		09/26/2016 10:49	1	7092604.D	DB-624 0.18(mm)
IC 180-189143/6		09/26/2016 12:39	1	7092606.D	DB-624 0.18(mm)
IC 180-189143/7		09/26/2016 13:06	1	7092607.D	DB-624 0.18(mm)
IC 180-189143/8		09/26/2016 14:00	1	7092608.D	DB-624 0.18(mm)
IC 180-189143/9		09/26/2016 14:28	1	7092609.D	DB-624 0.18(mm)
IC 180-189143/10		09/26/2016 15:04	1	7092610.D	DB-624 0.18(mm)
IC 180-189143/14		09/26/2016 17:48	1	7092614.D	DB-624 0.18(mm)
ICIS 180-189143/16		09/26/2016 18:43	1	7092616.D	DB-624 0.18(mm)
ICV 180-189143/17		09/26/2016 19:12	1		DB-624 0.18(mm)
ZZZZZ		09/27/2016 11:48	1		DB-624 0.18(mm)
ZZZZZ		09/28/2016 11:14	1		DB-624 0.18(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/03/2016 07:13

Analysis Batch Number: 193223 End Date: 11/03/2016 18:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-193223/1		11/03/2016 07:13	1	7110301.D	DB-624 0.18(mm)
CCVIS 180-193223/3		11/03/2016 08:32	1	7110303.D	DB-624 0.18(mm)
LCS 180-193223/4		11/03/2016 08:59	1	7110304.D	DB-624 0.18(mm)
LCSD 180-193223/5		11/03/2016 09:26	1	7110305.D	DB-624 0.18(mm)
ZZZZZ		11/03/2016 09:53	1		DB-624 0.18(mm)
MB 180-193223/8		11/03/2016 10:48	1	7110308.D	DB-624 0.18(mm)
240-71528-4		11/03/2016 14:31	1	7110316.D	DB-624 0.18(mm)
240-71528-1		11/03/2016 14:59	1	7110317.D	DB-624 0.18(mm)
240-71528-2		11/03/2016 15:26	1	7110318.D	DB-624 0.18(mm)
240-71528-3		11/03/2016 15:53	1	7110319.D	DB-624 0.18(mm)
240-71528-5		11/03/2016 16:21	1	7110320.D	DB-624 0.18(mm)
240-71528-6		11/03/2016 16:49	1	7110321.D	DB-624 0.18(mm)
240-71528-7		11/03/2016 17:17	1	7110322.D	DB-624 0.18(mm)
240-71528-8		11/03/2016 17:44	1	7110323.D	DB-624 0.18(mm)
240-71528-9		11/03/2016 18:12	1	7110324.D	DB-624 0.18(mm)
240-71528-10		11/03/2016 18:39	1	7110325.D	DB-624 0.18(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/06/2016 09:27

Analysis Batch Number: 193465 End Date: 11/06/2016 20:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-193465/1		11/06/2016 09:27	1	7110601.D	DB-624 0.18(mm)
CCVIS 180-193465/2		11/06/2016 10:07	1	7110602.D	DB-624 0.18(mm)
LCS 180-193465/4		11/06/2016 10:50	1	7110604.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 11:43	1		DB-624 0.18(mm)
MB 180-193465/8		11/06/2016 12:38	1	7110608.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 13:05	1		DB-624 0.18(mm)
ZZZZZ		11/06/2016 14:01	1		DB-624 0.18(mm)
240-71528-2 DL		11/06/2016 14:29	40	7110612.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 14:57	1		DB-624 0.18(mm)
LCSD 180-193465/14		11/06/2016 15:24	1	7110614.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 15:52	1		DB-624 0.18(mm)
240-71528-5 DL		11/06/2016 16:20	100	7110616.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 16:48	1		DB-624 0.18(mm)
ZZZZZ		11/06/2016 17:43	1		DB-624 0.18(mm)
240-71528-1 DL		11/06/2016 18:10	200	7110620.D	DB-624 0.18(mm)
240-71528-5 DL2		11/06/2016 18:37	500	7110621.D	DB-624 0.18(mm)
240-71528-6 DL		11/06/2016 19:04	200	7110622.D	DB-624 0.18(mm)
240-71528-9 DL		11/06/2016 19:32	10	7110623.D	DB-624 0.18(mm)
240-71528-10 DL		11/06/2016 19:59	2.5	7110624.D	DB-624 0.18(mm)
240-71528-8 DL		11/06/2016 20:54	500	7110626.D	DB-624 0.18(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/07/2016 08:22

Analysis Batch Number: 193502 End Date: 11/07/2016 13:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-193502/1		11/07/2016 08:22	1	7110701.D	DB-624 0.18(mm)
CCVIS 180-193502/3		11/07/2016 09:44	1	7110703.D	DB-624 0.18(mm)
LCS 180-193502/4		11/07/2016 10:11	1	7110704.D	DB-624 0.18(mm)
LCSD 180-193502/5		11/07/2016 10:37	1	7110705.D	DB-624 0.18(mm)
ZZZZZ		11/07/2016 11:05	1		DB-624 0.18(mm)
MB 180-193502/8		11/07/2016 12:01	1	7110708.D	DB-624 0.18(mm)
240-71528-3 DL		11/07/2016 13:24	30	7110711.D	DB-624 0.18(mm)
240-71528-7 DL		11/07/2016 13:52	30	7110712.D	DB-624 0.18(mm)

8260C

Subcontract Data

Shipping and Receiving Documents

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

180325
1.4|1.8
BALTIMORE

Chain of Custody Record

000017

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

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

Client Contact	Project Manager: Chris Pike	Site Contact: Stu Cameron	Date: 10/31/16	COC No:
Company Name: Tetra Tech	Tel/Fax: (410)302-1624	Lab Contact: John McFadden	Carrier:	1 of 1 COCs
Address: 20251 Century Blvd Ste 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown MD 20874	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (301) 528-5552	TAT if different from Below 5 day			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Block E Downgradient TCE GW	☒ 1 week			
Site: Middle River Complex, MD	☐ 2 days			Job / SDG No.:
PO# 112IC07896	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	Sample Specific Notes:
MRC-D2-S	10/31/16	0945	G	AQ	3			X	
MRC-D2-I		0955	G	AQ	3			X	
MRC-D2-D		1012	G	AQ	3			X	
TB-103116		—	G	AQ	2			X	
MRC-D3-S		1045		AQ	3			X	
MRC-D3-I		1050		AQ	3			X	
MRC-D3-D		1110		AQ	3			X	
MRC-D4-S		1252		AQ	3			X	
MRC-D4-I		1310		AQ	3			X	
MRC-D4-D		1322		AQ	3			X	
								2	

240-71528 Chain of Custody

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

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

Special Instructions/QC Requirements & Comments:

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	10/31/16-1600	[signature]	TestAmerica	10-31-2016/1600
Relinquished by: [signature]	Company: TestAmerica	Date/Time: 10-31-2016/1640	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA NC	Date/Time: 11/1/16 0915

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 71528
Canton Facility

Client Tetra Tech Site Name BlakE Cooler unpacked by: [illegible]
Cooler Received on 11/1/16 Opened on 11/1/16
FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time 9:15 Storage Location

TestAmerica Cooler # Foam Box (Client Cooler) Box Other
Packing material used: (Bubble Wrap) Foam Plastic Bag None Other
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.8 °C
   IR GUN #36 (CF +1.3°C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC682547**
12. Were VOAs on the COC? (Yes) No
13. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered (Yes) ~~No~~ 11/1/16
15. Was a LL Hg or Me Hg trip blank present? Yes (No)

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: GS

17. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____.

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **C. PIKE** **DATE:** **DECEMBER 2, 2016**

FROM: **L. GANSER** **COPIES:** **DV FILE**

SUBJECT: **DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
SDG 240-71423-1

SAMPLES: 2/Aqueous/

SEMW-9I-20-24 TB-102716

Overview

The sample set for LMC-MRC, SDG 240-71423-1 consisted of one (1) aqueous environmental sample and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOC). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on October 27, 2016 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Methods 8260C for VOC analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method/preparation blanks, surrogate spike recoveries, laboratory control sample results, internal standard areas and recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

No major issues were noted.

Minor

- Continuing calibration percent difference (%D) greater than 20 percent was noted for dichlorodifluoromethane, trichlorofluoromethane, 1,1,2-trichlorotrifluoroethane, acetone, 2-butanone, 1,1,1-trichloroethane, carbon tetrachloride, isopropylbenzene, and 1,1,2,2-tetrachloroethane on 11/02/2016 at 8:07 on instrument A3UX15 affecting all samples. Nondetected results for these parameters were qualified as estimated, (UJ).

Notes

Sample SEMW-9I-20-24 was analyzed for VOCs at a 1666.67x dilution resulting in elevated detection limits for nondetected results.

VOC laboratory control sample (LCS) percent recovery (%R) was greater than QC limits for trichlorofluoromethane affecting all samples. No action was necessary as all results for trichlorofluoromethane were nondetect.

Matrix spike/matrix spike duplicate (MS/MSD) relative percent difference was greater than QC limits for carbon disulfide. No action was taken as MS/MSD %Rs were acceptable.

Executive Summary

Laboratory Performance: Calibration noncompliance was noted for select VOCs. LCS noncompliance was noted for one VOC.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to "National Functional Guidelines for Organic Review" (September 2016). The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech, Inc.
Leanne Ganser
Environmental Scientist/Data Validator

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 07896	NSAMPLE	SEMW-9I-20-24			TB-102716		
SDG: 240-71423-1	LAB_ID	240-71423-2			240-71423-1		
FRACTION: OV	SAMP_DATE	10/27/2016			10/27/2016		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		380	UJ	C	0.23	UJ	C
1,1,2,2-TETRACHLOROETHANE		530	UJ	C	0.32	UJ	C
1,1,2-TRICHLOROETHANE		570	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		680	UJ	C	0.41	UJ	C
1,1-DICHLOROETHANE		420	U		0.25	U	
1,1-DICHLOROETHENE		450	U		0.27	U	
1,2,4-TRICHLOROBENZENE		450	U		0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		780	U		0.47	U	
1,2-DIBROMOETHANE		380	U		0.23	U	
1,2-DICHLOROBENZENE		430	U		0.26	U	
1,2-DICHLOROETHANE		500	U		0.3	U	
1,2-DICHLOROPROPANE		500	U		0.3	U	
1,3-DICHLOROBENZENE		530	U		0.32	U	
1,4-DICHLOROBENZENE		380	U		0.23	U	
2-BUTANONE		1700	UJ	C	1	UJ	C
2-HEXANONE		2100	U		1.2	U	
4-METHYL-2-PENTANONE		1200	U		0.71	U	
ACETONE		2900	UJ	C	1.8	UJ	C
BENZENE		470	U		0.28	U	
BROMODICHLOROMETHANE		500	U		0.3	U	
BROMOFORM		720	U		0.43	U	
BROMOMETHANE		700	U		0.42	U	
CARBON DISULFIDE		570	U		0.34	U	
CARBON TETRACHLORIDE		580	UJ	C	0.35	UJ	C
CHLOROBENZENE		530	U		0.32	U	
CHLORODIBROMOMETHANE		420	U		0.25	U	
CHLOROETHANE		680	U		0.41	U	
CHLOROFORM		520	U		0.31	U	
CHLOROMETHANE		720	U		0.43	U	
CIS-1,2-DICHLOROETHENE		500	U		0.3	U	
CIS-1,3-DICHLOROPROPENE		430	U		0.26	U	
CYCLOHEXANE		730	U		0.44	U	
DICHLORODIFLUOROMETHANE		830	UJ	C	0.5	UJ	C
ETHYLBENZENE		430	U		0.26	U	
ISOPROPYLBENZENE		350	UJ	C	0.21	UJ	C

PROJ_NO: 07896	NSAMPLE	SEMW-9I-20-24			TB-102716		
SDG: 240-71423-1	LAB_ID	240-71423-2			240-71423-1		
FRACTION: OV	SAMP_DATE	10/27/2016			10/27/2016		
MEDIA: WATER	QC_TYPE	NM			TB		
	UNITS	UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0		
	DUP_OF						
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		2400	U		1.4	U	
METHYL CYCLOHEXANE		750	U		0.45	U	
METHYL TERT-BUTYL ETHER		450	U		0.27	U	
METHYLENE CHLORIDE		880	U		0.53	U	
STYRENE		380	U		0.23	U	
TETRACHLOROETHENE		500	U		0.3	U	
TOLUENE		380	U		0.23	U	
TOTAL XYLENES		400	U		0.24	U	
TRANS-1,2-DICHLOROETHENE		480	U		0.29	U	
TRANS-1,3-DICHLOROPROPENE		520	U		0.31	U	
TRICHLOROETHENE		64000			0.33	U	
TRICHLOROFLUOROMETHANE		830	UJ	C	0.5	UJ	C
VINYL CHLORIDE		750	U		0.45	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-71423-1
SDG No.:
Client Sample ID: TB-102716 | Lab Sample ID: 240-71423-1
Matrix: Water | Lab File ID: UXC9417.D
Analysis Method: 8260C | Date Collected: 10/27/2016 00:00
Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2016 11:52
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 253989 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.25
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.47
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.30
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.23
78-93-3	2-Butanone (MEK)	10	U	10	1.0
591-78-6	2-Hexanone	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.71
67-64-1	Acetone	10	U	10	1.8
71-43-2	Benzene	1.0	U	1.0	0.28
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.30
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.34
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.35
108-90-7	Chlorobenzene	1.0	U	1.0	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.41
67-66-3	Chloroform	1.0	U	1.0	0.31
74-87-3	Chloromethane	1.0	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.26
110-82-7	Cyclohexane	1.0	U	1.0	0.44
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.50
100-41-4	Ethylbenzene	1.0	U	1.0	0.26
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-71423-1
SDG No.:
Client Sample ID: TB-102716 | Lab Sample ID: 240-71423-1
Matrix: Water | Lab File ID: UXC9417.D
Analysis Method: 8260C | Date Collected: 10/27/2016 00:00
Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2016 11:52
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 253989 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	10	U	10	1.4
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.27
108-87-2	Methylcyclohexane	1.0	U	1.0	0.45
75-09-2	Methylene Chloride	1.0	U	1.0	0.53
100-42-5	Styrene	1.0	U	1.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.30
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.31
79-01-6	Trichloroethene	1.0	U	1.0	0.33
75-69-4	Trichlorofluoromethane	1.0	U *	1.0	0.50
75-01-4	Vinyl chloride	1.0	U	1.0	0.45
1330-20-7	Xylenes, Total	2.0	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	105		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	110		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-71423-1

SDG No.:

Client Sample ID: SEMW-9I-20-24 | Lab Sample ID: 240-71423-2

Matrix: Water | Lab File ID: UXC9418.D

Analysis Method: 8260C | Date Collected: 10/27/2016 15:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2016 12:14

Soil Aliquot Vol: | Dilution Factor: 1666.67

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 253989 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1700	U	1700	380
79-34-5	1,1,2,2-Tetrachloroethane	1700	U	1700	530
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1700	U	1700	680
79-00-5	1,1,2-Trichloroethane	1700	U	1700	570
75-34-3	1,1-Dichloroethane	1700	U	1700	420
75-35-4	1,1-Dichloroethene	1700	U	1700	450
120-82-1	1,2,4-Trichlorobenzene	1700	U	1700	450
96-12-8	1,2-Dibromo-3-Chloropropane	3300	U	3300	780
106-93-4	Ethylene Dibromide	1700	U	1700	380
95-50-1	1,2-Dichlorobenzene	1700	U	1700	430
107-06-2	1,2-Dichloroethane	1700	U	1700	500
78-87-5	1,2-Dichloropropane	1700	U	1700	500
541-73-1	1,3-Dichlorobenzene	1700	U	1700	530
106-46-7	1,4-Dichlorobenzene	1700	U	1700	380
78-93-3	2-Butanone (MEK)	17000	U	17000	1700
591-78-6	2-Hexanone	17000	U	17000	2100
108-10-1	4-Methyl-2-pentanone (MIBK)	17000	U	17000	1200
67-64-1	Acetone	17000	U	17000	2900
71-43-2	Benzene	1700	U	1700	470
75-27-4	Dichlorobromomethane	1700	U	1700	500
75-25-2	Bromoform	1700	U	1700	720
74-83-9	Bromomethane	1700	U	1700	700
75-15-0	Carbon disulfide	1700	U	1700	570
56-23-5	Carbon tetrachloride	1700	U	1700	580
108-90-7	Chlorobenzene	1700	U	1700	530
75-00-3	Chloroethane	1700	U	1700	680
67-66-3	Chloroform	1700	U	1700	520
74-87-3	Chloromethane	1700	U	1700	720
156-59-2	cis-1,2-Dichloroethene	1700	U	1700	500
10061-01-5	cis-1,3-Dichloropropene	1700	U	1700	430
110-82-7	Cyclohexane	1700	U	1700	730
124-48-1	Chlorodibromomethane	1700	U	1700	420
75-71-8	Dichlorodifluoromethane	1700	U	1700	830
100-41-4	Ethylbenzene	1700	U	1700	430
98-82-8	Isopropylbenzene	1700	U	1700	350

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-71423-1
SDG No.:
Client Sample ID: SEMW-9I-20-24 | Lab Sample ID: 240-71423-2
Matrix: Water | Lab File ID: UXC9418.D
Analysis Method: 8260C | Date Collected: 10/27/2016 15:00
Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2016 12:14
Soil Aliquot Vol: | Dilution Factor: 1666.67
Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 253989 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	17000	U	17000	2400
1634-04-4	Methyl tert-butyl ether	1700	U	1700	450
108-87-2	Methylcyclohexane	1700	U	1700	750
75-09-2	Methylene Chloride	1700	U	1700	880
100-42-5	Styrene	1700	U	1700	380
127-18-4	Tetrachloroethene	1700	U	1700	500
108-88-3	Toluene	1700	U	1700	380
156-60-5	trans-1,2-Dichloroethene	1700	U	1700	480
10061-02-6	trans-1,3-Dichloropropene	1700	U	1700	520
79-01-6	Trichloroethene	64000		1700	550
75-69-4	Trichlorofluoromethane	1700	U *	1700	830
75-01-4	Vinyl chloride	1700	U	1700	750
1330-20-7	Xylenes, Total	3300	U	3300	400

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	104		73-124
1868-53-7	Dibromofluoromethane (Surr)	108		80-120
460-00-4	4-Bromofluorobenzene (Surr)	104		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		63-132

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Block E Downgradient TCE Inv.

Report Number: 240-71423-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 10/28/2016 9:30 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.2º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples TB-102716 (240-71423-1) and SEMW-9I-20-24 (240-71423-2) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 11/02/2016.

Sample SEMW-9I-20-24 (240-71423-2)[1666.67X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The continuing calibration verification (CCV) for analytical batch 253989 exceeded control criteria for multiple compounds. The samples associated with this CCV were non-detects for the affected analytes. In accordance with the laboratory SOP, a low level CCV at the reporting limit (labeled as an MRL) was analyzed and the affected compounds were detected; therefore the data has been reported. No further corrective action was required. TB-102716 (240-71423-1) and SEMW-9I-20-24 (240-71423-2)

The laboratory control sample (LCS) for 253989 recovered outside control limits for the following analyte: Trichlorofluoromethane. This analyte has been identified as a poor performing analyte when analyzed using this method; therefore, re-extraction/re-analysis was not performed. TB-102716 (240-71423-1), SEMW-9I-20-24 (240-71423-2) and (LCS 240-253989/4)

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE Inv.

TestAmerica Job ID: 240-71423-1

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

Protocol References:

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE Inv.

TestAmerica Job ID: 240-71423-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71423-1	TB-102716	Water	10/27/16 00:00	10/28/16 09:30
240-71423-2	SEMW-9I-20-24	Water	10/27/16 15:00	10/28/16 09:30

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

0.8 / Cl.2

Chain of Custody Record

000016

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

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

Client Contact			
Company Name: Tetra Tech	Project Manager: Chris Pike	Site Contact: Stu Cameron	Date: 10/27/16
Address: 20251 Century Blvd Ste 200	Tel/Fax: (410) 302-1624	Lab Contact: John McFadden	Carrier:
City/State/Zip: Germantown MD, 20874	Analysis Turnaround Time		
Phone: (301) 528-5552	☐ CALENDAR DAYS ☒ WORKING DAYS		
Fax:	TAT if different from Below 5 day		
Project Name: Block E Downgradient TCE INV.	☐ 2 weeks		
Site: MRC, Maryland	☑ 1 week		
P O # 112IC07896	☐ 2 days		
	☐ 1 day		

COC No: 1 of 1 COCs
Sampler:
For Lab Use Only:
Walk-in Client:
Lab Sampling:
Job / SDG No.:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	Sample Specific Notes:
TB-102716	—	—	—	AQ	2	.		X	
SEMW-9I-20-24	10-27-16	1500	G	AQ	3	N		X	
								2	

240-71423 Chain of Custody

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

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

Special Instructions/QC Requirements & Comments:

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	10-27-16/1630		TA	10-28-16 930
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 71423
Canton Facility

Client Tetratech Site Name _____ Cooler unpacked by:

Cooler Received on 10-28-16 Opened on 10-28-16

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp. 0.8 °C Corrected Cooler Temp. 1.2 °C
   IR GUN #36 (CF +1.3°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity _____ Yes No
   -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC682547**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

Method 8260C

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

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab File ID: BFB619.D BFB Injection Date: 06/23/2016

Instrument ID: A3UX15 BFB Injection Time: 11:35

Analysis Batch No.: 235701

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.7	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	7.2	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	90.4	
175	5.0 - 9.0 % of mass 174	6.2	(6.8) 1
176	95.0 - 101.0 % of mass 174	87.8	(97.1) 1
177	5.0 - 9.0 % of mass 176	5.4	(6.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-235701/2	UXC9008.D	06/23/2016	12:01
	STD8260 240-235701/3	UXC9009.D	06/23/2016	12:23
	STD8260 240-235701/4	UXC9010.D	06/23/2016	12:46
	STD8260 240-235701/5	UXC9011.D	06/23/2016	13:08
	STD8260 240-235701/6	UXC9012.D	06/23/2016	13:31
	STD8260 240-235701/7	UXC9013.D	06/23/2016	13:53
	ICV 240-235701/14	UXC9014.D	06/23/2016	14:16
	ICV 240-235701/15	UXC9021.D	06/23/2016	16:52

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab File ID: BFB61102B.D BFB Injection Date: 11/02/2016

Instrument ID: A3UX15 BFB Injection Time: 07:31

Analysis Batch No.: 253989

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	15.4	
75	30.0 - 60.0 % of mass 95	46.2	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.4	(0.4) 1
174	50.0 - 120.00 % of mass 95	92.3	
175	5.0 - 9.0 % of mass 174	6.5	(7.1) 1
176	95.0 - 101.0 % of mass 174	90.3	(97.8) 1
177	5.0 - 9.0 % of mass 176	5.7	(6.3) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-253989/2	UXC9407.D	11/02/2016	08:07
	LCS 240-253989/4	UXC9408.D	11/02/2016	08:29
	CCV 240-253989/3	UXC9409.D	11/02/2016	08:52
	MB 240-253989/7	UXC9411.D	11/02/2016	09:38
TB-102716	240-71423-1	UXC9417.D	11/02/2016	11:52
SEMW-9I-20-24	240-71423-2	UXC9418.D	11/02/2016	12:14
	240-71311-D-1 MS	UXC9420.D	11/02/2016	12:59
	240-71311-G-1 MSD	UXC9421.D	11/02/2016	13:21

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-71423-1 Analy Batch No.: 235701

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34931

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-235701/7	UXC9013.D
Level 2	STD8260 240-235701/6	UXC9012.D
Level 3	STD8260 240-235701/5	UXC9011.D
Level 4	STD8260 240-235701/4	UXC9010.D
Level 5	STD8260 240-235701/3	UXC9009.D
Level 6	STD8260 240-235701/2	UXC9008.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.3321 0.3340	0.3168	0.3294	0.3233	0.3421	Ave		0.3296			0.1000	2.7		20.0			
Chloromethane	0.5208 0.4361	0.4774	0.4696	0.4288	0.4654	Ave		0.4664			0.1000	7.1		20.0			
Vinyl chloride	0.4391 0.4197	0.4151	0.4242	0.3962	0.4333	Ave		0.4213			0.1000	3.6		20.0			
Butadiene	0.4013 0.3963	0.3836	0.3985	0.3823	0.4088	Ave		0.3951				2.6		20.0			
Bromomethane	0.1340 0.1484	0.1393	0.1381	0.1229	0.1534	Ave		0.1393			0.0500	7.7		20.0			
Chloroethane	0.2365 0.2202	0.2232	0.2271	0.2108	0.2270	Ave		0.2241			0.0500	3.8		20.0			
Dichlorofluoromethane	0.5040 0.4904	0.5039	0.4975	0.4540	0.5047	Ave		0.4924				4.0		20.0			
Trichlorofluoromethane	0.2480 0.2661	0.2535	0.2474	0.2379	0.2614	Ave		0.2524			0.1000	4.1		20.0			
Ethyl ether	0.2476 0.2339	0.2449	0.2241	0.2370	0.2362	Ave		0.2373				3.5		20.0			
Acrolein	0.0273 0.0276	0.0269	0.0279	0.0278	0.0281	Ave		0.0276				1.5		20.0			
1,1-Dichloroethene	0.2949 0.3034	0.2936	0.2845	0.2901	0.3022	Ave		0.2948			0.1000	2.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2043 0.2209	0.2241	0.2068	0.1967	0.2302	Ave		0.2139			0.0500	6.1		20.0			
Acetone	0.1395 0.0726	0.1118	0.0878	0.0765	0.0741	Lin1	0.1478	0.0706			0.0100				1.0000		0.9900
Iodomethane	0.4298 0.4393	0.4742	0.4386	0.4552	0.4550	Ave		0.4487				3.6		20.0			
Carbon disulfide	0.8263 0.9010	0.8422	0.8083	0.8576	0.9046	Ave		0.8567			0.1000	4.6		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-71423-1 Analy Batch No.: 235701

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1554 0.1784	0.1576	0.1559	0.1742	0.1827	Ave		0.1674				7.4		20.0			
Methyl acetate	0.1618 0.1580	0.1598	0.1514	0.1507	0.1555	Ave		0.1562			0.1000	2.9		20.0			
Methylene Chloride	0.4936 0.3132	0.4248	0.3449	0.3381	0.3268	Ave		0.3735			0.1000	18.9		20.0			
2-Methyl-2-propanol	0.0096 0.0085	0.0101	0.0097	0.0091	0.0098	Ave		0.0095				5.9		20.0			
Methyl tert-butyl ether	0.5514 0.5919	0.5838	0.5562	0.5860	0.5987	Ave		0.5780			0.1000	3.4		20.0			
Acrylonitrile	0.0865 0.0883	0.0907	0.0851	0.0849	0.0870	Ave		0.0871				2.5		20.0			
trans-1,2-Dichloroethene	0.3240 0.3105	0.3275	0.3102	0.3200	0.3216	Ave		0.3190			0.1000	2.2		20.0			
Hexane	0.0821 0.0795	0.0794	0.0711	0.0762	0.0800	Ave		0.0781				5.0		20.0			
1,1-Dichloroethane	0.5384 0.5434	0.5585	0.5285	0.5452	0.5510	Ave		0.5441			0.2000	1.9		20.0			
Vinyl acetate	0.3327 0.4085	0.3342	0.3408	0.3597	0.3885	Ave		0.3607				8.7		20.0			
2,2-Dichloropropane	0.1567 0.1717	0.1672	0.1652	0.1881	0.1921	Ave		0.1735				8.0		20.0			
cis-1,2-Dichloroethene	0.3493 0.3361	0.3547	0.3327	0.3418	0.3441	Ave		0.3431			0.1000	2.4		20.0			
2-Butanone (MEK)	0.1156 0.0989	0.1075	0.0977	0.0935	0.0974	Ave		0.1018			0.0100	8.1		20.0			
Chlorobromomethane	0.1540 0.1507	0.1555	0.1493	0.1527	0.1537	Ave		0.1527				1.5		20.0			
Tetrahydrofuran	0.0572 0.0606	0.0583	0.0537	0.0538	0.0574	Ave		0.0568				4.7		20.0			
Chloroform	0.5050 0.5062	0.5301	0.4888	0.5048	0.5160	Ave		0.5085			0.2000	2.7		20.0			
1,1,1-Trichloroethane	0.2852 0.3173	0.3011	0.2949	0.3230	0.3345	Ave		0.3093			0.1000	6.0		20.0			
Cyclohexane	0.5215 0.5527	0.5316	0.5133	0.5316	0.5628	Ave		0.5356			0.1000	3.5		20.0			
1,1-Dichloropropene	0.4167 0.4309	0.4314	0.4054	0.4204	0.4364	Ave		0.4235				2.7		20.0			
Carbon tetrachloride	0.2299 0.2784	0.2395	0.2362	0.2634	0.2833	Ave		0.2551			0.1000	9.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-71423-1 Analy Batch No.: 235701

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0044 0.0049	0.0050	0.0049	0.0045	0.0052	Ave		0.0048				6.2		20.0			
Benzene	1.2947 1.3224	1.3476	1.2332	1.2686	1.3184	Ave		1.2975			0.5000	3.2		20.0			
1,2-Dichloroethane	0.3772 0.3692	0.3872	0.3588	0.3580	0.3701	Ave		0.3701			0.1000	3.0		20.0			
n-Heptane	0.0707 0.0754	0.0678	0.0671	0.0694	0.0748	Ave		0.0709				5.0		20.0			
Trichloroethene	0.3257 0.3255	0.3303	0.3132	0.3205	0.3298	Ave		0.3242			0.1500	2.0		20.0			
Methylcyclohexane	0.4725 0.5041	0.4829	0.4609	0.4756	0.5114	Ave		0.4846			0.1000	4.0		20.0			
1,2-Dichloropropane	0.2716 0.3011	0.2967	0.2760	0.2859	0.2981	Ave		0.2882			0.1000	4.3		20.0			
Dibromomethane	0.1477 0.1578	0.1546	0.1476	0.1507	0.1554	Ave		0.1523				2.8		20.0			
1,4-Dioxane	0.0018 0.0020	0.0021	0.0022	0.0020	0.0024	Ave		0.0021				10.4		20.0			
Dichlorobromomethane	0.2755 0.3482	0.2939	0.2900	0.3099	0.3353	Ave		0.3088			0.1500	9.1		20.0			
2-Chloroethyl vinyl ether	0.1285 0.1675	0.1385	0.1373	0.1440	0.1608	Ave		0.1461				10.3		20.0			
cis-1,3-Dichloropropene	0.2821 0.4251	0.3138	0.3239	0.3522	0.4012	Ave		0.3497			0.1500	15.6		20.0			
4-Methyl-2-pentanone (MIBK)	0.1559 0.1939	0.1659	0.1670	0.1782	0.1883	Ave		0.1749			0.0500	8.3		20.0			
Toluene	1.8454 1.8440	1.8252	1.6979	1.7996	1.8461	Ave		1.8097			0.4000	3.2		20.0			
trans-1,3-Dichloropropene	0.2726 0.4490	0.3002	0.3104	0.3649	0.4144	Ave		0.3519			0.1000	19.8		20.0			
Ethyl methacrylate	0.3014 0.4225	0.3234	0.3291	0.3763	0.4067	Ave		0.3599				13.7		20.0			
1,1,2-Trichloroethane	0.3188 0.3147	0.3102	0.2977	0.3101	0.3157	Ave		0.3112			0.1000	2.4		20.0			
Tetrachloroethene	0.3611 0.3541	0.3544	0.3269	0.3481	0.3554	Ave		0.3500			0.1500	3.4		20.0			
1,3-Dichloropropane	0.5883 0.5924	0.5978	0.5552	0.5681	0.5922	Ave		0.5823				2.9		20.0			
2-Hexanone	0.1386 0.1847	0.1470	0.1601	0.1648	0.1828	Ave		0.1630			0.0500	11.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-71423-1 Analy Batch No.: 235701

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2261 0.3274	0.2475	0.2505	0.2847	0.3137	Ave		0.2750				14.6		20.0			
Ethylene Dibromide	0.2774 0.3104	0.2927	0.2790	0.2998	0.3114	Ave		0.2951				5.0		20.0			
Chlorobenzene	1.1961 1.1713	1.1891	1.1210	1.1448	1.1639	Ave		1.1644			0.3000	2.4		20.0			
1,1,1,2-Tetrachloroethane	0.2725 0.3478	0.2873	0.2883	0.3111	0.3365	Ave		0.3072				9.7		20.0			
Ethylbenzene	0.6049 0.6363	0.6212	0.5904	0.6147	0.6332	Ave		0.6168				2.8		20.0			
m-Xylene & p-Xylene	1.5175 1.5637	1.5565	1.4594	1.5035	1.5590	Ave		1.5266				2.7		20.0			
o-Xylene	0.6940 0.7507	0.7369	0.7052	0.7149	0.7489	Ave		0.7251				3.3		20.0			
Styrene	1.0918 1.3099	1.2017	1.1803	1.2357	1.2846	Ave		1.2173			0.3000	6.4		20.0			
Bromoform	0.1065 0.1710	0.1173	0.1240	0.1392	0.1569	Ave		0.1358			0.1000	18.1		20.0			
Isopropylbenzene	1.6591 1.8007	1.7054	1.6662	1.6882	1.7718	Ave		1.7152			0.1000	3.4		20.0			
1,1,2,2-Tetrachloroethane	0.7544 0.7783	0.7987	0.7374	0.7885	0.8054	Ave		0.7771			0.3000	3.4		20.0			
Bromobenzene	0.9784 1.0520	1.0763	0.9992	1.0201	1.0915	Ave		1.0362				4.3		20.0			
1,2,3-Trichloropropane	0.2309 0.2475	0.2509	0.2407	0.2509	0.2552	Ave		0.2460				3.6		20.0			
trans-1,4-Dichloro-2-butene	0.2006 0.2385	0.2147	0.2001	0.2165	0.2397	Ave		0.2183				8.0		20.0			
N-Propylbenzene	0.9622 1.0807	1.0815	1.0048	1.0306	1.1185	Ave		1.0464				5.5		20.0			
2-Chlorotoluene	0.8538 0.9207	0.9561	0.8891	0.9079	0.9420	Ave		0.9116				4.1		20.0			
1,3,5-Trimethylbenzene	2.8746 3.0704	2.9843	2.8406	2.9341	3.0812	Ave		2.9642				3.4		20.0			
4-Chlorotoluene	3.0370 3.1778	3.3117	3.0525	3.1150	3.2501	Ave		3.1573				3.5		20.0			
tert-Butylbenzene	2.2647 2.5252	2.3995	2.3043	2.3833	2.5293	Ave		2.4010				4.6		20.0			
1,2,4-Trimethylbenzene	3.0029 3.0543	3.0523	2.8941	2.9667	3.0688	Ave		3.0065				2.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-71423-1 Analy Batch No.: 235701

SDG No.:

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 06/23/2016 12:01 Calibration End Date: 06/23/2016 13:53 Calibration ID: 34931

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	3.0231 3.4048	3.2243	3.0768	3.1838	3.3627	Ave		3.2126				4.7		20.0			
1,3-Dichlorobenzene	1.7546 1.7099	1.7746	1.6796	1.7043	1.7149	Ave		1.7230			0.6000	2.0		20.0			
4-Isopropyltoluene	2.5011 2.9007	2.6300	2.6148	2.7211	2.8304	Ave		2.6997				5.5		20.0			
1,4-Dichlorobenzene	1.8619 1.7322	1.8194	1.7077	1.7335	1.7343	Ave		1.7648			0.5000	3.5		20.0			
n-Butylbenzene	2.0048 2.3308	2.0827	2.0417	2.1624	2.2859	Ave		2.1514				6.2		20.0			
1,2-Dichlorobenzene	1.6369 1.5498	1.6372	1.5209	1.5641	1.5550	Ave		1.5773			0.4000	3.1		20.0			
1,2-Dibromo-3-Chloropropane	0.0713 0.0968	0.0775	0.0764	0.0877	0.0937	Ave		0.0839			0.0500	12.3		20.0			
1,2,4-Trichlorobenzene	0.8718 0.7845	0.8230	0.8095	0.8148	0.8000	Ave		0.8173			0.2000	3.6		20.0			
Hexachlorobutadiene	0.4286 0.3302	0.4026	0.3714	0.3683	0.3604	Ave		0.3769				9.1		20.0			
Naphthalene	1.6356 1.6877	1.6077	1.7526	1.8425	1.8273	Ave		1.7256				5.7		20.0			
1,2,3-Trichlorobenzene	0.7978 0.6410	0.7359	0.7435	0.7184	0.7003	Ave		0.7228				7.2		20.0			
Dibromofluoromethane (Surr)	0.2526 0.2636	0.2509	0.2605	0.2635	0.2693	Ave		0.2601				2.7		20.0			
1,2-Dichloroethane-d4 (Surr)	0.3324 0.3123	0.3098	0.3131	0.3078	0.3160	Ave		0.3152				2.8		20.0			
Toluene-d8 (Surr)	1.5529 1.5694	1.4893	1.5049	1.5498	1.5942	Ave		1.5434				2.6		20.0			
4-Bromofluorobenzene (Surr)	0.5282 0.5273	0.5194	0.5346	0.5225	0.5355	Ave		0.5279				1.2		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab Sample ID: ICV 240-235701/14 Calibration Date: 06/23/2016 14:16

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9014.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3296	0.3164	0.1000	0.00960	0.0100	-4.0	20.0
Chloromethane	Ave	0.4664	0.4448	0.1000	0.00954	0.0100	-4.6	20.0
Vinyl chloride	Ave	0.4213	0.4126	0.1000	0.00979	0.0100	-2.1	20.0
Butadiene	Ave	0.3951	0.3681		0.00932	0.0100	-6.8	30.0
Bromomethane	Ave	0.1393	0.1386	0.0500	0.00995	0.0100	-0.5	20.0
Chloroethane	Ave	0.2241	0.2155	0.0500	0.00962	0.0100	-3.8	20.0
Dichlorofluoromethane	Ave	0.4924	0.4860		0.00987	0.0100	-1.3	20.0
Trichlorofluoromethane	Ave	0.2524	0.2694	0.1000	0.0107	0.0100	6.8	20.0
Ethyl ether	Ave	0.2373	0.2405		0.0101	0.0100	1.4	20.0
Acrolein	Ave	0.0276	0.0413		0.0749	0.0500	49.8	50.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2139	0.2353	0.0500	0.0110	0.0100	10.0	20.0
1,1-Dichloroethene	Ave	0.2948	0.3180	0.1000	0.0108	0.0100	7.9	20.0
Acetone	Lin1		0.0617	0.0100	0.0154	0.0200	-23.0	50.0
Iodomethane	Ave	0.4487	0.5028		0.0112	0.0100	12.1	20.0
Carbon disulfide	Ave	0.8567	0.9472	0.1000	0.0111	0.0100	10.6	20.0
3-Chloro-1-propene	Ave	0.1674	0.1872		0.0112	0.0100	11.9	20.0
Methyl acetate	Ave	0.1562	0.1548	0.1000	0.0495	0.0500	-0.9	20.0
Methylene Chloride	Ave	0.3735	0.3544	0.1000	0.00949	0.0100	-5.1	50.0
2-Methyl-2-propanol	Ave	0.0095	0.0086		0.0907	0.100	-9.3	50.0
Acrylonitrile	Ave	0.0871	0.0893		0.103	0.100	2.6	20.0
Methyl tert-butyl ether	Ave	0.5780	0.6020	0.1000	0.0104	0.0100	4.1	20.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3457	0.1000	0.0108	0.0100	8.4	20.0
Hexane	Ave	0.0781	0.0849		0.0109	0.0100	8.7	20.0
1,1-Dichloroethane	Ave	0.5441	0.5576	0.2000	0.0102	0.0100	2.5	20.0
Vinyl acetate	Ave	0.3607	0.4002		0.0111	0.0100	10.9	50.0
2,2-Dichloropropane	Ave	0.1735	0.1819		0.0105	0.0100	4.8	20.0
cis-1,2-Dichloroethene	Ave	0.3431	0.3582	0.1000	0.0104	0.0100	4.4	20.0
2-Butanone (MEK)	Ave	0.1018	0.0930	0.0100	0.0183	0.0200	-8.6	20.0
Chlorobromomethane	Ave	0.1527	0.1581		0.0104	0.0100	3.6	20.0
Tetrahydrofuran	Ave	0.0568	0.0553		0.0195	0.0200	-2.6	20.0
Chloroform	Ave	0.5085	0.5370	0.2000	0.0106	0.0100	5.6	20.0
1,1,1-Trichloroethane	Ave	0.3093	0.3345	0.1000	0.0108	0.0100	8.1	20.0
Cyclohexane	Ave	0.5356	0.5820	0.1000	0.0109	0.0100	8.7	20.0
1,1-Dichloropropene	Ave	0.4235	0.4371		0.0103	0.0100	3.2	20.0
Carbon tetrachloride	Ave	0.2551	0.2760	0.1000	0.0108	0.0100	8.2	20.0
Isobutyl alcohol	Ave	0.0048	0.0045		0.231	0.250	-7.7	20.0
Benzene	Ave	1.297	1.346	0.5000	0.0104	0.0100	3.7	20.0
1,2-Dichloroethane	Ave	0.3701	0.3803	0.1000	0.0103	0.0100	2.8	20.0
n-Heptane	Ave	0.0709	0.0751		0.0106	0.0100	6.0	20.0
Trichloroethene	Ave	0.3242	0.3424	0.1500	0.0106	0.0100	5.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab Sample ID: ICV 240-235701/14 Calibration Date: 06/23/2016 14:16

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9014.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4846	0.5143	0.1000	0.0106	0.0100	6.1	20.0
1,2-Dichloropropane	Ave	0.2882	0.3125	0.1000	0.0108	0.0100	8.4	20.0
Dibromomethane	Ave	0.1523	0.1580		0.0104	0.0100	3.7	20.0
1,4-Dioxane	Ave	0.0021	0.0016		0.153	0.200	-23.6	50.0
Dichlorobromomethane	Ave	0.3088	0.3286	0.1500	0.0106	0.0100	6.4	20.0
2-Chloroethyl vinyl ether	Ave	0.1461	0.1547		0.0106	0.0100	5.9	20.0
cis-1,3-Dichloropropene	Ave	0.3497	0.3799	0.1500	0.0109	0.0100	8.6	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1749	0.1785	0.0500	0.0204	0.0200	2.1	20.0
Toluene	Ave	1.810	1.889	0.4000	0.0104	0.0100	4.4	20.0
trans-1,3-Dichloropropene	Ave	0.3519	0.3654	0.1000	0.0104	0.0100	3.8	20.0
Ethyl methacrylate	Ave	0.3599	0.4014		0.0112	0.0100	11.5	20.0
1,1,2-Trichloroethane	Ave	0.3112	0.3226	0.1000	0.0104	0.0100	3.7	20.0
Tetrachloroethene	Ave	0.3500	0.3627	0.1500	0.0104	0.0100	3.6	20.0
1,3-Dichloropropane	Ave	0.5823	0.6023		0.0103	0.0100	3.4	20.0
2-Hexanone	Ave	0.1630	0.1674	0.0500	0.0205	0.0200	2.7	20.0
Chlorodibromomethane	Ave	0.2750	0.2891		0.0105	0.0100	5.1	20.0
Ethylene Dibromide	Ave	0.2951	0.3176		0.0108	0.0100	7.6	20.0
Chlorobenzene	Ave	1.164	1.192	0.3000	0.0102	0.0100	2.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3072	0.3146		0.0102	0.0100	2.4	20.0
Ethylbenzene	Ave	0.6168	0.6406		0.0104	0.0100	3.9	20.0
m-Xylene & p-Xylene	Ave	1.527	1.578		0.0103	0.0100	3.3	20.0
o-Xylene	Ave	0.7251	0.7431		0.0102	0.0100	2.5	20.0
Styrene	Ave	1.217	1.297	0.3000	0.0107	0.0100	6.6	20.0
Bromoform	Ave	0.1358	0.1506	0.1000	0.0111	0.0100	10.9	20.0
Isopropylbenzene	Ave	1.715	1.785	0.1000	0.0104	0.0100	4.1	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7771	0.8287	0.3000	0.0107	0.0100	6.6	20.0
Bromobenzene	Ave	1.036	1.111		0.0107	0.0100	7.2	20.0
1,2,3-Trichloropropane	Ave	0.2460	0.2711		0.0110	0.0100	10.2	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2183	0.2313		0.0106	0.0100	5.9	20.0
N-Propylbenzene	Ave	1.046	1.121		0.0107	0.0100	7.2	20.0
2-Chlorotoluene	Ave	0.9116	0.9667		0.0106	0.0100	6.0	20.0
1,3,5-Trimethylbenzene	Ave	2.964	3.080		0.0104	0.0100	3.9	20.0
4-Chlorotoluene	Ave	3.157	3.319		0.0105	0.0100	5.1	20.0
tert-Butylbenzene	Ave	2.401	2.534		0.0106	0.0100	5.6	20.0
1,2,4-Trimethylbenzene	Ave	3.007	3.055		0.0102	0.0100	1.6	20.0
sec-Butylbenzene	Ave	3.213	3.336		0.0104	0.0100	3.8	20.0
1,3-Dichlorobenzene	Ave	1.723	1.718	0.6000	0.00997	0.0100	-0.3	20.0
4-Isopropyltoluene	Ave	2.700	2.773		0.0103	0.0100	2.7	20.0
1,4-Dichlorobenzene	Ave	1.765	1.763	0.5000	0.00999	0.0100	-0.1	20.0
n-Butylbenzene	Ave	2.151	2.130		0.00990	0.0100	-1.0	20.0
1,2-Dichlorobenzene	Ave	1.577	1.548	0.4000	0.00981	0.0100	-1.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab Sample ID: ICV 240-235701/14 Calibration Date: 06/23/2016 14:16

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9014.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0839	0.0824	0.0500	0.00982	0.0100	-1.8	50.0
1,2,4-Trichlorobenzene	Ave	0.8173	0.7237	0.2000	0.00885	0.0100	-11.5	50.0
Hexachlorobutadiene	Ave	0.3769	0.3089		0.00820	0.0100	-18.0	20.0
Naphthalene	Ave	1.726	1.505		0.00872	0.0100	-12.8	50.0
1,2,3-Trichlorobenzene	Ave	0.7228	0.5970		0.00826	0.0100	-17.4	20.0
Dibromofluoromethane (Surr)	Ave	0.2601	0.2609		0.00804	0.00801	0.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3152	0.3049		0.00775	0.00801	-3.3	20.0
Toluene-d8 (Surr)	Ave	1.543	1.568		0.00814	0.00801	1.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5279	0.5475		0.00831	0.00801	3.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab Sample ID: CCVIS 240-253989/2 Calibration Date: 11/02/2016 08:07

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9407.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3296	0.4666	0.1000	0.0142	0.0100	41.6*	20.0
Chloromethane	Ave	0.4664	0.5141	0.1000	0.0110	0.0100	10.2	20.0
Vinyl chloride	Ave	0.4213	0.4340	0.1000	0.0103	0.0100	3.0	20.0
Butadiene	Ave	0.3951	0.3943		0.00998	0.0100	-0.2	20.0
Bromomethane	Ave	0.1393	0.1544	0.0500	0.0111	0.0100	10.8	20.0
Chloroethane	Ave	0.2241	0.2231	0.0500	0.00995	0.0100	-0.5	20.0
Dichlorofluoromethane	Ave	0.4924	0.5064		0.0103	0.0100	2.8	20.0
Trichlorofluoromethane	Ave	0.2524	0.4847	0.1000	0.0192	0.0100	92.1*	20.0
Ethyl ether	Ave	0.2373	0.2048		0.00863	0.0100	-13.7	20.0
Acrolein	Ave	0.0276	0.0277		0.0503	0.0500	0.5	50.0
1,1-Dichloroethene	Ave	0.2948	0.3144	0.1000	0.0107	0.0100	6.7	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2139	0.2862	0.0500	0.0134	0.0100	33.8*	20.0
Acetone	Lin1		0.0633	0.0100	0.0158	0.0200	-20.9	50.0
Iodomethane	Ave	0.4487	0.5585		0.0124	0.0100	24.5*	20.0
Carbon disulfide	Ave	0.8567	1.005	0.1000	0.0117	0.0100	17.4	20.0
3-Chloro-1-propene	Ave	0.1674	0.1808		0.0108	0.0100	8.1	20.0
Methyl acetate	Ave	0.1562	0.1328	0.1000	0.0425	0.0500	-15.0	20.0
Methylene Chloride	Ave	0.3735	0.3591	0.1000	0.00961	0.0100	-3.9	50.0
2-Methyl-2-propanol	Ave	0.0095	0.0092		0.0967	0.100	-3.3	50.0
Methyl tert-butyl ether	Ave	0.5780	0.5957	0.1000	0.0103	0.0100	3.1	20.0
Acrylonitrile	Ave	0.0871	0.0748		0.0859	0.100	-14.1	20.0
trans-1,2-Dichloroethene	Ave	0.3190	0.3506	0.1000	0.0110	0.0100	9.9	20.0
Hexane	Ave	0.0781	0.0891		0.0114	0.0100	14.2	20.0
1,1-Dichloroethane	Ave	0.5441	0.5831	0.2000	0.0107	0.0100	7.2	20.0
Vinyl acetate	Ave	0.3607	0.3736		0.0104	0.0100	3.6	50.0
2,2-Dichloropropane	Ave	0.1735	0.2832		0.0163	0.0100	63.2*	20.0
cis-1,2-Dichloroethene	Ave	0.3431	0.3731	0.1000	0.0109	0.0100	8.7	20.0
2-Butanone (MEK)	Ave	0.1018	0.0794	0.0100	0.0156	0.0200	-22.0*	20.0
Chlorobromomethane	Ave	0.1527	0.1687		0.0110	0.0100	10.5	20.0
Tetrahydrofuran	Ave	0.0568	0.0537		0.0189	0.0200	-5.5	20.0
Chloroform	Ave	0.5085	0.5491	0.2000	0.0108	0.0100	8.0	20.0
1,1,1-Trichloroethane	Ave	0.3093	0.4270	0.1000	0.0138	0.0100	38.0*	20.0
Cyclohexane	Ave	0.5356	0.6090	0.1000	0.0114	0.0100	13.7	20.0
1,1-Dichloropropene	Ave	0.4235	0.4606		0.0109	0.0100	8.8	20.0
Carbon tetrachloride	Ave	0.2551	0.3951	0.1000	0.0155	0.0100	54.9*	20.0
Isobutyl alcohol	Ave	0.0048	0.0044		0.228	0.250	-8.7	20.0
Benzene	Ave	1.297	1.375	0.5000	0.0106	0.0100	6.0	20.0
1,2-Dichloroethane	Ave	0.3701	0.3630	0.1000	0.00981	0.0100	-1.9	20.0
n-Heptane	Ave	0.0709	0.0784		0.0111	0.0100	10.7	20.0
Trichloroethene	Ave	0.3242	0.3653	0.1500	0.0113	0.0100	12.7	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab Sample ID: CCVIS 240-253989/2 Calibration Date: 11/02/2016 08:07

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9407.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.4846	0.5463	0.1000	0.0113	0.0100	12.7	20.0
1,2-Dichloropropane	Ave	0.2882	0.3064	0.1000	0.0106	0.0100	6.3	20.0
Dibromomethane	Ave	0.1523	0.1520		0.00998	0.0100	-0.2	20.0
1,4-Dioxane	Ave	0.0021	0.0018		0.173	0.200	-13.6	50.0
Dichlorobromomethane	Ave	0.3088	0.3475	0.1500	0.0113	0.0100	12.5	20.0
2-Chloroethyl vinyl ether	Ave	0.1461	0.1381		0.0189	0.0200	-5.4	20.0
cis-1,3-Dichloropropene	Ave	0.3497	0.4029	0.1500	0.0115	0.0100	15.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1749	0.1563	0.0500	0.0179	0.0200	-10.6	20.0
Toluene	Ave	1.810	1.911	0.4000	0.0106	0.0100	5.6	20.0
trans-1,3-Dichloropropene	Ave	0.3519	0.3814	0.1000	0.0108	0.0100	8.4	20.0
Ethyl methacrylate	Ave	0.3599	0.3464		0.00962	0.0100	-3.8	20.0
1,1,2-Trichloroethane	Ave	0.3112	0.3047	0.1000	0.00979	0.0100	-2.1	20.0
Tetrachloroethene	Ave	0.3500	0.3982	0.1500	0.0114	0.0100	13.7	20.0
1,3-Dichloropropane	Ave	0.5823	0.5507		0.00946	0.0100	-5.4	20.0
2-Hexanone	Ave	0.1630	0.1342	0.0500	0.0165	0.0200	-17.7	20.0
Chlorodibromomethane	Ave	0.2750	0.3088		0.0112	0.0100	12.3	20.0
Ethylene Dibromide	Ave	0.2951	0.2847		0.00965	0.0100	-3.5	20.0
Chlorobenzene	Ave	1.164	1.261	0.3000	0.0108	0.0100	8.3	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3072	0.3912		0.0127	0.0100	27.3*	20.0
Ethylbenzene	Ave	0.6168	0.6881		0.0112	0.0100	11.6	20.0
m-Xylene & p-Xylene	Ave	1.527	1.684		0.0110	0.0100	10.3	20.0
o-Xylene	Ave	0.7251	0.8362		0.0115	0.0100	15.3	20.0
Styrene	Ave	1.217	1.430	0.3000	0.0117	0.0100	17.4	20.0
Bromoform	Ave	0.1358	0.1617	0.1000	0.0119	0.0100	19.1	20.0
Isopropylbenzene	Ave	1.715	2.079	0.1000	0.0121	0.0100	21.2*	20.0
1,1,2,2-Tetrachloroethane	Ave	0.7771	0.6012	0.3000	0.00774	0.0100	-22.6*	20.0
Bromobenzene	Ave	1.036	0.9556		0.00922	0.0100	-7.8	20.0
1,2,3-Trichloropropane	Ave	0.2460	0.1903		0.00773	0.0100	-22.7*	20.0
trans-1,4-Dichloro-2-butene	Ave	0.2183	0.1578		0.00722	0.0100	-27.8*	20.0
N-Propylbenzene	Ave	1.046	1.017		0.00972	0.0100	-2.8	20.0
2-Chlorotoluene	Ave	0.9116	0.8820		0.00968	0.0100	-3.2	20.0
1,3,5-Trimethylbenzene	Ave	2.964	2.997		0.0101	0.0100	1.1	20.0
4-Chlorotoluene	Ave	3.157	2.979		0.00943	0.0100	-5.7	20.0
tert-Butylbenzene	Ave	2.401	2.469		0.0103	0.0100	2.8	20.0
1,2,4-Trimethylbenzene	Ave	3.007	3.105		0.0103	0.0100	3.3	20.0
sec-Butylbenzene	Ave	3.213	3.374		0.0105	0.0100	5.0	20.0
1,3-Dichlorobenzene	Ave	1.723	1.810	0.6000	0.0105	0.0100	5.0	20.0
4-Isopropyltoluene	Ave	2.700	3.010		0.0112	0.0100	11.5	20.0
1,4-Dichlorobenzene	Ave	1.765	1.835	0.5000	0.0104	0.0100	4.0	20.0
n-Butylbenzene	Ave	2.151	2.377		0.0110	0.0100	10.5	20.0
1,2-Dichlorobenzene	Ave	1.577	1.664	0.4000	0.0105	0.0100	5.5	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab Sample ID: CCVIS 240-253989/2 Calibration Date: 11/02/2016 08:07

Instrument ID: A3UX15 Calib Start Date: 06/23/2016 12:01

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 06/23/2016 13:53

Lab File ID: UXC9407.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0839	0.0822	0.0500	0.00980	0.0100	-2.0	50.0
1,2,4-Trichlorobenzene	Ave	0.8173	0.9669	0.2000	0.0118	0.0100	18.3	50.0
Hexachlorobutadiene	Ave	0.3769	0.4527		0.0120	0.0100	20.1*	20.0
Naphthalene	Ave	1.726	1.560		0.00904	0.0100	-9.6	50.0
1,2,3-Trichlorobenzene	Ave	0.7228	0.7767		0.0107	0.0100	7.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2601	0.2800		0.00862	0.00801	7.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3152	0.2874		0.00730	0.00801	-8.8	20.0
Toluene-d8 (Surr)	Ave	1.543	1.619		0.00840	0.00801	4.9	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5279	0.6150		0.00933	0.00801	16.5	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Lab File ID: UXC9411.D Lab Sample ID: MB 240-253989/7

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX15 Date Analyzed: 11/02/2016 09:38

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-253989/4	UXC9408.D	11/02/2016 08:29
TB-102716	240-71423-1	UXC9417.D	11/02/2016 11:52
SEMW-9I-20-24	240-71423-2	UXC9418.D	11/02/2016 12:14
	240-71311-D-1 MS	UXC9420.D	11/02/2016 12:59
	240-71311-G-1 MSD	UXC9421.D	11/02/2016 13:21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-71423-1
SDG No.:
Client Sample ID: | Lab Sample ID: MB 240-253989/7
Matrix: Water | Lab File ID: UXC9411.D
Analysis Method: 8260C | Date Collected:
Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2016 09:38
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 253989 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.25
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.47
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.30
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.23
78-93-3	2-Butanone (MEK)	10	U	10	1.0
591-78-6	2-Hexanone	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.71
67-64-1	Acetone	10	U	10	1.8
71-43-2	Benzene	1.0	U	1.0	0.28
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.30
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.34
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.35
108-90-7	Chlorobenzene	1.0	U	1.0	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.41
67-66-3	Chloroform	1.0	U	1.0	0.31
74-87-3	Chloromethane	1.0	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.26
110-82-7	Cyclohexane	1.0	U	1.0	0.44
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.50
100-41-4	Ethylbenzene	1.0	U	1.0	0.26
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-71423-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-253989/7

Matrix: Water | Lab File ID: UXC9411.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/02/2016 09:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 253989 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	10	U	10	1.4
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.27
108-87-2	Methylcyclohexane	1.0	U	1.0	0.45
75-09-2	Methylene Chloride	1.0	U	1.0	0.53
100-42-5	Styrene	1.0	U	1.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.30
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.31
79-01-6	Trichloroethene	1.0	U	1.0	0.33
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.50
75-01-4	Vinyl chloride	1.0	U	1.0	0.45
1330-20-7	Xylenes, Total	2.0	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	102		73-124
1868-53-7	Dibromofluoromethane (Surr)	103		80-120
460-00-4	4-Bromofluorobenzene (Surr)	109		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-132

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-102716	240-71423-1	103	97	105	110
SEMW-9I-20-24	240-71423-2	108	97	104	104
	MB 240-253989/7	103	96	102	109
	LCS 240-253989/4	105	91	105	116
	240-71311-D-1 MS	108	96	104	117
	240-71311-G-1 MSD	108	94	109	113

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	63-132
TOL = Toluene-d8 (Surr)	73-124
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC9408.D

Lab ID: LCS 240-253989/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	11.9	119	79-133	
1,1,2,2-Tetrachloroethane	10.0	7.34	73	61-130	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	12.1	121	65-151	
1,1,2-Trichloroethane	10.0	9.05	90	80-120	
1,1-Dichloroethane	10.0	9.21	92	77-121	
1,1-Dichloroethene	10.0	9.84	98	70-141	
1,2,4-Trichlorobenzene	10.0	11.5	115	53-137	
1,2-Dibromo-3-Chloropropane	10.0	9.58	96	46-140	
Ethylene Dibromide	10.0	9.39	94	80-126	
1,2-Dichlorobenzene	10.0	9.92	99	80-120	
1,2-Dichloroethane	10.0	9.11	91	76-130	
1,2-Dichloropropane	10.0	9.83	98	79-121	
1,3-Dichlorobenzene	10.0	9.60	96	80-120	
1,4-Dichlorobenzene	10.0	9.59	96	80-120	
2-Butanone (MEK)	20.0	14.7	74	54-122	
2-Hexanone	20.0	15.5	77	56-124	
4-Methyl-2-pentanone (MIBK)	20.0	16.4	82	60-131	
Acetone	20.0	13.1	66	46-120	
Benzene	10.0	9.54	95	80-120	
Dichlorobromomethane	10.0	10.1	101	76-125	
Bromoform	10.0	11.0	110	52-157	
Bromomethane	10.0	9.67	97	24-160	
Carbon disulfide	10.0	10.4	104	58-160	
Carbon tetrachloride	10.0	13.9	139	69-149	
Chlorobenzene	10.0	9.94	99	80-120	
Chloroethane	10.0	8.91	89	24-147	
Chloroform	10.0	9.79	98	80-120	
Chloromethane	10.0	9.09	91	50-135	
cis-1,2-Dichloroethene	10.0	9.66	97	80-120	
cis-1,3-Dichloropropene	10.0	10.4	104	75-120	
Cyclohexane	10.0	10.1	101	66-135	
Chlorodibromomethane	10.0	10.2	102	68-131	
Dichlorodifluoromethane	10.0	10.3	103	32-140	
Ethylbenzene	10.0	10.0	100	80-120	
Isopropylbenzene	10.0	11.2	112	80-120	
Methyl acetate	50.0	41.7	83	65-124	
Methyl tert-butyl ether	10.0	9.61	96	75-126	
Methylcyclohexane	10.0	10.4	104	71-122	
Methylene Chloride	10.0	8.61	86	68-136	
Styrene	10.0	10.5	105	80-120	
Tetrachloroethene	10.0	10.7	107	80-123	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC9408.D

Lab ID: LCS 240-253989/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	10.0	9.68	97	80-121	
trans-1,2-Dichloroethene	10.0	10.1	101	80-123	
trans-1,3-Dichloropropene	10.0	9.78	98	65-120	
Trichloroethene	10.0	10.5	105	80-122	
Trichlorofluoromethane	10.0	16.6	166	56-161	*
Vinyl chloride	10.0	8.91	89	60-129	
Xylenes, Total	20.0	20.3	101	80-120	
m-Xylene & p-Xylene	10.0	9.97	100	80-120	
o-Xylene	10.0	10.3	103	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC9420.D

Lab ID: 240-71311-D-1 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
1,2-Dichloroethane	10.0	1.0 U	8.12	81	62-137	
2-Butanone (MEK)	20.0	10 U	13.0	65	38-123	
Benzene	10.0	1.0 U	7.88	79	67-126	
Carbon disulfide	10.0	1.0 U	7.28	73	43-172	
Chlorobenzene	10.0	1.0 U	8.20	82	58-128	
Chloroform	10.0	1.0 U	8.20	82	67-133	
Ethylbenzene	10.0	1.0 U	7.82	78	66-123	
Styrene	10.0	1.0 U	8.65	87	62-131	
Toluene	10.0	1.0 U	7.74	77	63-130	
Xylenes, Total	20.0	2.0 U	16.0	80	60-126	
m-Xylene & p-Xylene	10.0	2.0 U	7.79	78	58-127	
o-Xylene	10.0	1.0 U	8.25	83	61-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXC9421.D

Lab ID: 240-71311-G-1 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,2-Dichloroethane	10.0	9.00	90	10	35	62-137	
2-Butanone (MEK)	20.0	13.5	68	4	35	38-123	
Benzene	10.0	9.59	96	20	31	67-126	
Carbon disulfide	10.0	11.0	110	41	35	43-172	F2
Chlorobenzene	10.0	9.88	99	19	35	58-128	
Chloroform	10.0	9.96	100	19	35	67-133	
Ethylbenzene	10.0	9.77	98	22	34	66-123	
Styrene	10.0	10.3	103	17	35	62-131	
Toluene	10.0	10.0	100	25	33	63-130	
Xylenes, Total	20.0	19.8	99	21	35	60-126	
m-Xylene & p-Xylene	10.0	9.89	99	24	35	58-127	
o-Xylene	10.0	9.92	99	18	35	61-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Sample No.: STD8260 240-235701/4 Date Analyzed: 06/23/2016 12:46

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC9010.D Heated Purge: (Y/N) N

Calibration ID: 34931

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1646184	5.13	1222360	7.81	530154	10.04
UPPER LIMIT		3292368	5.63	2444720	8.31	1060308	10.54
LOWER LIMIT		823092	4.63	611180	7.31	265077	9.54
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-235701/14		1661685	5.13	1268289	7.81	530949	10.04
ICV 240-235701/15		1649875	5.13	1270373	7.81	493234	10.04
CCVIS 240-253989/2		1668478	5.03	1322975	7.68	764372	9.91

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Sample No.: CCVIS 240-253989/2 Date Analyzed: 11/02/2016 08:07

Instrument ID: A3UX15 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXC9407.D Heated Purge: (Y/N) N

Calibration ID: 36080

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		1668478	5.03	1322975	7.68	764372	9.91
UPPER LIMIT		3336956	5.53	2645950	8.18	1528744	10.41
LOWER LIMIT		834239	4.53	661488	7.18	382186	9.41
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-253989/4		1711663	5.03	1322041	7.68	775757	9.91
CCV 240-253989/3		1687796	5.03	1343475	7.68	731999	9.91
MB 240-253989/7		1667008	5.03	1304276	7.68	721693	9.91
240-71423-1	TB-102716	1700002	5.03	1312188	7.68	738250	9.91
240-71423-2	SEMW-9I-20-24	1614794	5.03	1250708	7.68	609822	9.91
240-71311-D-1 MS		1692330	5.03	1323949	7.68	740140	9.91
240-71311-G-1 MSD		1681705	5.03	1247981	7.68	672236	9.91

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Instrument ID: A3UX15 Start Date: 06/23/2016 11:35

Analysis Batch Number: 235701 End Date: 06/23/2016 18:00

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-235701/1		06/23/2016 11:35	1	BFB619.D	DB-624 0.18(mm)
STD8260 240-235701/2 IC		06/23/2016 12:01	1	UXC9008.D	DB-624 0.18(mm)
STD8260 240-235701/3 IC		06/23/2016 12:23	1	UXC9009.D	DB-624 0.18(mm)
STD8260 240-235701/4 ICIS		06/23/2016 12:46	1	UXC9010.D	DB-624 0.18(mm)
STD8260 240-235701/5 IC		06/23/2016 13:08	1	UXC9011.D	DB-624 0.18(mm)
STD8260 240-235701/6 IC		06/23/2016 13:31	1	UXC9012.D	DB-624 0.18(mm)
STD8260 240-235701/7 IC		06/23/2016 13:53	1	UXC9013.D	DB-624 0.18(mm)
ICV 240-235701/14		06/23/2016 14:16	1	UXC9014.D	DB-624 0.18(mm)
STD 240-235701/8 IC		06/23/2016 14:38	1		DB-624 0.18(mm)
STD 240-235701/9 IC		06/23/2016 15:00	1		DB-624 0.18(mm)
STD 240-235701/10 IC		06/23/2016 15:22	1		DB-624 0.18(mm)
STD 240-235701/11 IC		06/23/2016 15:45	1		DB-624 0.18(mm)
STD 240-235701/12 IC		06/23/2016 16:07	1		DB-624 0.18(mm)
STD 240-235701/13 IC		06/23/2016 16:30	1		DB-624 0.18(mm)
ICV 240-235701/15		06/23/2016 16:52	1	UXC9021.D	DB-624 0.18(mm)
ZZZZZ		06/23/2016 17:15	1		DB-624 0.18(mm)
ZZZZZ		06/23/2016 18:00	1		DB-624 0.18(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-71423-1

SDG No.:

Instrument ID: A3UX15 Start Date: 11/02/2016 07:31

Analysis Batch Number: 253989 End Date: 11/02/2016 17:50

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-253989/1		11/02/2016 07:31	1	BFB61102B.D	DB-624 0.18(mm)
CCVIS 240-253989/2		11/02/2016 08:07	1	UXC9407.D	DB-624 0.18(mm)
LCS 240-253989/4		11/02/2016 08:29	1	UXC9408.D	DB-624 0.18(mm)
CCV 240-253989/3		11/02/2016 08:52	1	UXC9409.D	DB-624 0.18(mm)
ZZZZZ		11/02/2016 09:15	1		DB-624 0.18(mm)
MB 240-253989/7		11/02/2016 09:38	1	UXC9411.D	DB-624 0.18(mm)
240-71423-1		11/02/2016 11:52	1	UXC9417.D	DB-624 0.18(mm)
240-71423-2		11/02/2016 12:14	1666.67	UXC9418.D	DB-624 0.18(mm)
ZZZZZ		11/02/2016 12:36	1		DB-624 0.18(mm)
240-71311-D-1 MS		11/02/2016 12:59	1	UXC9420.D	DB-624 0.18(mm)
240-71311-G-1 MSD		11/02/2016 13:21	1	UXC9421.D	DB-624 0.18(mm)
ZZZZZ		11/02/2016 13:43	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 14:06	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 14:28	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 14:51	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 15:13	20		DB-624 0.18(mm)
ZZZZZ		11/02/2016 15:36	14.29		DB-624 0.18(mm)
ZZZZZ		11/02/2016 15:58	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 16:21	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 16:44	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 17:06	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 17:28	1		DB-624 0.18(mm)
ZZZZZ		11/02/2016 17:50	1		DB-624 0.18(mm)

8260C

TETRA TECH

INTERNAL CORRESPONDENCE

TO: **C. PIKE** **DATE:** **DECEMBER 2, 2016**

FROM: **L. GANSER** **COPIES:** **DV FILE**

SUBJECT: **DATA VALIDATION – VOC**
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
SDG 240-71528-1

SAMPLES: 10/Aqueous/

MRC-D2-D	MRC-D2-I	MRC-D2-S	MRC-D3-D	MRC-D3-I
MRC-D3-S	MRC-D4-D	MRC-D4-I	MRC-D4-S	TB-103116

Overview

The sample set for LMC-MRC, SDG 240-71423-1 consisted of nine (9) aqueous environmental samples and one (1) trip blank. The samples were analyzed for volatile organic compounds (VOC). No field duplicate sample pair was included in this SDG.

The samples were collected by Tetra Tech, Inc. on October 31, 2016 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Methods 8260C for VOC analytical and reporting protocols.

The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method/preparation blanks, surrogate spike recoveries, laboratory control sample results, internal standard areas and recoveries, chromatographic resolution, analyte identification, analyte quantitation, and detection limits. Areas of concern are listed below.

Major

No major issues were noted.

Minor

- Continuing calibration percent difference (%D) greater than 20 percent was noted for chloroethane, acetone, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, chlorodibromomethane, bromoform, 1,2-dibromo-3-chloropropane, and 1,2,4-trichlorobenzene on 11/03/2016 at 8:32 on instrument CHHP7 affecting undiluted samples. Detected and nondetected results for these parameters were qualified as estimated, (J) and (UJ), respectively.

- The detected result for 1,1,2-trichloro-1,2,2-trifluoroethane in sample MRC-D4-S exceeded the calibration limit. The result was qualified as estimated (J). The sample was reanalyzed at a 500x dilution; however, 1,1,2-trichloro-1,2,2-trifluoroethane was not detected in the reanalyzed sample at detection limit of 120 ug/L. Therefore, the result from the undiluted sample was reported.

Notes

The laboratory reported that trichloroethene and 1,1,2-trichloro-1,2,2-trifluoroethane are not reported in some analyses if carryover was suspected in an analysis that followed a sample that contained those analytes in an over-range sample prior to that analysis.

TETRA TECH

INTERNAL CORRESPONDENCE

TO:	**C. PIKE**	**DATE:**	**DECEMBER 20, 2016**
FROM:	**LEIGH A. CIOFANI**	**COPIES:**	**DV FILE**

SUBJECT: **ORGANIC AND INORGANIC DATA VALIDATION – VOC / METHANE / ETHANE / ETHENE / IRON / MANGANESE / ALKALINITY / SULFATE / TOC/ MICROBIAL**
MRC – BLOCK E – LEVEL 2B REVIEW
SAMPLE DELIVERY GROUP (SDG) 240-72440-1

SAMPLES: 4 / Water / VOC

SEMW-7I-112116 SEMW-8I-112116 SEMW-8S-112116
TB-112116

3 / Water / Methane / Ethane / Ethene / Iron / Manganese / Alkalinity / Sulfate / TOC

SEMW-7I-112116 SEMW-8I-112116 SEMW-8S-112116

OVERVIEW

The sample set for MRC-Block E, SDG 240-72440-1, consists of one (3) aqueous environmental samples and one (1) trip blank. Samples were analyzed for volatile organic compounds (VOC), methane, ethane, and ethane, iron, manganese, alkalinity, sulfate, and total organic carbon (TOC), dehalococcoides (DHC) and genes. No field duplicate pair is included in this SDG.

The samples were collected by Tetra Tech on November 21, 2016 and analyzed by Microbial Insights (for DHC) and TestAmerica (for remaining fractions). Analyses were conducted in accordance with SW-846 Methods 8260B (for VOCs), 6010C (for metals), and 9060A (for TOC) RSK-175 (for methane, ethane, and ethane, EPA Method 300.0 (for sulfate), Standard Method 2320B-1997 (for alkalinity), and a general sub-contract method (for DHC) analytical and reporting protocols.

A Level 2B review was performed on this SDG. The data contained in this SDG were validated with regard to the following parameters: data completeness, holding times, GC/MS tuning, initial/continuing calibrations, laboratory method blanks, surrogate spike recoveries, laboratory control sample results, matrix spike/matrix spike duplicate results, internal standard recoveries, and detection limits. Areas of concern with respect to data quality are listed below.

MAJOR PROBLEMS

- None.

MINOR PROBLEMS

- The VOC continuing calibration performed on 11/30/2016 at 10:06 on instrument A3UX16 had percent differences (%Ds) for acetone and 2-hexanone that were greater than the 20% quality control limit. All samples were affected. Non-detected results for these analytes were qualified as estimated (UJ) in the affected samples.

- Detected results below the reporting limit (RL) but above the method detection limit (MDL) were qualified as estimated (J).

NOTES

Non-detected results were reported to the MDL in the database (but to the RL on the Form Is).

The following VOC samples were analyzed at dilution factors greater than 1:

Sample	Dilution Factor
SEMW-7I-112116	625
SEMW-8I-112116	250
SEMW-8S-112116	500

The matrix spike (MS)/matrix spike duplicate (MSD) analysis for the volatile organic gases (methane, ethane, and ethane) performed on sample 240-72267-E-4 (laboratory identification) had an MSD percent recovery (%R) that was greater than the laboratory quality control limits for methane. No action was necessary because the original unspiked sample was not included in this SDG.

Metals sample SEMW-8S-112116 was analyzed at a dilution factor of 5.

Sulfate in sample SEMW-8S-112116 was analyzed at a dilution factor of 10.

Sulfate was detected in the initial calibration blank at the following concentration:

Analyte	Maximum Concentration	< or > RL
Sulfate	0.137 mg/L[(1)]	< RL

1 – Maximum concentration detected in initial calibration blank 240-256972/11.

No action was necessary, as samples from this SDG were not analyzed directly after this initial calibration blank.

Sample SEMW-7I-112116 was listed as SEMW-7I-11211 on the Form I report and in the database for microbial parameters. The sample name was corrected on the Form I and in the database by the data validator.

EXECUTIVE SUMMARY

Laboratory Performance Issues: Non-detected results for two (2) VOC analytes were qualified due to calibration noncompliance.

Other Factors Affecting Data Quality: Detected results below the RL but above the MDL were qualified as estimated.

The data for these analyses were reviewed with reference to the USEPA “National Functional Guidelines for Superfund Organic Methods Data Review” (September 2016) and “National Functional Guidelines for Inorganic Superfund Data Review” (September 2016). The text of this report has been formulated to address only those problem areas affecting data quality.

Leigh A. Ciofani

Tetra Tech
Leigh A. Ciofani
Environmental Scientist/Data Validator

Joseph A. Samchuck

Tetra Tech
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Data Qualifier Definitions

The following definitions provide brief explanations of the validation qualifiers assigned to results in the data review process.

U	The analyte was analyzed for, but was not detected at a level greater than or equal to the level of the adjusted method detection limit for sample and method.
J	The analyte was positively identified and the associated numerical value is the approximate concentration of the analyte in the sample (due either to the quality of the data generated because certain quality control criteria were not met, or the concentration of the analyte was below the reporting limit).
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.
UJ	The analyte was analyzed for, but was not detected. The reported detection limit is approximate and may be inaccurate or imprecise.
R	The sample result (detected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.
UR	The sample result (nondetected) is unusable due to the quality of the data generated because certain criteria were not met. The analyte may or may not be present in the sample.

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

APPENDIX A

QUALIFIED ANALYTICAL RESULTS

PROJ_NO: 07896	NSAMPLE	SEMW-7I-112116			SEMW-8I-112116			SEMW-8S-112116			TB-112116		
SDG: 240-72440-1	LAB_ID	240-72440-2			240-72440-4			240-72440-3			240-72440-1		
FRACTION: OV	SAMP_DATE	11/21/2016			11/21/2016			11/21/2016			11/21/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		140	U		58	U		120	U		0.23	U	
1,1,2,2-TETRACHLOROETHANE		200	U		80	U		160	U		0.32	U	
1,1,2-TRICHLOROETHANE		210	U		85	U		170	U		0.34	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		260	U		100	U		210	U		0.41	U	
1,1-DICHLOROETHANE		160	U		63	U		130	U		0.25	U	
1,1-DICHLOROETHENE		170	U		68	U		140	U		0.27	U	
1,2,4-TRICHLOROBENZENE		170	U		68	U		140	U		0.27	U	
1,2-DIBROMO-3-CHLOROPROPANE		290	U		120	U		240	U		0.47	U	
1,2-DIBROMOETHANE		140	U		58	U		120	U		0.23	U	
1,2-DICHLOROBENZENE		160	U		65	U		130	U		0.26	U	
1,2-DICHLOROETHANE		190	U		75	U		150	U		0.3	U	
1,2-DICHLOROPROPANE		190	U		75	U		150	U		0.3	U	
1,3-DICHLOROBENZENE		200	U		80	U		160	U		0.32	U	
1,4-DICHLOROBENZENE		140	U		58	U		120	U		0.23	U	
2-BUTANONE		640	U		260	U		510	U		1	U	
2-HEXANONE		770	UJ	C	310	UJ	C	620	UJ	C	1.2	UJ	C
4-METHYL-2-PENTANONE		440	U		180	U		360	U		0.71	U	
ACETONE		1100	UJ	C	440	UJ	C	880	UJ	C	1.8	UJ	C
BENZENE		180	U		70	U		140	U		0.28	U	
BROMODICHLOROMETHANE		190	U		75	U		150	U		0.3	U	
BROMOFORM		270	U		110	U		220	U		0.43	U	
BROMOMETHANE		260	U		110	U		210	U		0.42	U	
CARBON DISULFIDE		210	U		85	U		170	U		0.34	U	
CARBON TETRACHLORIDE		220	U		88	U		180	U		0.35	U	
CHLOROBENZENE		200	U		80	U		160	U		0.32	U	
CHLORODIBROMOMETHANE		160	U		63	U		130	U		0.25	U	
CHLOROETHANE		260	U		100	U		210	U		0.41	U	
CHLOROFORM		190	U		78	U		160	U		0.31	U	
CHLOROMETHANE		270	U		110	U		220	U		0.43	U	
CIS-1,2-DICHLOROETHENE		190	U		170	J	P	150	U		0.3	U	
CIS-1,3-DICHLOROPROPENE		160	U		65	U		130	U		0.26	U	
CYCLOHEXANE		280	U		110	U		220	U		0.44	U	
DICHLORODIFLUOROMETHANE		310	U		130	U		250	U		0.5	U	
ETHYLBENZENE		160	U		65	U		130	U		0.26	U	
ISOPROPYLBENZENE		130	U		53	U		110	U		0.21	U	

PROJ_NO: 07896	NSAMPLE	SEMW-7I-112116			SEMW-8I-112116			SEMW-8S-112116			TB-112116		
SDG: 240-72440-1	LAB_ID	240-72440-2			240-72440-4			240-72440-3			240-72440-1		
FRACTION: OV	SAMP_DATE	11/21/2016			11/21/2016			11/21/2016			11/21/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		890	U		360	U		720	U		1.4	U	
METHYL CYCLOHEXANE		280	U		110	U		230	U		0.45	U	
METHYL TERT-BUTYL ETHER		170	U		68	U		140	U		0.27	U	
METHYLENE CHLORIDE		330	U		130	U		270	U		0.53	U	
STYRENE		140	U		58	U		120	U		0.23	U	
TETRACHLOROETHENE		190	U		75	U		150	U		0.3	U	
TOLUENE		140	U		58	U		120	U		0.23	U	
TOTAL XYLENES		150	U		60	U		120	U		0.24	U	
TRANS-1,2-DICHLOROETHENE		180	U		73	U		150	U		0.29	U	
TRANS-1,3-DICHLOROPROPENE		190	U		78	U		160	U		0.31	U	
TRICHLOROETHENE		22000			7100			16000			0.33	U	
TRICHLOROFLUOROMETHANE		310	U		130	U		250	U		0.5	U	
VINYL CHLORIDE		280	U		110	U		230	U		0.45	U	

PROJ_NO: 07896	NSAMPLE	SEMW-7I-112116			SEMW-8I-112116			SEMW-8S-112116		
SDG: 240-72440-1	LAB_ID	240-72440-2			240-72440-4			240-72440-3		
FRACTION: OVG	SAMP_DATE	11/21/2016			11/21/2016			11/21/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ETHANE		0.47	J	P	5.8			0.5		
ETHENE		0.28	J	P	10			0.51		
METHANE		1.4			6.1			3.7		

PROJ_NO: 07896	NSAMPLE	SEMW-7I-112116			SEMW-8I-112116			SEMW-8S-112116		
SDG: 240-72440-1	LAB_ID	240-72440-2			240-72440-4			240-72440-3		
FRACTION: M	SAMP_DATE	11/21/2016			11/21/2016			11/21/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
IRON		610			16000			7000		
MANGANESE		110			1300			530		

PROJ_NO: 07896	NSAMPLE	SEMW-7I-112116			SEMW-8I-112116			SEMW-8S-112116		
SDG: 240-72440-1	LAB_ID	240-72440-2			240-72440-4			240-72440-3		
FRACTION: MISC	SAMP_DATE	11/21/2016			11/21/2016			11/21/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM		
	UNITS	MG/L			MG/L			MG/L		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF									
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
ALKALINITY		4.2	J	P	47			1.9	U	
SULFATE		7.9			9.8			180		
TOTAL ORGANIC CARBON		0.56	J	P	1.2			3		

PROJ_NO: 07896	NSAMPLE	SEMW-7I-112116		
SDG: 240-72440-1	LAB_ID	085NK		
FRACTION: MICRO	SAMP_DATE	11/21/2016		
MEDIA: WATER	QC_TYPE	NM		
	UNITS	CELLS/ML		
	PCT_SOLIDS			
	DUP_OF			
PARAMETER		RESULT	VQL	QLCD
BAV1 VC R-DASE		0.5	U	
DEHALOBACTER		41		
DEHALOCOCCOIDES		0.5	U	
TCE R-DASE		0.5	U	
VINYL CHLORIDE REDUCTASE GENE		0.5	U	

APPENDIX B

RESULTS AS REPORTED BY THE LABORATORY

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-7I-112116 | Lab Sample ID: 240-72440-2

Matrix: Water | Lab File ID: UXM9677.D

Analysis Method: 8260C | Date Collected: 11/21/2016 11:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 13:16

Soil Aliquot Vol: | Dilution Factor: 625

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	630	U	630	140
79-34-5	1,1,2,2-Tetrachloroethane	630	U	630	200
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	630	U	630	260
79-00-5	1,1,2-Trichloroethane	630	U	630	210
75-34-3	1,1-Dichloroethane	630	U	630	160
75-35-4	1,1-Dichloroethene	630	U	630	170
120-82-1	1,2,4-Trichlorobenzene	630	U	630	170
96-12-8	1,2-Dibromo-3-Chloropropane	1300	U	1300	290
106-93-4	Ethylene Dibromide	630	U	630	140
95-50-1	1,2-Dichlorobenzene	630	U	630	160
107-06-2	1,2-Dichloroethane	630	U	630	190
78-87-5	1,2-Dichloropropane	630	U	630	190
541-73-1	1,3-Dichlorobenzene	630	U	630	200
106-46-7	1,4-Dichlorobenzene	630	U	630	140
78-93-3	2-Butanone (MEK)	6300	U	6300	640
591-78-6	2-Hexanone	6300	U	6300	770
108-10-1	4-Methyl-2-pentanone (MIBK)	6300	U	6300	440
67-64-1	Acetone	6300	U	6300	1100
71-43-2	Benzene	630	U	630	180
75-27-4	Dichlorobromomethane	630	U	630	190
75-25-2	Bromoform	630	U	630	270
74-83-9	Bromomethane	630	U	630	260
75-15-0	Carbon disulfide	630	U	630	210
56-23-5	Carbon tetrachloride	630	U	630	220
108-90-7	Chlorobenzene	630	U	630	200
75-00-3	Chloroethane	630	U	630	260
67-66-3	Chloroform	630	U	630	190
74-87-3	Chloromethane	630	U	630	270
156-59-2	cis-1,2-Dichloroethene	630	U	630	190
10061-01-5	cis-1,3-Dichloropropene	630	U	630	160
110-82-7	Cyclohexane	630	U	630	280
124-48-1	Chlorodibromomethane	630	U	630	160
75-71-8	Dichlorodifluoromethane	630	U	630	310
100-41-4	Ethylbenzene	630	U	630	160
98-82-8	Isopropylbenzene	630	U	630	130

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-7I-112116 | Lab Sample ID: 240-72440-2

Matrix: Water | Lab File ID: UXM9677.D

Analysis Method: 8260C | Date Collected: 11/21/2016 11:20

Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 13:16

Soil Aliquot Vol: | Dilution Factor: 625

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	6300	U	6300	890
1634-04-4	Methyl tert-butyl ether	630	U	630	170
108-87-2	Methylcyclohexane	630	U	630	280
75-09-2	Methylene Chloride	630	U	630	330
100-42-5	Styrene	630	U	630	140
127-18-4	Tetrachloroethene	630	U	630	190
108-88-3	Toluene	630	U	630	140
156-60-5	trans-1,2-Dichloroethene	630	U	630	180
10061-02-6	trans-1,3-Dichloropropene	630	U	630	190
79-01-6	Trichloroethene	22000		630	210
75-69-4	Trichlorofluoromethane	630	U	630	310
75-01-4	Vinyl chloride	630	U	630	280
1330-20-7	Xylenes, Total	1300	U	1300	150

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		73-124
1868-53-7	Dibromofluoromethane (Surr)	97		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-8I-112116 | Lab Sample ID: 240-72440-4

Matrix: Water | Lab File ID: UXM9679.D

Analysis Method: 8260C | Date Collected: 11/21/2016 14:15

Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 14:02

Soil Aliquot Vol: | Dilution Factor: 250

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	250	U	250	58
79-34-5	1,1,2,2-Tetrachloroethane	250	U	250	80
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	250	U	250	100
79-00-5	1,1,2-Trichloroethane	250	U	250	85
75-34-3	1,1-Dichloroethane	250	U	250	63
75-35-4	1,1-Dichloroethene	250	U	250	68
120-82-1	1,2,4-Trichlorobenzene	250	U	250	68
96-12-8	1,2-Dibromo-3-Chloropropane	500	U	500	120
106-93-4	Ethylene Dibromide	250	U	250	58
95-50-1	1,2-Dichlorobenzene	250	U	250	65
107-06-2	1,2-Dichloroethane	250	U	250	75
78-87-5	1,2-Dichloropropane	250	U	250	75
541-73-1	1,3-Dichlorobenzene	250	U	250	80
106-46-7	1,4-Dichlorobenzene	250	U	250	58
78-93-3	2-Butanone (MEK)	2500	U	2500	260
591-78-6	2-Hexanone	2500	U	2500	310
108-10-1	4-Methyl-2-pentanone (MIBK)	2500	U	2500	180
67-64-1	Acetone	2500	U	2500	440
71-43-2	Benzene	250	U	250	70
75-27-4	Dichlorobromomethane	250	U	250	75
75-25-2	Bromoform	250	U	250	110
74-83-9	Bromomethane	250	U	250	110
75-15-0	Carbon disulfide	250	U	250	85
56-23-5	Carbon tetrachloride	250	U	250	88
108-90-7	Chlorobenzene	250	U	250	80
75-00-3	Chloroethane	250	U	250	100
67-66-3	Chloroform	250	U	250	78
74-87-3	Chloromethane	250	U	250	110
156-59-2	cis-1,2-Dichloroethene	170	J	250	75
10061-01-5	cis-1,3-Dichloropropene	250	U	250	65
110-82-7	Cyclohexane	250	U	250	110
124-48-1	Chlorodibromomethane	250	U	250	63
75-71-8	Dichlorodifluoromethane	250	U	250	130
100-41-4	Ethylbenzene	250	U	250	65
98-82-8	Isopropylbenzene	250	U	250	53

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1
SDG No.:
Client Sample ID: SEMW-8I-112116 | Lab Sample ID: 240-72440-4
Matrix: Water | Lab File ID: UXM9679.D
Analysis Method: 8260C | Date Collected: 11/21/2016 14:15
Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 14:02
Soil Aliquot Vol: | Dilution Factor: 250
Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	2500	U	2500	360
1634-04-4	Methyl tert-butyl ether	250	U	250	68
108-87-2	Methylcyclohexane	250	U	250	110
75-09-2	Methylene Chloride	250	U	250	130
100-42-5	Styrene	250	U	250	58
127-18-4	Tetrachloroethene	250	U	250	75
108-88-3	Toluene	250	U	250	58
156-60-5	trans-1,2-Dichloroethene	250	U	250	73
10061-02-6	trans-1,3-Dichloropropene	250	U	250	78
79-01-6	Trichloroethene	7100		250	83
75-69-4	Trichlorofluoromethane	250	U	250	130
75-01-4	Vinyl chloride	250	U	250	110
1330-20-7	Xylenes, Total	500	U	500	60

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		73-124
1868-53-7	Dibromofluoromethane (Surr)	98		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-8S-112116 | Lab Sample ID: 240-72440-3

Matrix: Water | Lab File ID: UXM9678.D

Analysis Method: 8260C | Date Collected: 11/21/2016 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 13:39

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	500	U	500	120
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	160
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	210
79-00-5	1,1,2-Trichloroethane	500	U	500	170
75-34-3	1,1-Dichloroethane	500	U	500	130
75-35-4	1,1-Dichloroethene	500	U	500	140
120-82-1	1,2,4-Trichlorobenzene	500	U	500	140
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U	1000	240
106-93-4	Ethylene Dibromide	500	U	500	120
95-50-1	1,2-Dichlorobenzene	500	U	500	130
107-06-2	1,2-Dichloroethane	500	U	500	150
78-87-5	1,2-Dichloropropane	500	U	500	150
541-73-1	1,3-Dichlorobenzene	500	U	500	160
106-46-7	1,4-Dichlorobenzene	500	U	500	120
78-93-3	2-Butanone (MEK)	5000	U	5000	510
591-78-6	2-Hexanone	5000	U	5000	620
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	360
67-64-1	Acetone	5000	U	5000	880
71-43-2	Benzene	500	U	500	140
75-27-4	Dichlorobromomethane	500	U	500	150
75-25-2	Bromoform	500	U	500	220
74-83-9	Bromomethane	500	U	500	210
75-15-0	Carbon disulfide	500	U	500	170
56-23-5	Carbon tetrachloride	500	U	500	180
108-90-7	Chlorobenzene	500	U	500	160
75-00-3	Chloroethane	500	U	500	210
67-66-3	Chloroform	500	U	500	160
74-87-3	Chloromethane	500	U	500	220
156-59-2	cis-1,2-Dichloroethene	500	U	500	150
10061-01-5	cis-1,3-Dichloropropene	500	U	500	130
110-82-7	Cyclohexane	500	U	500	220
124-48-1	Chlorodibromomethane	500	U	500	130
75-71-8	Dichlorodifluoromethane	500	U	500	250
100-41-4	Ethylbenzene	500	U	500	130
98-82-8	Isopropylbenzene	500	U	500	110

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-8S-112116 | Lab Sample ID: 240-72440-3

Matrix: Water | Lab File ID: UXM9678.D

Analysis Method: 8260C | Date Collected: 11/21/2016 12:30

Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 13:39

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	5000	U	5000	720
1634-04-4	Methyl tert-butyl ether	500	U	500	140
108-87-2	Methylcyclohexane	500	U	500	230
75-09-2	Methylene Chloride	500	U	500	270
100-42-5	Styrene	500	U	500	120
127-18-4	Tetrachloroethene	500	U	500	150
108-88-3	Toluene	500	U	500	120
156-60-5	trans-1,2-Dichloroethene	500	U	500	150
10061-02-6	trans-1,3-Dichloropropene	500	U	500	160
79-01-6	Trichloroethene	16000		500	170
75-69-4	Trichlorofluoromethane	500	U	500	250
75-01-4	Vinyl chloride	500	U	500	230
1330-20-7	Xylenes, Total	1000	U	1000	120

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		73-124
1868-53-7	Dibromofluoromethane (Surr)	100		80-120
460-00-4	4-Bromofluorobenzene (Surr)	90		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		63-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: TB-112116 | Lab Sample ID: 240-72440-1

Matrix: Water | Lab File ID: UXM9676.D

Analysis Method: 8260C | Date Collected: 11/21/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 12:52

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.25
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.47
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.30
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.23
78-93-3	2-Butanone (MEK)	10	U	10	1.0
591-78-6	2-Hexanone	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.71
67-64-1	Acetone	10	U	10	1.8
71-43-2	Benzene	1.0	U	1.0	0.28
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.30
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.34
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.35
108-90-7	Chlorobenzene	1.0	U	1.0	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.41
67-66-3	Chloroform	1.0	U	1.0	0.31
74-87-3	Chloromethane	1.0	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.26
110-82-7	Cyclohexane	1.0	U	1.0	0.44
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.50
100-41-4	Ethylbenzene	1.0	U	1.0	0.26
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1
SDG No.:
Client Sample ID: TB-112116 | Lab Sample ID: 240-72440-1
Matrix: Water | Lab File ID: UXM9676.D
Analysis Method: 8260C | Date Collected: 11/21/2016 00:00
Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 12:52
Soil Aliquot Vol: | Dilution Factor: 1
Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)
% Moisture: | Level: (low/med) Low
Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	10	U	10	1.4
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.27
108-87-2	Methylcyclohexane	1.0	U	1.0	0.45
75-09-2	Methylene Chloride	1.0	U	1.0	0.53
100-42-5	Styrene	1.0	U	1.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.30
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.31
79-01-6	Trichloroethene	1.0	U	1.0	0.33
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.50
75-01-4	Vinyl chloride	1.0	U	1.0	0.45
1330-20-7	Xylenes, Total	2.0	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		73-124
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	99		63-132

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-7I-112116 | Lab Sample ID: 240-72440-2

Matrix: Water | Lab File ID: RSK0112918.D

Analysis Method: RSK-175 | Date Collected: 11/21/2016 11:20

Sample wt/vol: 33(mL) | Date Analyzed: 11/29/2016 17:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257347 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-85-1	Ethene	0.28	J	0.50	0.13
74-84-0	Ethane	0.47	J	0.50	0.14
74-82-8	Methane	1.4		0.50	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	84		76-121

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-8I-112116 | Lab Sample ID: 240-72440-4

Matrix: Water | Lab File ID: RSK0112920.D

Analysis Method: RSK-175 | Date Collected: 11/21/2016 14:15

Sample wt/vol: 33(mL) | Date Analyzed: 11/29/2016 18:08

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257347 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-85-1	Ethene	10		0.50	0.13
74-84-0	Ethane	5.8		0.50	0.14
74-82-8	Methane	6.1		0.50	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	82		76-121

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: SEMW-8S-112116 | Lab Sample ID: 240-72440-3

Matrix: Water | Lab File ID: RSK0112919.D

Analysis Method: RSK-175 | Date Collected: 11/21/2016 12:30

Sample wt/vol: 33(mL) | Date Analyzed: 11/29/2016 17:51

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257347 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-85-1	Ethene	0.51		0.50	0.13
74-84-0	Ethane	0.50		0.50	0.14
74-82-8	Methane	3.7		0.50	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	84		76-121

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: SEMW-7I-112116

Lab Sample ID: 240-72440-2

Lab Name: TestAmerica Canton

Job No.: 240-72440-1

SDG ID.:

Matrix: Water

Date Sampled: 11/21/2016 11:20

Reporting Basis: WET

Date Received: 11/22/2016 09:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-89-6	Iron	610	100	25	ug/L			1	6010C
7439-96-5	Manganese	110	15	5.1	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: SEMW-8I-112116

Lab Sample ID: 240-72440-4

Lab Name: TestAmerica Canton

Job No.: 240-72440-1

SDG ID.:

Matrix: Water

Date Sampled: 11/21/2016 14:15

Reporting Basis: WET

Date Received: 11/22/2016 09:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-89-6	Iron	16000	100	25	ug/L			1	6010C
7439-96-5	Manganese	1300	15	5.1	ug/L			1	6010C

1A-IN
INORGANIC ANALYSIS DATA SHEET
METALS - TOTAL RECOVERABLE

Client Sample ID: SEMW-8S-112116
Lab Sample ID: 240-72440-3
Lab Name: TestAmerica Canton
Job No.: 240-72440-1
SDG ID.:
Matrix: Water
Date Sampled: 11/21/2016 12:30
Reporting Basis: WET
Date Received: 11/22/2016 09:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
7439-89-6	Iron	7000	500	130	ug/L			5	6010C
7439-96-5	Manganese	530	75	26	ug/L			5	6010C

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SEMW-7I-112116
Lab Sample ID: 240-72440-2
Lab Name: TestAmerica Canton
Job No.: 240-72440-1
SDG ID.:
Matrix: Water
Date Sampled: 11/21/2016 11:20
Reporting Basis: WET
Date Received: 11/22/2016 09:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	4.2	5.0	1.9	mg/L	J		1	2320B-1997
14808-79-8	Sulfate	7.9	1.0	0.13	mg/L			1	300.0
	TOC Result 1	0.52	1.0	0.080	mg/L	J		1	9060A
	TOC Result 2	0.57	1.0	0.080	mg/L	J		1	9060A
	TOC Result 3	0.57	1.0	0.080	mg/L	J		1	9060A
	TOC Result 4	0.61	1.0	0.080	mg/L	J		1	9060A
7440-44-0	Total Organic Carbon	0.56	1.0	0.080	mg/L	J		1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SEMW-8I-112116
Lab Sample ID: 240-72440-4
Lab Name: TestAmerica Canton
Job No.: 240-72440-1
SDG ID.:
Matrix: Water
Date Sampled: 11/21/2016 14:15
Reporting Basis: WET
Date Received: 11/22/2016 09:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	47	5.0	1.9	mg/L			1	2320B-1997
14808-79-8	Sulfate	9.8	1.0	0.13	mg/L			1	300.0
	TOC Result 1	1.1	1.0	0.080	mg/L			1	9060A
	TOC Result 2	1.3	1.0	0.080	mg/L			1	9060A
	TOC Result 3	1.2	1.0	0.080	mg/L			1	9060A
	TOC Result 4	1.3	1.0	0.080	mg/L			1	9060A
7440-44-0	Total Organic Carbon	1.2	1.0	0.080	mg/L			1	9060A

1B-IN
INORGANIC ANALYSIS DATA SHEET
GENERAL CHEMISTRY

Client Sample ID: SEMW-8S-112116
Lab Sample ID: 240-72440-3
Lab Name: TestAmerica Canton
Job No.: 240-72440-1
SDG ID.:
Matrix: Water
Date Sampled: 11/21/2016 12:30
Reporting Basis: WET
Date Received: 11/22/2016 09:40

CAS No.	Analyte	Result	RL	MDL	Units	C	Q	DIL	Method
	Alkalinity	5.0	5.0	1.9	mg/L	U		1	2320B-1997
14808-79-8	Sulfate	180	10	1.3	mg/L			10	300.0
	TOC Result 1	2.9	1.0	0.080	mg/L			1	9060A
	TOC Result 2	3.1	1.0	0.080	mg/L			1	9060A
	TOC Result 3	2.8	1.0	0.080	mg/L			1	9060A
	TOC Result 4	3.1	1.0	0.080	mg/L			1	9060A
7440-44-0	Total Organic Carbon	3.0	1.0	0.080	mg/L			1	9060A

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Test America**
Project:

MI Project Number: **085NK**
Date Received: 11/22/2016

Sample Information

Client Sample ID:	~~**SEMW-7I-112116**~~	SEMW-7I-112116 L.A.C. 12/20/16
Sample Date:	11/21/2016	
Units:	cells/mL	
Analyst:	CB	

Dechlorinating Bacteria

Dehalococcoides	*DHC*	<5.00E-01
tceA Reductase	TCE	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01
Dehalobacter spp.	*DHBt*	**4.10E+01**

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

APPENDIX C

SUPPORT DOCUMENTATION

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC Block E Downgradient TCE

Report Number: 240-72440-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The DHC analyses were performed at Microbial Insights, Inc.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT
The samples were received on 11/22/2016 9:40 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.6º C.

VOLATILE ORGANIC COMPOUNDS (GCMS)
Samples TB-112116 (240-72440-1), SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3) and SEMW-8I-112116 (240-72440-4) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260C. The samples were analyzed on 11/30/2016.

Samples SEMW-7I-112116 (240-72440-2)[625X], SEMW-8S-112116 (240-72440-3)[500X] and SEMW-8I-112116 (240-72440-4)[250X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

The continuing calibration verification (CCV) analyzed in batch 240-257488 was outside the method criteria for the following analyte: 2-Hexanone. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated: TB-112116 (240-72440-1), SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3), SEMW-8I-112116 (240-72440-4) and (CCVIS 240-257488/4).

Batch 240-257488 is reported without a matrix spike/matrix spike duplicate (MS/MSD). The batch MS/MSD was performed on another client's sample that is method 8260B. This MS/MSD result does not have immediate bearing on any samples except for the actual sample spiked. The associated laboratory control sample (LCS) met acceptance criteria and provides long-term precision and accuracy for this batch. Data is reported. Batch included: TB-112116 (240-72440-1), SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3) and SEMW-8I-112116 (240-72440-4).

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

DISSOLVED GASES
Samples SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3) and SEMW-8I-112116 (240-72440-4) were analyzed for dissolved gases in accordance with RSK_175. The samples were analyzed on 11/29/2016.

The matrix spike duplicate (MSD) recoveries for analytical batch 240-257347 were outside control limits. Dilution required due to sample over range for Methane. The associated laboratory control sample (LCS) and Matrix Spike (MS) recovery were within acceptance limits.

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

TOTAL RECOVERABLE METALS (ICP)
Samples SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3) and SEMW-8I-112116 (240-72440-4) were analyzed for total recoverable metals (ICP) in accordance with EPA SW-846 Method 6010C. The samples were prepared on 11/25/2016 and analyzed on 11/28/2016 and 11/29/2016.

Sample SEMW-8S-112116 (240-72440-3)[5X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

ALKALINITY
Samples SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3) and SEMW-8I-112116 (240-72440-4) were analyzed for alkalinity in accordance with SM 2320B. The samples were analyzed on 11/23/2016.

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

ANIONS
Samples SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3) and SEMW-8I-112116 (240-72440-4) were analyzed for anions in accordance with EPA Method 300.0. The samples were analyzed on 11/30/2016 and 12/01/2016.

Sample SEMW-8S-112116 (240-72440-3)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

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

TOTAL ORGANIC CARBON
Samples SEMW-7I-112116 (240-72440-2), SEMW-8S-112116 (240-72440-3) and SEMW-8I-112116 (240-72440-4) were analyzed for total organic carbon in accordance with EPA SW-846 Method 9060A. The samples were analyzed on 11/28/2016.

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

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC 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.
U	Indicates the analyte was analyzed for but not detected.

Metals

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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.
U	Indicates the analyte was analyzed for but not detected.

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block E Downgradient TCE

TestAmerica Job ID: 240-72440-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL CAN
RSK-175	Dissolved Gases (GC)	RSK	TAL CAN
6010C	Metals (ICP)	SW846	TAL CAN
2320B-1997	Alkalinity, Total	SM	TAL CAN
300.0	Anions, Ion Chromatography	MCAWW	TAL CAN
9060A	Organic Carbon, Total (TOC)	SW846	TAL CAN
DHC	General Sub Contract Method	NONE	Micro
DHC (Send unpreserved liter poly)	General Sub Contract Method	NONE	Micro

Protocol References:

MCAWW = "Methods For Chemical Analysis Of Water And Wastes", EPA-600/4-79-020, March 1983 And Subsequent Revisions.

NONE = NONE

RSK = Sample Prep And Calculations For Dissolved Gas Analysis In Water Samples Using A GC Headspace Equilibration Technique, RSKSOP-175, Rev. 0, 8/11/94, USEPA Research Lab

SM = "Standard Methods For The Examination Of Water And Wastewater",

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

Laboratory References:

Micro = Micro, 10515 Research Dr, Knoxville, TN 37932

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block E Downgradient TCE

TestAmerica Job ID: 240-72440-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-72440-1	TB-112116	Water	11/21/16 00:00	11/22/16 09:40
240-72440-2	SEMW-7I-112116	Water	11/21/16 11:20	11/22/16 09:40
240-72440-3	SEMW-8S-112116	Water	11/21/16 12:30	11/22/16 09:40
240-72440-4	SEMW-8I-112116	Water	11/21/16 14:15	11/22/16 09:40

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

2121C26 180325

Chain of Custody Record

000023

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

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

Client Contact	Project Manager: Chris Pike	Site Contact: Stu Cameron	Date: 11/21/16	COC No:
Company Name: Tetra Tech	Tel/Fax: (412) 302-1624	Lab Contact: John McFadden	Carrier:	1 of 1 COCs
Address: 20251 Century Blvd Ste 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown MD 20874	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone: (301) 528-5552	TAT if different from Below 5 day TAT			Walk-in Client:
Fax: (301) 528-3000	☐ 2 weeks			Lab Sampling:
Project Name: Block E Dewatering TCE	☐ 1 week			
Site: Middle River Complex, MD	☐ 2 days			Job / SDG No.:
PO # 112IC07896	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs (8260C)	Methane, Ethane, Ethene (RSK-175)	TOC (9060 or SM5310)	Sulfate (300.0)	Alkalinity (310.1)	Total Iron + Manganese (6010)	DHC + Functional Genes*	Sample Specific Notes:
TB-112116	—	—	—	AQ	2			2							
SEMW-7I-112116	11/21/16	1120	G	AQ	15			3	3	2	1	1	1	4	
SEMW-8S-112116	11/21/16	1230	G	AQ	11			3	3	2	1	1	1		
SEMW-8I-112116	11/21/16	1415	G	AQ	11			3	3	2	1	1	1		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other								2	2	3	1	1	4	1	

140-72440 Chain of Custody

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return to Client ☒ Disposal by Lab ☐ Archive for ____ Months

Special Instructions/QC Requirements & Comments: DHC goes to another Lab; Includes Aqueous DHC, dehalobacter, TCE reductase, + VC Reductase

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	Tetra Tech	11-21-16/1530		TestAmerica	11-21-2016/1530
Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
	TestAmerica	11-21-2016/1612		TA	11-22-16 940
Relinquished by:	Company:	Date/Time:	Received in Laboratory by:	Company:	Date/Time:

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 72440
Canton Facility

Client Tetra tech Site Name _____ Cooler unpacked by:

Cooler Received on 11-22-16 Opened on 11-22-16

FedEx: 1st Grd Exp UPS FAS Stetson Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # _____ Foam Box Client Cooler Box Other _____

Packing material used: Bubble Wrap Foam Plastic Bag None Other _____

COOLANT: Wet Ice Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form

IR GUN# IR-8 (CF **+0.4** °C) Observed Cooler Temp. 2.2 °C Corrected Cooler Temp. 2.6 °C

IR GUN #36 (CF **+1.3**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C

2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
   - -Were custody seals on the outside of the cooler(s) signed & dated? Yes No NA
   - -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
3. Shippers' packing slip attached to the cooler(s)? Yes No
4. Did custody papers accompany the sample(s)? Yes No
5. Were the custody papers relinquished & signed in the appropriate place? Yes No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No
7. Did all bottles arrive in good condition (Unbroken)? Yes No
8. Could all bottle labels be reconciled with the COC? Yes No
9. Were correct bottle(s) used for the test(s) indicated? Yes No
10. Sufficient quantity received to perform indicated analyses? Yes No
11. Are these work share samples? Yes No

    If yes, Questions 11-15 have been checked at the originating laboratory.

11. Were sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# **HC682547**
12. Were VOAs on the COC? Yes No
13. Were air bubbles >6 mm in any VOA vials? Yes No NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
15. Was a LL Hg or Me Hg trip blank present? _____ Yes No

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

17. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.

Sample(s) _____ were received in a broken container.

Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.

Time preserved: _____ Preservative(s) added/Lot number(s): _____.

Ref: SOP NC-SC-0005, Sample Receiving

L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

Login Container Summary Report

Temperature readings: _____

Client Sample ID	Lab ID	Container Type	Container pH	Preservative Added (mls)	Lot #
SEMW-7I-112116	240-72440-L-2	Plastic 500ml - with Nitric Acid	<2	_____	_____
SEMW-8S-112116	240-72440-K-3	Plastic 500ml - with Nitric Acid	<2	_____	_____
SEMW-8I-112116	240-72440-K-4	Plastic 500ml - with Nitric Acid	<2	_____	_____

Method 8260C

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

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab File ID: BFB4965.D BFB Injection Date: 09/02/2016

Instrument ID: A3UX16 BFB Injection Time: 17:51

Analysis Batch No.: 245431

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	17.2	
75	30.0 - 60.0 % of mass 95	45.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	72.6	
175	5.0 - 9.0 % of mass 174	5.3	(7.3) 1
176	95.0 - 101.0 % of mass 174	71.8	(99.0) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.6) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD8260 240-245431/6	UXM7645.D	09/02/2016	18:19
	STD8260 240-245431/7	UXM7646.D	09/02/2016	18:42
	STD8260 240-245431/8	UXM7647.D	09/02/2016	19:05
	ICIS 240-245431/9	UXM7648.D	09/02/2016	19:28
	STD8260 240-245431/10	UXM7649.D	09/02/2016	19:51
	STD8260 240-245431/11	UXM7650.D	09/02/2016	20:14
	ICV 240-245431/20	UXM7659.D	09/02/2016	23:42

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-245431/6	UXM7645.D
Level 2	STD8260 240-245431/7	UXM7646.D
Level 3	STD8260 240-245431/8	UXM7647.D
Level 4	ICIS 240-245431/9	UXM7648.D
Level 5	STD8260 240-245431/10	UXM7649.D
Level 6	STD8260 240-245431/11	UXM7650.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2964 0.2824	0.2784	0.3055	0.2471	0.2588	Ave		0.2781			0.1000	7.9		20.0			
Chloromethane	0.3944 0.3913	0.3679	0.3925	0.3634	0.3807	Ave		0.3817			0.1000	3.5		20.0			
Vinyl chloride	0.3796 0.3692	0.3253	0.3671	0.3375	0.3532	Ave		0.3553			0.1000	5.8		20.0			
Butadiene	0.3938 0.3354	0.3134	0.3433	0.3036	0.3151	Ave		0.3341				9.8		20.0			
Bromomethane	0.2170 0.1835	0.1898	0.1955	0.1783	0.1769	Ave		0.1902			0.0500	7.8		20.0			
Chloroethane	0.2032 0.2183	0.2061	0.2212	0.2047	0.2110	Ave		0.2108			0.0500	3.6		20.0			
Dichlorofluoromethane	0.5256 0.5090	0.4876	0.5140	0.4759	0.4851	Ave		0.4995				3.9		20.0			
Trichlorofluoromethane	0.3608 0.3425	0.3166	0.3571	0.3107	0.3198	Ave		0.3346			0.1000	6.5		20.0			
Ethyl ether	0.2097 0.1966	0.1851	0.1936	0.1878	0.1909	Ave		0.1940				4.5		20.0			
Acrolein	0.0343 0.0281	0.0310	0.0272	0.0261	0.0277	Ave		0.0291				10.4		20.0			
1,1-Dichloroethene	0.2174 0.2511	0.2288	0.2410	0.2430	0.2488	Ave		0.2383			0.1000	5.4		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	+++++ 0.1603	0.1431	0.1520	0.1487	0.1523	Ave		0.1513			0.0500	4.1		20.0			
Acetone	+++++ 0.0427	0.1213	0.0526	0.0493	0.0438	Lin1	0.1652	0.0423			0.0100				0.9990		0.9900
Iodomethane	0.3734 0.3925	0.3921	0.4056	0.3872	0.3881	Ave		0.3898				2.7		20.0			
Carbon disulfide	0.9225 0.9229	0.8595	0.9086	0.8777	0.8985	Ave		0.8983			0.1000	2.8		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
3-Chloro-1-propene	0.1651 0.1876	0.1603	0.1796	0.1722	0.1799	Ave		0.1741				5.9		20.0			
Methyl acetate	0.1336 0.1144	0.1074	0.1096	0.1084	0.1103	Ave		0.1139			0.1000	8.7		20.0			
Methylene Chloride	+++++ 0.3064	0.6659	0.3423	0.3090	0.3043	Lin1	0.3695	0.2975			0.1000				1.0000		0.9900
2-Methyl-2-propanol	0.0131 0.0131	0.0114	0.0115	0.0119	0.0121	Ave		0.0122				6.2		20.0			
Acrylonitrile	0.0606 0.0614	0.0603	0.0584	0.0568	0.0592	Ave		0.0594				2.8		20.0			
trans-1,2-Dichloroethene	0.2852 0.3013	0.2721	0.2954	0.2898	0.2961	Ave		0.2900			0.1000	3.6		20.0			
Methyl tert-butyl ether	0.6621 0.6927	0.6761	0.6835	0.6560	0.6608	Ave		0.6719			0.1000	2.2		20.0			
Hexane	0.2884 0.2770	0.2866	0.2484	0.2532	0.2649	Ave		0.2697				6.3		20.0			
1,1-Dichloroethane	0.4903 0.5264	0.4734	0.5134	0.4983	0.5133	Ave		0.5025			0.2000	3.8		20.0			
Vinyl acetate	0.3776 0.3676	0.3456	0.3600	0.3514	0.3608	Ave		0.3605				3.2		20.0			
cis-1,2-Dichloroethene	0.3248 0.3150	0.3032	0.3041	0.3002	0.3099	Ave		0.3095			0.1000	3.0		20.0			
2,2-Dichloropropane	0.3336 0.3825	0.3662	0.3884	0.3740	0.3730	Ave		0.3696				5.2		20.0			
2-Butanone (MEK)	0.0724 0.0599	0.0632	0.0596	0.0587	0.0584	Ave		0.0621			0.0100	8.6		20.0			
Chlorobromomethane	0.1290 0.1268	0.1205	0.1233	0.1201	0.1243	Ave		0.1240				2.8		20.0			
Tetrahydrofuran	+++++ 0.0428	0.0379	0.0412	0.0399	0.0411	Ave		0.0406				4.5		20.0			
Chloroform	0.4798 0.4729	0.4386	0.4534	0.4511	0.4582	Ave		0.4590			0.2000	3.3		20.0			
1,1,1-Trichloroethane	0.3081 0.4024	0.3439	0.3766	0.3901	0.3952	Ave		0.3694			0.1000	9.9		20.0			
Cyclohexane	0.3409 0.4530	0.3931	0.4085	0.4161	0.4371	Ave		0.4081			0.1000	9.6		20.0			
1,1-Dichloropropene	0.3206 0.3859	0.3208	0.3535	0.3628	0.3693	Ave		0.3522				7.5		20.0			
Carbon tetrachloride	0.2145 0.3285	0.2708	0.2976	0.3060	0.3192	Ave		0.2894			0.1000	14.4		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Isobutyl alcohol	0.0045 0.0039	0.0035	0.0035	0.0036	0.0036	Ave		0.0038				10.2		20.0			
Benzene	1.2117 1.2123	1.1128	1.1716	1.1460	1.1847	Ave		1.1732			0.5000	3.3		20.0			
1,2-Dichloroethane	0.3202 0.3105	0.2996	0.3009	0.3011	0.3023	Ave		0.3058			0.1000	2.6		20.0			
n-Heptane	+++++ 0.1244	0.7151	0.1654	0.1390	0.1274	Lin1	0.5948	0.1125							0.9990		0.9900
Trichloroethene	0.2741 0.2841	0.2542	0.2732	0.2827	0.2792	Ave		0.2746			0.1500	4.0		20.0			
Methylcyclohexane	0.3442 0.3840	0.3491	0.3405	0.3507	0.3686	Ave		0.3562			0.1000	4.7		20.0			
1,2-Dichloropropane	0.2636 0.2758	0.2631	0.2685	0.2627	0.2692	Ave		0.2672			0.1000	1.9		20.0			
Dibromomethane	0.1306 0.1193	0.1154	0.1181	0.1173	0.1200	Ave		0.1201				4.5		20.0			
1,4-Dioxane	+++++ 0.0013	+++++	0.0010	0.0011	0.0012	Ave		0.0011				9.9		20.0			
Dichlorobromomethane	0.3324 0.3308	0.3027	0.3176	0.3127	0.3278	Ave		0.3207			0.1500	3.7		20.0			
2-Chloroethyl vinyl ether	0.1142 0.1191	0.1056	0.1114	0.1131	0.1227	Ave		0.1143				5.3		20.0			
cis-1,3-Dichloropropene	0.4252 0.4292	0.3840	0.4230	0.4125	0.4258	Ave		0.4166			0.1500	4.1		20.0			
4-Methyl-2-pentanone (MIBK)	0.1371 0.1420	0.1262	0.1351	0.1336	0.1378	Ave		0.1353			0.0500	3.9		20.0			
Toluene	1.7512 1.7872	1.5727	1.7282	1.6984	1.7218	Ave		1.7099			0.4000	4.3		20.0			
trans-1,3-Dichloropropene	0.4907 0.4905	0.4258	0.4585	0.4597	0.4779	Ave		0.4672			0.1000	5.3		20.0			
Ethyl methacrylate	0.3199 0.3566	0.3152	0.3330	0.3238	0.3474	Ave		0.3327				4.9		20.0			
1,1,2-Trichloroethane	0.2737 0.2588	0.2294	0.2537	0.2468	0.2540	Ave		0.2527			0.1000	5.8		20.0			
1,3-Dichloropropane	0.4673 0.4810	0.4784	0.4775	0.4691	0.4856	Ave		0.4765				1.5		20.0			
Tetrachloroethene	0.2611 0.2926	0.2648	0.2726	0.2768	0.2850	Ave		0.2755			0.1500	4.3		20.0			
2-Hexanone	0.1223 0.1259	0.1205	0.1170	0.1194	0.1226	Ave		0.1213			0.0500	2.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
Chlorodibromomethane	0.2666 0.2982	0.2415	0.2769	0.2750	0.2867	Ave		0.2742				7.0		20.0			
Ethylene Dibromide	0.2402 0.2480	0.2338	0.2359	0.2320	0.2392	Ave		0.2382				2.4		20.0			
Chlorobenzene	1.1963 1.1143	1.0283	1.0882	1.0620	1.0871	Ave		1.0960			0.3000	5.2		20.0			
1,1,1,2-Tetrachloroethane	0.3154 0.3735	0.3379	0.3512	0.3485	0.3531	Ave		0.3466				5.5		20.0			
Ethylbenzene	0.5329 0.6219	0.5215	0.5871	0.5872	0.6053	Ave		0.5760				7.0		20.0			
m-Xylene & p-Xylene	0.6942 0.7581	0.6718	0.7389	0.7300	0.7403	Ave		0.7222				4.5		20.0			
o-Xylene	0.7531 0.7776	0.6703	0.7605	0.7368	0.7361	Ave		0.7391				5.0		20.0			
Styrene	1.1185 1.2977	1.0691	1.2198	1.1980	1.2501	Ave		1.1922			0.3000	7.1		20.0			
Bromoform	0.1372 0.1558	0.1159	0.1429	0.1384	0.1451	Ave		0.1392			0.1000	9.5		20.0			
Isopropylbenzene	1.6297 1.9023	1.5616	1.7557	1.7736	1.7736	Ave		1.7327			0.1000	7.0		20.0			
1,1,2,2-Tetrachloroethane	0.5692 0.5674	0.5407	0.5634	0.5573	0.5661	Ave		0.5607			0.3000	1.9		20.0			
Bromobenzene	0.8058 0.8109	0.7520	0.7926	0.7636	0.8087	Ave		0.7889				3.2		20.0			
1,2,3-Trichloropropane	0.1324 0.1639	0.1034	0.1609	0.1598	0.1638	Ave		0.1474				16.7		20.0			
trans-1,4-Dichloro-2-butene	+++++ 0.1641	0.1320	0.1506	0.1487	0.1568	Ave		0.1504				7.9		20.0			
N-Propylbenzene	0.7978 0.9271	0.7609	0.8868	0.8787	0.9235	Ave		0.8625				7.9		20.0			
2-Chlorotoluene	0.8312 0.8160	0.7192	0.7894	0.7888	0.8057	Ave		0.7917				4.9		20.0			
1,3,5-Trimethylbenzene	2.6432 2.9051	2.3806	2.7635	2.7988	2.8501	Ave		2.7236				7.0		20.0			
4-Chlorotoluene	0.9315 0.8526	0.7597	0.8365	0.8251	0.8497	Ave		0.8425				6.6		20.0			
tert-Butylbenzene	2.1944 2.3365	1.9618	2.1840	2.2589	2.2838	Ave		2.2032				6.0		20.0			
1,2,4-Trimethylbenzene	3.0717 3.0699	2.6361	2.9096	2.9217	2.9663	Ave		2.9292				5.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
sec-Butylbenzene	2.9529 3.2166	2.5454	2.9398	3.0428	3.1243	Ave		2.9703				7.8		20.0			
1,3-Dichlorobenzene	1.8134 1.5999	1.5519	1.5482	1.5704	1.5551	Ave		1.6065			0.6000	6.4		20.0			
4-Isopropyltoluene	2.6759 2.8186	2.3165	2.5826	2.6836	2.7180	Ave		2.6325				6.6		20.0			
1,4-Dichlorobenzene	1.9186 1.5931	1.5778	1.5767	1.5533	1.5671	Ave		1.6311			0.5000	8.7		20.0			
n-Butylbenzene	2.4226 2.2797	1.8931	2.0729	2.1667	2.2237	Ave		2.1764				8.3		20.0			
1,2-Dichlorobenzene	1.6093 1.4624	1.3677	1.4397	1.4140	1.4259	Ave		1.4532			0.4000	5.7		20.0			
1,2-Dibromo-3-Chloropropane	+++++ 0.0926	0.0585	0.0810	0.0873	0.0880	Ave		0.0815			0.0500	16.6		20.0			
1,2,4-Trichlorobenzene	1.1622 0.7731	0.6890	0.7259	0.7368	0.7653	Lin1	0.0951	0.7581			0.2000				0.9990		0.9900
Hexachlorobutadiene	+++++ 0.2920	0.3142	0.2602	0.2694	0.2924	Ave		0.2856				7.5		20.0			
Naphthalene	2.0934 1.7538	1.4478	1.5379	1.5801	1.6693	Ave		1.6804				13.6		20.0			
1,2,3-Trichlorobenzene	0.9661 0.6502	0.5768	0.6227	0.6314	0.6337	Lin1	0.0808	0.6372							0.9990		0.9900
Dibromofluoromethane (Surr)	0.2038 0.2452	0.2227	0.2225	0.2387	0.2402	Ave		0.2289				6.8		20.0			
1,2-Dichloroethane-d4 (Surr)	0.2364 0.2580	0.2230	0.2369	0.2570	0.2561	Ave		0.2446				5.9		20.0			
Toluene-d8 (Surr)	1.4326 1.5541	1.3434	1.3971	1.5040	1.5171	Ave		1.4580				5.5		20.0			
4-Bromofluorobenzene (Surr)	0.5715 0.5667	0.4653	0.5109	0.5567	0.5503	Ave		0.5369				7.7		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-245431/6	UXM7645.D
Level 2	STD8260 240-245431/7	UXM7646.D
Level 3	STD8260 240-245431/8	UXM7647.D
Level 4	ICIS 240-245431/9	UXM7648.D
Level 5	STD8260 240-245431/10	UXM7649.D
Level 6	STD8260 240-245431/11	UXM7650.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Dichlorodifluoromethane	FB	Ave	7523 853105	13751	154829	251372	521260	0.500 60.0	1.00	10.0	20.0	40.0
Chloromethane	FB	Ave	10008 1181916	18175	198954	369691	766875	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl chloride	FB	Ave	9634 1115105	16071	186050	343381	711508	0.500 60.0	1.00	10.0	20.0	40.0
Butadiene	FB	Ave	9994 1013157	15483	174019	308833	634633	0.500 60.0	1.00	10.0	20.0	40.0
Bromomethane	FB	Ave	5506 554208	9378	99092	181390	356276	0.500 60.0	1.00	10.0	20.0	40.0
Chloroethane	FB	Ave	5158 659381	10179	112135	208215	425081	0.500 60.0	1.00	10.0	20.0	40.0
Dichlorofluoromethane	FB	Ave	13339 1537534	24088	260522	484168	977064	0.500 60.0	1.00	10.0	20.0	40.0
Trichlorofluoromethane	FB	Ave	9156 1034413	15640	181007	316095	644209	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl ether	FB	Ave	5321 593848	9146	98153	191097	384576	0.500 60.0	1.00	10.0	20.0	40.0
Acrolein	FB	Ave	4355 424932	7651	68995	132865	279390	2.50 300	5.00	50.0	100	200
1,1-Dichloroethene	FB	Ave	5516 758417	11304	122182	247185	501119	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2-Trichloro-1,2,2-trifluoroetha ne	FB	Ave	+++++ 484331	7069	77066	151258	306772	+++++ 60.0	1.00	10.0	20.0	40.0
Acetone	FB	Lin1	+++++ 258127	11981	53357	100311	176530	+++++ 120	2.00	20.0	40.0	80.0
Iodomethane	FB	Ave	9477 1185618	19368	205597	393872	781684	0.500 60.0	1.00	10.0	20.0	40.0
Carbon disulfide	FB	Ave	23411 2787477	42457	460537	892879	1809775	0.500 60.0	1.00	10.0	20.0	40.0
3-Chloro-1-propene	FB	Ave	4190 566754	7921	91024	175205	362330	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methyl acetate	FB	Ave	16948 1727021	26530	277806	551163	1110434	2.50 300	5.00	50.0	100	200
Methylene Chloride	FB	Lin1	+++++ 925375	32896	173509	314346	612844	+++++ 60.0	1.00	10.0	20.0	40.0
2-Methyl-2-propanol	FB	Ave	3325 395539	5637	58313	121140	243176	5.00 600	10.0	100	200	400
Acrylonitrile	FB	Ave	15374 1853994	29776	295958	577946	1193211	5.00 600	10.0	100	200	400
trans-1,2-Dichloroethene	FB	Ave	7237 910191	13441	149734	294780	596495	0.500 60.0	1.00	10.0	20.0	40.0
Methyl tert-butyl ether	FB	Ave	16802 2092270	33400	346466	667322	1331005	0.500 60.0	1.00	10.0	20.0	40.0
Hexane	FB	Ave	7318 836591	14160	125900	257581	533483	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloroethane	FB	Ave	12442 1589882	23386	260219	506966	1033883	0.500 60.0	1.00	10.0	20.0	40.0
Vinyl acetate	FB	Ave	9583 1110328	17071	182452	357507	726705	0.500 60.0	1.00	10.0	20.0	40.0
cis-1,2-Dichloroethene	FB	Ave	8243 951589	14979	154142	305424	624121	0.500 60.0	1.00	10.0	20.0	40.0
2,2-Dichloropropane	FB	Ave	8465 1155275	18088	196855	380420	751196	0.500 60.0	1.00	10.0	20.0	40.0
2-Butanone (MEK)	FB	Ave	3674 361763	6246	60461	119512	235391	1.00 120	2.00	20.0	40.0	80.0
Chlorobromomethane	FB	Ave	3273 382939	5954	62481	122207	250390	0.500 60.0	1.00	10.0	20.0	40.0
Tetrahydrofuran	FB	Ave	+++++ 258316	3745	41799	81171	165693	+++++ 120	2.00	20.0	40.0	80.0
Chloroform	FB	Ave	12176 1428250	21668	229820	458943	922878	0.500 60.0	1.00	10.0	20.0	40.0
1,1,1-Trichloroethane	FB	Ave	7819 1215453	16989	190898	396852	795960	0.500 60.0	1.00	10.0	20.0	40.0
Cyclohexane	FB	Ave	8652 1368363	19418	207056	423279	880403	0.500 60.0	1.00	10.0	20.0	40.0
1,1-Dichloropropene	FB	Ave	8136 1165728	15845	179197	369048	743915	0.500 60.0	1.00	10.0	20.0	40.0
Carbon tetrachloride	FB	Ave	5444 992122	13376	150830	311276	642845	0.500 60.0	1.00	10.0	20.0	40.0
Isobutyl alcohol	FB	Ave	2844 298014	4271	44616	92642	180842	12.5 1500	25.0	250	500	1000
Benzene	FB	Ave	30752 3661852	54973	593839	1165842	2386277	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,2-Dichloroethane	FB	Ave	8125 938005	14799	152502	306271	608925	0.500 60.0	1.00	10.0	20.0	40.0
n-Heptane	FB	Lin1	+++++ 375839	35327	83821	141362	256678	+++++ 60.0	1.00	10.0	20.0	40.0
Trichloroethene	FB	Ave	6956 858104	12557	138458	287608	562337	0.500 60.0	1.00	10.0	20.0	40.0
Methylcyclohexane	FB	Ave	8735 1159985	17246	172604	356755	742475	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichloropropane	FB	Ave	6690 833142	12996	136100	267293	542271	0.500 60.0	1.00	10.0	20.0	40.0
Dibromomethane	FB	Ave	3314 360471	5701	59851	119288	241742	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dioxane	FB	Ave	+++++ 76212	+++++	10310	21652	47695	+++++ 1200	+++++	200	400	800
Dichlorobromomethane	FB	Ave	8437 999322	14951	160964	318075	660310	0.500 60.0	1.00	10.0	20.0	40.0
2-Chloroethyl vinyl ether	FB	Ave	5794 719737	10431	112884	230080	494412	1.00 120	2.00	20.0	40.0	80.0
cis-1,3-Dichloropropene	FB	Ave	10790 1296316	18968	214391	419680	857708	0.500 60.0	1.00	10.0	20.0	40.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	6958 857708	12467	136923	271852	555095	1.00 120	2.00	20.0	40.0	80.0
Toluene	CBNZ d5	Ave	31133 3816588	55749	626743	1232800	2531999	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	8723 1047424	15094	166264	333649	702828	0.500 60.0	1.00	10.0	20.0	40.0
Ethyl methacrylate	CBNZ d5	Ave	5687 761447	11173	120762	235058	510917	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4865 552567	8130	92010	179120	373570	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichloropropane	CBNZ d5	Ave	8308 1027251	16958	173173	340520	714119	0.500 60.0	1.00	10.0	20.0	40.0
Tetrachloroethene	CBNZ d5	Ave	4641 624796	9385	98871	200949	419063	0.500 60.0	1.00	10.0	20.0	40.0
2-Hexanone	CBNZ d5	Ave	4349 537585	8543	84868	173402	360611	1.00 120	2.00	20.0	40.0	80.0
Chlorodibromomethane	CBNZ d5	Ave	4740 636823	8561	100434	199602	421557	0.500 60.0	1.00	10.0	20.0	40.0
Ethylene Dibromide	CBNZ d5	Ave	4271 529565	8286	85538	168437	351742	0.500 60.0	1.00	10.0	20.0	40.0
Chlorobenzene	CBNZ d5	Ave	21267 2379580	36451	394653	770889	1598603	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	5608 797603	11978	127381	252939	519219	0.500 60.0	1.00	10.0	20.0	40.0
Ethylbenzene	CBNZ d5	Ave	9474 1328105	18485	212906	426215	890140	0.500 60.0	1.00	10.0	20.0	40.0
m-Xylene & p-Xylene	CBNZ d5	Ave	12342 1618824	23815	267971	529919	1088657	0.500 60.0	1.00	10.0	20.0	40.0
o-Xylene	CBNZ d5	Ave	13388 1660662	23761	275788	534851	1082466	0.500 60.0	1.00	10.0	20.0	40.0
Styrene	CBNZ d5	Ave	19884 2771203	37898	442378	869593	1838358	0.500 60.0	1.00	10.0	20.0	40.0
Bromoform	CBNZ d5	Ave	2439 332626	4109	51827	100453	213366	0.500 60.0	1.00	10.0	20.0	40.0
Isopropylbenzene	CBNZ d5	Ave	28972 4062481	55355	636731	1287409	2608077	0.500 60.0	1.00	10.0	20.0	40.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	5325 652252	9970	107547	210721	425024	0.500 60.0	1.00	10.0	20.0	40.0
Bromobenzene	DCBd 4	Ave	7538 932194	13865	151298	288716	607200	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichloropropane	DCBd 4	Ave	1239 188391	1907	30717	60401	122998	0.500 60.0	1.00	10.0	20.0	40.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	+++++ 188602	2433	28756	56228	117743	+++++ 60.0	1.00	10.0	20.0	40.0
N-Propylbenzene	DCBd 4	Ave	7463 1065878	14029	169269	332236	693417	0.500 60.0	1.00	10.0	20.0	40.0
2-Chlorotoluene	DCBd 4	Ave	7776 938112	13260	150678	298240	604951	0.500 60.0	1.00	10.0	20.0	40.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	24727 3339843	43893	527519	1058183	2140028	0.500 60.0	1.00	10.0	20.0	40.0
4-Chlorotoluene	DCBd 4	Ave	8714 980146	14007	159671	311962	638008	0.500 60.0	1.00	10.0	20.0	40.0
tert-Butylbenzene	DCBd 4	Ave	20528 2686102	36172	416891	854069	1714775	0.500 60.0	1.00	10.0	20.0	40.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	28735 3529310	48604	555409	1104631	2227231	0.500 60.0	1.00	10.0	20.0	40.0
sec-Butylbenzene	DCBd 4	Ave	27624 3697907	46932	561161	1150431	2345885	0.500 60.0	1.00	10.0	20.0	40.0
1,3-Dichlorobenzene	DCBd 4	Ave	16964 1839346	28614	295529	593740	1167633	0.500 60.0	1.00	10.0	20.0	40.0
4-Isopropyltoluene	DCBd 4	Ave	25032 3240360	42712	492976	1014632	2040838	0.500 60.0	1.00	10.0	20.0	40.0
1,4-Dichlorobenzene	DCBd 4	Ave	17948 1831491	29092	300973	587284	1176698	0.500 60.0	1.00	10.0	20.0	40.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 245431

SDG No.:

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/02/2016 18:19 Calibration End Date: 09/02/2016 20:14 Calibration ID: 35912

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
n-Butylbenzene	DCBd 4	Ave	22663 2620807	34905	395682	819187	1669676	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichlorobenzene	DCBd 4	Ave	15055 1681236	25217	274819	534603	1070643	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	+++++ 106502	1078	15462	33010	66054	+++++ 60.0	1.00	10.0	20.0	40.0
1,2,4-Trichlorobenzene	DCBd 4	Lin1	10872 888813	12703	138572	278556	574630	0.500 60.0	1.00	10.0	20.0	40.0
Hexachlorobutadiene	DCBd 4	Ave	+++++ 335653	5794	49676	101851	219545	+++++ 60.0	1.00	10.0	20.0	40.0
Naphthalene	DCBd 4	Ave	19583 2016259	26694	293564	597404	1253409	0.500 60.0	1.00	10.0	20.0	40.0
1,2,3-Trichlorobenzene	DCBd 4	Lin1	9038 747481	10635	118862	238727	475806	0.500 60.0	1.00	10.0	20.0	40.0
Dibromofluoromethane (Surr)	FB	Ave	5173 740719	10999	112793	242855	483883	0.500 60.0	1.00	10.0	20.0	40.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	5999 779157	11018	120090	261493	515818	0.500 60.0	1.00	10.0	20.0	40.0
Toluene-d8 (Surr)	CBNZ d5	Ave	25468 3318698	47620	506688	1091734	2230907	0.500 60.0	1.00	10.0	20.0	40.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	10160 1210196	16495	185268	404107	809182	0.500 60.0	1.00	10.0	20.0	40.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICV 240-245431/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2781	0.2946	0.1000	0.0212	0.0200	5.9	20.0
Chloromethane	Ave	0.3817	0.3579	0.1000	0.0188	0.0200	-6.2	20.0
Vinyl chloride	Ave	0.3553	0.3449	0.1000	0.0194	0.0200	-2.9	20.0
Butadiene	Ave	0.3341	0.3114		0.0186	0.0200	-6.8	30.0
Bromomethane	Ave	0.1902	0.1762	0.0500	0.0185	0.0200	-7.4	20.0
Chloroethane	Ave	0.2108	0.2032	0.0500	0.0193	0.0200	-3.6	20.0
Dichlorofluoromethane	Ave	0.4995	0.4743		0.0190	0.0200	-5.1	20.0
Trichlorofluoromethane	Ave	0.3346	0.3314	0.1000	0.0198	0.0200	-0.9	20.0
Ethyl ether	Ave	0.1940	0.1870		0.0193	0.0200	-3.6	20.0
Acrolein	Ave	0.0291	0.0285		0.0980	0.100	-2.0	50.0
1,1-Dichloroethene	Ave	0.2383	0.2532	0.1000	0.0212	0.0200	6.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1513	0.1743	0.0500	0.0230	0.0200	15.2	20.0
Acetone	Lin1		0.0445	0.0100	0.0382	0.0400	-4.4	50.0
Iodomethane	Ave	0.3898	0.4036		0.0207	0.0200	3.5	20.0
Carbon disulfide	Ave	0.8983	0.9347	0.1000	0.0208	0.0200	4.1	20.0
3-Chloro-1-propene	Ave	0.1741	0.1764		0.0203	0.0200	1.3	20.0
Methyl acetate	Ave	0.1139	0.1106	0.1000	0.0971	0.100	-2.9	20.0
Methylene Chloride	Lin1		0.3001	0.1000	0.0189	0.0200	-5.3	50.0
2-Methyl-2-propanol	Ave	0.0122	0.0117		0.192	0.200	-4.2	50.0
Acrylonitrile	Ave	0.0594	0.0593		0.199	0.200	-0.3	20.0
trans-1,2-Dichloroethene	Ave	0.2900	0.2902	0.1000	0.0200	0.0200	0.0	20.0
Methyl tert-butyl ether	Ave	0.6719	0.6606	0.1000	0.0197	0.0200	-1.7	20.0
Hexane	Ave	0.2697	0.3269		0.0242	0.0200	21.2*	20.0
1,1-Dichloroethane	Ave	0.5025	0.4762	0.2000	0.0190	0.0200	-5.2	20.0
Vinyl acetate	Ave	0.3605	0.3574		0.0198	0.0200	-0.9	50.0
2,2-Dichloropropane	Ave	0.3696	0.3605		0.0195	0.0200	-2.4	20.0
cis-1,2-Dichloroethene	Ave	0.3095	0.2971	0.1000	0.0192	0.0200	-4.0	20.0
2-Butanone (MEK)	Ave	0.0621	0.0596	0.0100	0.0384	0.0400	-4.0	20.0
Chlorobromomethane	Ave	0.1240	0.1178		0.0190	0.0200	-5.0	20.0
Tetrahydrofuran	Ave	0.0406	0.0406		0.0400	0.0400	-0.0	20.0
Chloroform	Ave	0.4590	0.4308	0.2000	0.0188	0.0200	-6.1	20.0
1,1,1-Trichloroethane	Ave	0.3694	0.3778	0.1000	0.0205	0.0200	2.3	20.0
Cyclohexane	Ave	0.4081	0.4727	0.1000	0.0232	0.0200	15.8	20.0
1,1-Dichloropropene	Ave	0.3522	0.3663		0.0208	0.0200	4.0	20.0
Carbon tetrachloride	Ave	0.2894	0.3133	0.1000	0.0216	0.0200	8.2	20.0
Isobutyl alcohol	Ave	0.0038	0.0035		0.467	0.500	-6.6	20.0
Benzene	Ave	1.173	1.123	0.5000	0.0191	0.0200	-4.3	20.0
1,2-Dichloroethane	Ave	0.3058	0.2978	0.1000	0.0195	0.0200	-2.6	20.0
n-Heptane	Lin1		0.1689		0.0247	0.0200	23.7*	20.0
Trichloroethene	Ave	0.2746	0.2737	0.1500	0.0199	0.0200	-0.3	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICV 240-245431/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3562	0.3978	0.1000	0.0223	0.0200	11.7	20.0
1,2-Dichloropropane	Ave	0.2672	0.2647	0.1000	0.0198	0.0200	-0.9	20.0
Dibromomethane	Ave	0.1201	0.1171		0.0195	0.0200	-2.5	20.0
1,4-Dioxane	Ave	0.0011	0.0009		0.309	0.400	-22.9	50.0
Dichlorobromomethane	Ave	0.3207	0.3032	0.1500	0.0189	0.0200	-5.5	20.0
2-Chloroethyl vinyl ether	Ave	0.1143	0.1155		0.0202	0.0200	1.0	20.0
cis-1,3-Dichloropropene	Ave	0.4166	0.4069	0.1500	0.0195	0.0200	-2.3	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1353	0.1405	0.0500	0.0415	0.0400	3.9	20.0
Toluene	Ave	1.710	1.667	0.4000	0.0195	0.0200	-2.5	20.0
trans-1,3-Dichloropropene	Ave	0.4672	0.4393	0.1000	0.0188	0.0200	-6.0	20.0
Ethyl methacrylate	Ave	0.3327	0.3487		0.0210	0.0200	4.8	20.0
1,1,2-Trichloroethane	Ave	0.2527	0.2490	0.1000	0.0197	0.0200	-1.5	20.0
1,3-Dichloropropane	Ave	0.4765	0.4654		0.0195	0.0200	-2.3	20.0
Tetrachloroethene	Ave	0.2755	0.2793	0.1500	0.0203	0.0200	1.4	20.0
2-Hexanone	Ave	0.1213	0.1249	0.0500	0.0412	0.0400	2.9	20.0
Chlorodibromomethane	Ave	0.2742	0.2707		0.0197	0.0200	-1.3	20.0
Ethylene Dibromide	Ave	0.2382	0.2432		0.0204	0.0200	2.1	20.0
Chlorobenzene	Ave	1.096	1.020	0.3000	0.0186	0.0200	-6.9	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3466	0.3334		0.0192	0.0200	-3.8	20.0
Ethylbenzene	Ave	0.5760	0.5612		0.0195	0.0200	-2.6	20.0
m-Xylene & p-Xylene	Ave	0.7222	0.7013		0.0194	0.0200	-2.9	20.0
o-Xylene	Ave	0.7391	0.6910		0.0187	0.0200	-6.5	20.0
Styrene	Ave	1.192	1.151	0.3000	0.0193	0.0200	-3.5	20.0
Bromoform	Ave	0.1392	0.1448	0.1000	0.0208	0.0200	4.0	20.0
Isopropylbenzene	Ave	1.733	1.698	0.1000	0.0196	0.0200	-2.0	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5607	0.5729	0.3000	0.0204	0.0200	2.2	20.0
Bromobenzene	Ave	0.7889	0.7696		0.0195	0.0200	-2.5	20.0
1,2,3-Trichloropropane	Ave	0.1474	0.1684		0.0229	0.0200	14.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1504	0.1489		0.0198	0.0200	-1.0	20.0
N-Propylbenzene	Ave	0.8625	0.8636		0.0200	0.0200	0.1	20.0
2-Chlorotoluene	Ave	0.7917	0.7546		0.0191	0.0200	-4.7	20.0
1,3,5-Trimethylbenzene	Ave	2.724	2.643		0.0194	0.0200	-3.0	20.0
4-Chlorotoluene	Ave	0.8425	0.8074		0.0192	0.0200	-4.2	20.0
tert-Butylbenzene	Ave	2.203	2.122		0.0193	0.0200	-3.7	20.0
1,2,4-Trimethylbenzene	Ave	2.929	2.756		0.0188	0.0200	-5.9	20.0
sec-Butylbenzene	Ave	2.970	2.894		0.0195	0.0200	-2.6	20.0
1,3-Dichlorobenzene	Ave	1.606	1.477	0.6000	0.0184	0.0200	-8.1	20.0
4-Isopropyltoluene	Ave	2.633	2.522		0.0192	0.0200	-4.2	20.0
1,4-Dichlorobenzene	Ave	1.631	1.505	0.5000	0.0185	0.0200	-7.7	20.0
n-Butylbenzene	Ave	2.176	1.997		0.0183	0.0200	-8.3	20.0
1,2-Dichlorobenzene	Ave	1.453	1.383	0.4000	0.0190	0.0200	-4.8	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICV 240-245431/20 Calibration Date: 09/02/2016 23:42

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM7659.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Ave	0.0815	0.0939	0.0500	0.0230	0.0200	15.2	50.0
1,2,4-Trichlorobenzene	Lin1		0.7127	0.2000	0.0187	0.0200	-6.6	50.0
Hexachlorobutadiene	Ave	0.2856	0.2529		0.0177	0.0200	-11.5	20.0
Naphthalene	Ave	1.680	1.646		0.0196	0.0200	-2.0	50.0
1,2,3-Trichlorobenzene	Lin1		0.5985		0.0187	0.0200	-6.7	20.0
Dibromofluoromethane (Surr)	Ave	0.2289	0.2051		0.0179	0.0200	-10.4	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2213		0.0181	0.0200	-9.5	20.0
Toluene-d8 (Surr)	Ave	1.458	1.318		0.0181	0.0200	-9.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.4819		0.0179	0.0200	-10.3	20.0

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab File ID: BFB5077.D BFB Injection Date: 11/30/2016

Instrument ID: A3UX16 BFB Injection Time: 09:39

Analysis Batch No.: 257488

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	16.7	
75	30.0 - 60.0 % of mass 95	45.6	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.9	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	77.6	
175	5.0 - 9.0 % of mass 174	5.4	(6.9) 1
176	95.0 - 101.0 % of mass 174	74.2	(95.6) 1
177	5.0 - 9.0 % of mass 176	5.0	(6.8) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 240-257488/4	UXM9671.D	11/30/2016	10:06
	LCS 240-257488/5	UXM9672.D	11/30/2016	10:29
	CCV 240-257488/6	UXM9673.D	11/30/2016	11:10
	MB 240-257488/8	UXM9675.D	11/30/2016	11:56
TB-112116	240-72440-1	UXM9676.D	11/30/2016	12:52
SEMW-7I-112116	240-72440-2	UXM9677.D	11/30/2016	13:16
SEMW-8S-112116	240-72440-3	UXM9678.D	11/30/2016	13:39
SEMW-8I-112116	240-72440-4	UXM9679.D	11/30/2016	14:02

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCVIS 240-257488/4 Calibration Date: 11/30/2016 10:06

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM9671.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2781	0.3151	0.1000	0.0227	0.0200	13.3	20.0
Chloromethane	Ave	0.3817	0.4102	0.1000	0.0215	0.0200	7.5	20.0
Vinyl chloride	Ave	0.3553	0.3919	0.1000	0.0221	0.0200	10.3	20.0
Butadiene	Ave	0.3341	0.3773		0.0226	0.0200	12.9	20.0
Bromomethane	Ave	0.1902	0.2002	0.0500	0.0211	0.0200	5.3	20.0
Chloroethane	Ave	0.2108	0.2314	0.0500	0.0220	0.0200	9.8	20.0
Dichlorofluoromethane	Ave	0.4995	0.4766		0.0191	0.0200	-4.6	20.0
Trichlorofluoromethane	Ave	0.3346	0.3312	0.1000	0.0198	0.0200	-1.0	20.0
Ethyl ether	Ave	0.1940	0.2212		0.0228	0.0200	14.0	20.0
Acrolein	Ave	0.0291	0.0295		0.101	0.100	1.2	50.0
1,1-Dichloroethene	Ave	0.2383	0.2635	0.1000	0.0221	0.0200	10.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.1513	0.1688	0.0500	0.0223	0.0200	11.6	20.0
Acetone	Lin1		0.0576	0.0100	0.0506	0.0400	26.4	50.0
Iodomethane	Ave	0.3898	0.4017		0.0206	0.0200	3.0	20.0
Carbon disulfide	Ave	0.8983	0.9614	0.1000	0.0214	0.0200	7.0	20.0
3-Chloro-1-propene	Ave	0.1741	0.1795		0.0206	0.0200	3.1	20.0
Methyl acetate	Ave	0.1139	0.1364	0.1000	0.120	0.100	19.7	20.0
Methylene Chloride	Lin1		0.2969	0.1000	0.0187	0.0200	-6.4	50.0
2-Methyl-2-propanol	Ave	0.0122	0.0147		0.242	0.200	20.9	50.0
Acrylonitrile	Ave	0.0594	0.0748		0.252	0.200	25.8*	20.0
trans-1,2-Dichloroethene	Ave	0.2900	0.2869	0.1000	0.0198	0.0200	-1.1	20.0
Methyl tert-butyl ether	Ave	0.6719	0.6748	0.1000	0.0201	0.0200	0.4	20.0
Hexane	Ave	0.2697	0.2836		0.0210	0.0200	5.1	20.0
1,1-Dichloroethane	Ave	0.5025	0.5230	0.2000	0.0208	0.0200	4.1	20.0
Vinyl acetate	Ave	0.3605	0.4052		0.0225	0.0200	12.4	50.0
cis-1,2-Dichloroethene	Ave	0.3095	0.3141	0.1000	0.0203	0.0200	1.5	20.0
2,2-Dichloropropane	Ave	0.3696	0.3396		0.0184	0.0200	-8.1	20.0
2-Butanone (MEK)	Ave	0.0621	0.0728	0.0100	0.0469	0.0400	17.3	20.0
Chlorobromomethane	Ave	0.1240	0.1280		0.0206	0.0200	3.2	20.0
Tetrahydrofuran	Ave	0.0406	0.0492		0.0485	0.0400	21.2*	20.0
Chloroform	Ave	0.4590	0.4475	0.2000	0.0195	0.0200	-2.5	20.0
1,1,1-Trichloroethane	Ave	0.3694	0.3458	0.1000	0.0187	0.0200	-6.4	20.0
Cyclohexane	Ave	0.4081	0.4409	0.1000	0.0216	0.0200	8.0	20.0
1,1-Dichloropropene	Ave	0.3522	0.3812		0.0216	0.0200	8.2	20.0
Carbon tetrachloride	Ave	0.2894	0.2867	0.1000	0.0198	0.0200	-1.0	20.0
Isobutyl alcohol	Ave	0.0038	0.0052		0.686	0.500	37.3*	20.0
Benzene	Ave	1.173	1.156	0.5000	0.0197	0.0200	-1.5	20.0
1,2-Dichloroethane	Ave	0.3058	0.2844	0.1000	0.0186	0.0200	-7.0	20.0
n-Heptane	Lin1		0.1386		0.0194	0.0200	-3.2	20.0
Trichloroethene	Ave	0.2746	0.2720	0.1500	0.0198	0.0200	-0.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCVIS 240-257488/4 Calibration Date: 11/30/2016 10:06

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM9671.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.3562	0.3612	0.1000	0.0203	0.0200	1.4	20.0
1,2-Dichloropropane	Ave	0.2672	0.2616	0.1000	0.0196	0.0200	-2.1	20.0
Dibromomethane	Ave	0.1201	0.1226		0.0204	0.0200	2.1	20.0
Dichlorobromomethane	Ave	0.3207	0.2980	0.1500	0.0186	0.0200	-7.1	20.0
2-Chloroethyl vinyl ether	Ave	0.1143	0.1061		0.0371	0.0400	-7.2	20.0
cis-1,3-Dichloropropene	Ave	0.4166	0.3826	0.1500	0.0184	0.0200	-8.2	20.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1353	0.1579	0.0500	0.0467	0.0400	16.7	20.0
Toluene	Ave	1.710	1.662	0.4000	0.0194	0.0200	-2.8	20.0
trans-1,3-Dichloropropene	Ave	0.4672	0.4364	0.1000	0.0187	0.0200	-6.6	20.0
Ethyl methacrylate	Ave	0.3327	0.3520		0.0212	0.0200	5.8	20.0
1,1,2-Trichloroethane	Ave	0.2527	0.2518	0.1000	0.0199	0.0200	-0.3	20.0
1,3-Dichloropropane	Ave	0.4765	0.4793		0.0201	0.0200	0.6	20.0
Tetrachloroethene	Ave	0.2755	0.2555	0.1500	0.0185	0.0200	-7.3	20.0
2-Hexanone	Ave	0.1213	0.1583	0.0500	0.0522	0.0400	30.5*	20.0
Chlorodibromomethane	Ave	0.2742	0.2679		0.0195	0.0200	-2.3	20.0
Ethylene Dibromide	Ave	0.2382	0.2350		0.0197	0.0200	-1.3	20.0
Chlorobenzene	Ave	1.096	0.9947	0.3000	0.0182	0.0200	-9.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.3466	0.3405		0.0196	0.0200	-1.8	20.0
Ethylbenzene	Ave	0.5760	0.5389		0.0187	0.0200	-6.4	20.0
m-Xylene & p-Xylene	Ave	0.7222	0.6710		0.0186	0.0200	-7.1	20.0
o-Xylene	Ave	0.7391	0.7038		0.0190	0.0200	-4.8	20.0
Styrene	Ave	1.192	1.123	0.3000	0.0188	0.0200	-5.8	20.0
Bromoform	Ave	0.1392	0.1419	0.1000	0.0204	0.0200	1.9	20.0
Isopropylbenzene	Ave	1.733	1.649	0.1000	0.0190	0.0200	-4.8	20.0
1,1,2,2-Tetrachloroethane	Ave	0.5607	0.6277	0.3000	0.0224	0.0200	12.0	20.0
Bromobenzene	Ave	0.7889	0.6965		0.0177	0.0200	-11.7	20.0
1,2,3-Trichloropropane	Ave	0.1474	0.1731		0.0235	0.0200	17.5	20.0
trans-1,4-Dichloro-2-butene	Ave	0.1504	0.1240		0.0165	0.0200	-17.6	20.0
N-Propylbenzene	Ave	0.8625	0.7948		0.0184	0.0200	-7.8	20.0
2-Chlorotoluene	Ave	0.7917	0.7256		0.0183	0.0200	-8.4	20.0
1,3,5-Trimethylbenzene	Ave	2.724	2.459		0.0181	0.0200	-9.7	20.0
4-Chlorotoluene	Ave	0.8425	0.7474		0.0177	0.0200	-11.3	20.0
tert-Butylbenzene	Ave	2.203	1.959		0.0178	0.0200	-11.1	20.0
1,2,4-Trimethylbenzene	Ave	2.929	2.611		0.0178	0.0200	-10.9	20.0
sec-Butylbenzene	Ave	2.970	2.705		0.0182	0.0200	-8.9	20.0
1,3-Dichlorobenzene	Ave	1.606	1.384	0.6000	0.0172	0.0200	-13.9	20.0
4-Isopropyltoluene	Ave	2.633	2.340		0.0178	0.0200	-11.1	20.0
1,4-Dichlorobenzene	Ave	1.631	1.434	0.5000	0.0176	0.0200	-12.1	20.0
n-Butylbenzene	Ave	2.176	1.974		0.0181	0.0200	-9.3	20.0
1,2-Dichlorobenzene	Ave	1.453	1.319	0.4000	0.0182	0.0200	-9.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.0815	0.0929	0.0500	0.0228	0.0200	14.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCVIS 240-257488/4 Calibration Date: 11/30/2016 10:06

Instrument ID: A3UX16 Calib Start Date: 09/02/2016 18:19

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/02/2016 20:14

Lab File ID: UXM9671.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2,4-Trichlorobenzene	Lin1		0.6334	0.2000	0.0166	0.0200	-17.1	50.0
Hexachlorobutadiene	Ave	0.2856	0.2192		0.0153	0.0200	-23.3*	20.0
Naphthalene	Ave	1.680	1.494		0.0178	0.0200	-11.1	50.0
1,2,3-Trichlorobenzene	Lin1		0.5298		0.0165	0.0200	-17.5	20.0
Dibromofluoromethane (Surr)	Ave	0.2289	0.2252		0.0197	0.0200	-1.6	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2446	0.2290		0.0187	0.0200	-6.4	20.0
Toluene-d8 (Surr)	Ave	1.458	1.391		0.0191	0.0200	-4.6	20.0
4-Bromofluorobenzene (Surr)	Ave	0.5369	0.4960		0.0185	0.0200	-7.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCVIS 240-257488/4 Calibration Date: 11/30/2016 10:06

Instrument ID: A3UX16 Calib Start Date: 09/06/2016 18:05

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/06/2016 20:18

Lab File ID: UXM9671.D Conc. Units: ng/uL Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.0011	0.0017		0.641	0.400	60.2*	50.0

FORM VII 8260C

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab File ID: UXM9675.D Lab Sample ID: MB 240-257488/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: A3UX16 Date Analyzed: 11/30/2016 11:56

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-257488/5	UXM9672.D	11/30/2016 10:29
TB-112116	240-72440-1	UXM9676.D	11/30/2016 12:52
SEMW-7I-112116	240-72440-2	UXM9677.D	11/30/2016 13:16
SEMW-8S-112116	240-72440-3	UXM9678.D	11/30/2016 13:39
SEMW-8I-112116	240-72440-4	UXM9679.D	11/30/2016 14:02

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-257488/8

Matrix: Water | Lab File ID: UXM9675.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/30/2016 11:56

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257488 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.23
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.32
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.41
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.34
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.25
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.27
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.27
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.47
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.23
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.26
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.30
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.30
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.32
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.23
78-93-3	2-Butanone (MEK)	10	U	10	1.0
591-78-6	2-Hexanone	10	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	0.71
67-64-1	Acetone	10	U	10	1.8
71-43-2	Benzene	1.0	U	1.0	0.28
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.30
75-25-2	Bromoform	1.0	U	1.0	0.43
74-83-9	Bromomethane	1.0	U	1.0	0.42
75-15-0	Carbon disulfide	1.0	U	1.0	0.34
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.35
108-90-7	Chlorobenzene	1.0	U	1.0	0.32
75-00-3	Chloroethane	1.0	U	1.0	0.41
67-66-3	Chloroform	1.0	U	1.0	0.31
74-87-3	Chloromethane	1.0	U	1.0	0.43
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.26
110-82-7	Cyclohexane	1.0	U	1.0	0.44
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.25
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.50
100-41-4	Ethylbenzene	1.0	U	1.0	0.26
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton
Job No.: 240-72440-1
SDG No.:
Client Sample ID:
Lab Sample ID: MB 240-257488/8
Matrix: Water
Lab File ID: UXM9675.D
Analysis Method: 8260C
Date Collected:
Sample wt/vol: 5(mL)
Date Analyzed: 11/30/2016 11:56
Soil Aliquot Vol:
Dilution Factor: 1
Soil Extract Vol.:
GC Column: DB-624 ID: 0.18(mm)
% Moisture:
Level: (low/med) Low
Analysis Batch No.: 257488
Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-20-9	Methyl acetate	10	U	10	1.4
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.27
108-87-2	Methylcyclohexane	1.0	U	1.0	0.45
75-09-2	Methylene Chloride	1.0	U	1.0	0.53
100-42-5	Styrene	1.0	U	1.0	0.23
127-18-4	Tetrachloroethene	1.0	U	1.0	0.30
108-88-3	Toluene	1.0	U	1.0	0.23
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.29
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.31
79-01-6	Trichloroethene	1.0	U	1.0	0.33
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.50
75-01-4	Vinyl chloride	1.0	U	1.0	0.45
1330-20-7	Xylenes, Total	2.0	U	2.0	0.24

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		73-124
1868-53-7	Dibromofluoromethane (Surr)	99		80-120
460-00-4	4-Bromofluorobenzene (Surr)	89		73-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	93		63-132

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM9672.D

Lab ID: LCS 240-257488/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	20.0	18.1	91	79-133	
1,1,2,2-Tetrachloroethane	20.0	20.7	103	61-130	
1,1,2-Trichloro-1,2,2-trifluoroethane	20.0	22.5	112	65-151	
1,1,2-Trichloroethane	20.0	19.4	97	80-120	
1,1-Dichloroethane	20.0	18.9	95	77-121	
1,1-Dichloroethene	20.0	21.4	107	70-141	
1,2,4-Trichlorobenzene	20.0	14.9	75	53-137	
1,2-Dibromo-3-Chloropropane	20.0	21.4	107	46-140	
Ethylene Dibromide	20.0	19.5	98	80-126	
1,2-Dichlorobenzene	20.0	17.0	85	80-120	
1,2-Dichloroethane	20.0	17.3	87	76-130	
1,2-Dichloropropane	20.0	18.7	93	79-121	
1,3-Dichlorobenzene	20.0	16.0	80	80-120	
1,4-Dichlorobenzene	20.0	16.4	82	80-120	
2-Butanone (MEK)	40.0	42.5	106	54-122	
2-Hexanone	40.0	48.2	120	56-124	
4-Methyl-2-pentanone (MIBK)	40.0	43.5	109	60-131	
Acetone	40.0	42.3	106	46-120	
Benzene	20.0	18.4	92	80-120	
Dichlorobromomethane	20.0	17.5	87	76-125	
Bromoform	20.0	19.4	97	52-157	
Bromomethane	20.0	19.5	97	24-160	
Carbon disulfide	20.0	20.1	101	58-160	
Carbon tetrachloride	20.0	19.5	98	69-149	
Chlorobenzene	20.0	17.3	86	80-120	
Chloroethane	20.0	20.7	103	24-147	
Chloroform	20.0	18.3	92	80-120	
Chloromethane	20.0	19.7	98	50-135	
cis-1,2-Dichloroethene	20.0	18.9	95	80-120	
cis-1,3-Dichloropropene	20.0	17.4	87	75-120	
Cyclohexane	20.0	22.8	114	66-135	
Chlorodibromomethane	20.0	18.2	91	68-131	
Dichlorodifluoromethane	20.0	20.3	102	32-140	
Ethylbenzene	20.0	18.1	91	80-120	
Isopropylbenzene	20.0	18.2	91	80-120	
Methyl acetate	100	113	113	65-124	
Methyl tert-butyl ether	20.0	18.5	92	75-126	
Methylcyclohexane	20.0	21.4	107	71-122	
Methylene Chloride	20.0	17.4	87	68-136	
Styrene	20.0	18.1	91	80-120	
Tetrachloroethene	20.0	18.0	90	80-123	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: UXM9672.D

Lab ID: LCS 240-257488/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Toluene	20.0	18.5	92	80-121	
trans-1,2-Dichloroethene	20.0	19.2	96	80-123	
trans-1,3-Dichloropropene	20.0	17.8	89	65-120	
Trichloroethene	20.0	18.0	90	80-122	
Trichlorofluoromethane	20.0	19.3	97	56-161	
Vinyl chloride	20.0	20.8	104	60-129	
Xylenes, Total	40.0	35.6	89	80-120	
m-Xylene & p-Xylene	20.0	17.9	89	80-120	
o-Xylene	20.0	17.7	88	80-120	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
TB-112116	240-72440-1	99	99	92	89
SEMW-7I-112116	240-72440-2	97	96	90	89
SEMW-8S-112116	240-72440-3	100	95	92	90
SEMW-8I-112116	240-72440-4	98	96	92	90
	MB 240-257488/8	99	93	91	89
	LCS 240-257488/5	95	92	94	90

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	80-120
DCA = 1,2-Dichloroethane-d4 (Surr)	63-132
TOL = Toluene-d8 (Surr)	73-124
BFB = 4-Bromofluorobenzene (Surr)	73-120

Column to be used to flag recovery values

FORM II 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Sample No.: ICIS 240-245431/9 Date Analyzed: 09/02/2016 19:28

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM7648.D Heated Purge: (Y/N) N

Calibration ID: 35912

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		1017298	5.17	725873	7.87	378084	10.10
UPPER LIMIT		2034596	5.67	1451746	8.37	756168	10.60
LOWER LIMIT		508649	4.67	362937	7.37	189042	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-245431/20		1038034	5.17	740042	7.85	381864	10.10
CCVIS 240-257488/4		769759	5.17	519826	7.87	282498	10.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Sample No.: CCVIS 240-257488/4 Date Analyzed: 11/30/2016 10:06

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): UXM9671.D Heated Purge: (Y/N) N

Calibration ID: 35918

		FB		CBNZd5		DCBd4	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		769759	5.17	519826	7.87	282498	10.10
UPPER LIMIT		1539518	5.67	1039652	8.37	564996	10.60
LOWER LIMIT		384880	4.67	259913	7.37	141249	9.60
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-257488/5		791113	5.17	534614	7.87	292925	10.10
CCV 240-257488/6		736222	5.17	498788	7.87	264358	10.10
MB 240-257488/8		708273	5.17	493137	7.87	257600	10.10
240-72440-1	TB-112116	732305	5.17	507634	7.87	255878	10.10
240-72440-2	SEMW-7I-112116	718081	5.17	500536	7.87	256462	10.10
240-72440-3	SEMW-8S-112116	688657	5.17	483249	7.87	247323	10.10
240-72440-4	SEMW-8I-112116	714079	5.17	496043	7.87	252809	10.10

FB = Fluorobenzene
CBNZd5 = Chlorobenzene-d5
DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

Method RSK-175

Dissolved Gases (GC) by Method RSK_175

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Sample No.: STD3 240-251578/5 Date Analyzed: 10/15/2016 15:31

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm)

Lab File ID (Standard): RSK0101505.D Heated Purge: (Y/N) N

Calibration ID: 36649

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFE		
				RT #		
INITIAL CALIBRATION SURROGATE				3.34		
UPPER LIMIT				3.39		
LOWER LIMIT				3.29		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
STD3 240-251578/5 ICRT		10/15/2016 15:31	RSK0101505.D	3.34		
ICV 240-251578/9		10/15/2016 16:39	RSK0101509.D	3.34		

TFE = 1,1,1-Trifluoroethane

TFE RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII RSK-175

FORM VIII
GC VOA ANALYTICAL SEQUENCE

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Sample No.: CCVRT 240-257347/3 Date Analyzed: 11/29/2016 13:17

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm)

Lab File ID (Standard): RSK0112903.D Heated Purge: (Y/N) N

Calibration ID: 36649

THE ANALYTICAL SEQUENCE OF BLANKS, SAMPLES, STANDARDS, MS/MSDs AND LCSs IS GIVEN BELOW:

				TFE		
				RT #		
CONTINUING CALIBRATION SURROGATE				3.34		
UPPER LIMIT				3.39		
LOWER LIMIT				3.29		
LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	LAB FILE ID			
CCVRT 240-257347/3		11/29/2016 13:17	RSK0112903.D	3.34		
MB 240-257347/4		11/29/2016 13:34	RSK0112904.D	3.34		
LCS 240-257347/5		11/29/2016 13:51	RSK0112905.D	3.34		
240-72267-E-4 MS		11/29/2016 14:25	RSK0112907.D	3.34		
240-72267-E-4 MSD		11/29/2016 14:42	RSK0112908.D	3.34		
CCV 240-257347/14		11/29/2016 16:25	RSK0112914.D	3.34		
240-72440-2	SEMW-7I-112116	11/29/2016 17:34	RSK0112918.D	3.34		
240-72440-3	SEMW-8S-112116	11/29/2016 17:51	RSK0112919.D	3.34		
240-72440-4	SEMW-8I-112116	11/29/2016 18:08	RSK0112920.D	3.34		
CCV 240-257347/25		11/29/2016 19:34	RSK0112925.D	3.34		

TFE = 1,1,1-Trifluoroethane

TFE RT Limit = ± 0.05 minutes of surrogate RT

Column used to flag values outside QC limits

FORM VIII RSK-175

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 251578

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2016 14:57 Calibration End Date: 10/15/2016 16:22 Calibration ID: 36649

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-251578/3	RSK0101503.D
Level 2	STD2 240-251578/4	RSK0101504.D
Level 3	STD3 240-251578/5	RSK0101505.D
Level 4	STD4 240-251578/6	RSK0101506.D
Level 5	STD5 240-251578/7	RSK0101507.D
Level 6	STD6 240-251578/8	RSK0101508.D

ANALYTE	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6					RT WINDOW	AVG RT
Methane	1.181	1.182	1.182	1.183	1.180	1.182					1.132 - 1.232	1.182
Ethene	1.877	1.879	1.879	1.879	1.877	1.872					1.822 - 1.922	1.877
Acetylene	1.991	1.992	1.992	1.993	1.990	1.988					1.938 - 2.038	1.991
Ethane	2.201	2.199	2.199	2.203	2.197	2.192					1.992 - 2.392	2.199
Propane	4.544	4.546	4.546	4.546	4.537	4.522					4.472 - 4.572	4.540
1,1,1-Trifluoroethane	3.344	3.342	3.339	3.336	3.327						3.239 - 3.439	3.338

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 251578

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2016 14:57 Calibration End Date: 10/15/2016 16:22 Calibration ID: 36649

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-251578/3	RSK0101503.D
Level 2	STD2 240-251578/4	RSK0101504.D
Level 3	STD3 240-251578/5	RSK0101505.D
Level 4	STD4 240-251578/6	RSK0101506.D
Level 5	STD5 240-251578/7	RSK0101507.D
Level 6	STD6 240-251578/8	RSK0101508.D

ANALYTE	CF				CURVE TYPE	COEFFICIENT			#	MIN CF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 5	LVL 2 LVL 6	LVL 3	LVL 4		B	M1	M2								
Methane	17282 15031	14572 14891	15021	15273	Ave		15344.8970				6.4		30.0			
Ethene	13272 13787	13164 13601	13786	13941	Ave		13591.7814				2.3		30.0			
Acetylene	6429.5 6415.6	5892.3 6088.3	6401.9	6607.6	Ave		6305.86557				4.2		30.0			
Ethane	13684 14544	13730 14408	14353	14588	Ave		14217.7545				2.9		30.0			
Propane	13814 15013	13864 14908	14731	14670	Ave		14499.9021				3.6		30.0			
1,1,1-Trifluoroethane	7519.7 7756.9	8027.5	7602.5	8141.8	Ave		7809.65873				3.4		30.0			

Note: The m1 coefficient is the same as Ave CF for an Ave curve type.

FORM VI
GC VOA BY EXTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-72440-1 Analy Batch No.: 251578

SDG No.:

Instrument ID: ZPID GC Column: HP-PLOT/Q ID: 0.53(mm) Heated Purge: (Y/N) N

Calibration Start Date: 10/15/2016 14:57 Calibration End Date: 10/15/2016 16:22 Calibration ID: 36649

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-251578/3	RSK0101503.D
Level 2	STD2 240-251578/4	RSK0101504.D
Level 3	STD3 240-251578/5	RSK0101505.D
Level 4	STD4 240-251578/6	RSK0101506.D
Level 5	STD5 240-251578/7	RSK0101507.D
Level 6	STD6 240-251578/8	RSK0101508.D

ANALYTE	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
		LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1 LVL 6	LVL 2	LVL 3	LVL 4	LVL 5
Methane	Ave	4466 29592381	28968	149298	1518050	5973962	0.258 1987	1.99	9.94	99.4	397
Ethene	Ave	6023 47472057	45954	240631	2433289	9624127	0.454 3490	3.49	17.5	175	698
Acetylene	Ave	2700 19661432	19034	103400	1067223	4143730	0.420 3229	3.23	16.2	162	646
Ethane	Ave	6652 53866713	51341	268353	2727568	10875652	0.486 3739	3.74	18.7	187	748
Propane	Ave	9839 81662046	75958	403531	4018573	16448361	0.712 5478	5.48	27.4	274	1096
1,1,1-Trifluoroethane	Ave	1961483	4187852	19830722	42474965	80933618	261	522	2608	5217	10434

Curve Type Legend:
Ave = Average

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICV 240-251578/9 Calibration Date: 10/15/2016 16:39

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0101509.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Ave	15345	12457		161	199	-18.8	30.0
Ethene	Ave	13592	11508		296	349	-15.3	30.0
Acetylene	Ave	6306	5081		260	323	-19.4	30.0
Ethane	Ave	14218	12173		320	374	-14.4	30.0
Propane	Ave	14500	12390		467	546	-14.6	30.0
1,1,1-Trifluoroethane	Ave	7810	6762		2640	3050	-13.4	30.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICV 240-251578/9 Calibration Date: 10/15/2016 16:39

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0101509.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.13	1.23
Ethene	1.88	1.82	1.92
Acetylene	1.99	1.94	2.04
Ethane	2.20	1.99	2.39
Propane	4.54	4.47	4.57
1,1,1-Trifluoroethane	3.34	3.24	3.44

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCVRT 240-257347/3 Calibration Date: 11/29/2016 13:17

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0112903.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Ave	15345	14815		192	199	-3.5	30.0
Ethene	Ave	13592	12801		329	349	-5.8	30.0
Acetylene	Ave	6306	5576		286	323	-11.6	30.0
Ethane	Ave	14218	13369		352	374	-6.0	30.0
Propane	Ave	14500	12768		482	548	-11.9	30.0
1,1,1-Trifluoroethane	Ave	7810	6869		2680	3050	-12.0	30.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCVRT 240-257347/3 Calibration Date: 11/29/2016 13:17

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0112903.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.13	1.23
Ethene	1.87	1.82	1.92
Acetylene	1.99	1.94	2.04
Ethane	2.19	1.99	2.39
Propane	4.54	4.49	4.59
1,1,1-Trifluoroethane	3.34	3.24	3.44

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCV 240-257347/14 Calibration Date: 11/29/2016 16:25

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0112914.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Ave	15345	14870		193	199	-3.1	30.0
Ethene	Ave	13592	12363		317	349	-9.0	30.0
Acetylene	Ave	6306	5192		266	323	-17.7	30.0
Ethane	Ave	14218	13120		345	374	-7.7	30.0
Propane	Ave	14500	12320		465	548	-15.0	30.0
1,1,1-Trifluoroethane	Ave	7810	6484		2530	3050	-17.0	30.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCV 240-257347/14 Calibration Date: 11/29/2016 16:25

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0112914.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.13	1.23
Ethene	1.88	1.83	1.93
Acetylene	1.99	1.94	2.04
Ethane	2.20	2.00	2.40
Propane	4.54	4.49	4.59
1,1,1-Trifluoroethane	3.34	3.24	3.44

FORM VII
GC VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCV 240-257347/25 Calibration Date: 11/29/2016 19:34

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0112925.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE CF	CF	MIN CF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methane	Ave	15345	14117		183	199	-8.0	30.0
Ethene	Ave	13592	11291		290	349	-16.9	30.0
Acetylene	Ave	6306	4871		249	323	-22.8	30.0
Ethane	Ave	14218	12106		318	374	-14.9	30.0
Propane	Ave	14500	10912		412	548	-24.7	30.0
1,1,1-Trifluoroethane	Ave	7810	5943		2320	3050	-23.9	30.0

FORM VII
GC VOA CONTINUING CALIBRATION RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: CCV 240-257347/25 Calibration Date: 11/29/2016 19:34

Instrument ID: ZPID Calib Start Date: 10/15/2016 14:57

GC Column: HP-PLOT/Q ID: 0.53(mm) Calib End Date: 10/15/2016 16:22

Lab File ID: RSK0112925.D Heated Purge: (Y/N) N

Analyte	RT	RT WINDOW	
		FROM	TO
Methane	1.18	1.13	1.23
Ethene	1.88	1.83	1.93
Acetylene	1.99	1.94	2.04
Ethane	2.20	2.00	2.40
Propane	4.54	4.49	4.59
1,1,1-Trifluoroethane	3.34	3.24	3.44

FORM IV
GC VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: MB 240-257347/4

Matrix: Water Date Extracted:

Lab File ID:(1) RSK0112904.D Lab File ID:(2)

Date Analyzed:(1) 11/29/2016 13:34 Date Analyzed:(2)

Instrument ID:(1) ZPID Instrument ID:(2)

GC Column:(1) HP-PLOT/Q ID: 0.53(mm) GC Column:(2) ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
	LCS 240-257347/5	11/29/2016 13:51	
	240-72267-E-4 MS	11/29/2016 14:25	
	240-72267-E-4 MSD	11/29/2016 14:42	
SEMW-7I-112116	240-72440-2	11/29/2016 17:34	
SEMW-8S-112116	240-72440-3	11/29/2016 17:51	
SEMW-8I-112116	240-72440-4	11/29/2016 18:08	

FORM I
GC VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton | Job No.: 240-72440-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 240-257347/4

Matrix: Water | Lab File ID: RSK0112904.D

Analysis Method: RSK-175 | Date Collected:

Sample wt/vol: 33(mL) | Date Analyzed: 11/29/2016 13:34

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: HP-PLOT/Q ID: 0.53(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 257347 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
74-85-1	Ethene	0.50	U	0.50	0.13
74-84-0	Ethane	0.50	U	0.50	0.14
74-82-8	Methane	0.50	U	0.50	0.080

CAS NO.	SURROGATE	%REC	Q	LIMITS
420-46-2	1,1,1-Trifluoroethane	87		76-121

FORM III
GC VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: RSK0112905.D

Lab ID: LCS 240-257347/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Ethene	349	336	96	79-132	
Ethane	374	362	97	76-131	
Methane	199	190	96	80-130	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: RSK0112907.D

Lab ID: 240-72267-E-4 MS Client ID:

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC	QC LIMITS REC	#
Methane	994	2900	4310	140	48-159	

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM III
GC VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water Level: Low Lab File ID: RSK0112908.D

Lab ID: 240-72267-E-4 MSD Client ID:

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Methane	994	4520	162	5	23	48-159	F1

Column to be used to flag recovery and RPD values

FORM III RSK-175

FORM II
GC VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): HP-PLOT/Q ID: 0.53(mm)

Client Sample ID	Lab Sample ID	TFE1 #
SEMW-7I-112116	240-72440-2	84
SEMW-8S-112116	240-72440-3	84
SEMW-8I-112116	240-72440-4	82
	MB 240-257347/4	87
	LCS 240-257347/5	87
	240-72267-E-4 MS	87
	240-72267-E-4 MSD	88

	QC LIMITS
TFE = 1,1,1-Trifluoroethane	76-121

Column to be used to flag recovery values

FORM II RSK-175

METALS

COVER PAGE
METALS

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG No.:

Project: MRC Block E Downgradient TCE

Client Sample ID	Lab Sample ID
SEMW-7I-112116	240-72440-2
SEMW-8S-112116	240-72440-3
SEMW-8I-112116	240-72440-4

Comments:

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

ICV Source: MT6500ICV_00034 Concentration Units: ug/L

CCV Source: MTICPCCV_00082

Analyte	ICV 240-257308/4 11/28/2016 08:54				CCV 240-257308/30 11/28/2016 11:06				CCV 240-257308/42 11/28/2016 11:57			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	12900		12500	103	26000		25000	104	27200		25000	109
Manganese	1540		1500	103	2050		2000	102	2130		2000	106

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2A-IN
CALIBRATION VERIFICATIONS
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

ICV Source: MT6500ICV_00034 Concentration Units: ug/L

CCV Source: MTICPCCV_00082

Analyte	ICV 240-257467/4 11/29/2016 10:56				CCV 240-257467/18 11/29/2016 11:57				CCV 240-257467/30 11/29/2016 12:51			
	Found	C	True	%R	Found	C	True	%R	Found	C	True	%R
Iron	12800		12500	102	26000		25000	104	25300		25000	101
Manganese	1520		1500	101	2040		2000	102	2000		2000	100

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.
Italicized analytes were not requested for this sequence.

2B-IN
CRQL CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Method: 6010C Instrument ID: I12

Lab Sample ID: CRI 240-257308/6 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	200	204		102	70-130
Manganese	15.0	15.3		102	70-130

Lab Sample ID: CRI 240-257308/152 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	200	228		114	70-130
Manganese	15.0	16.5		110	70-130

Lab Sample ID: CRI 240-257467/6 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	200	208		104	70-130
Manganese	15.0	15.5		103	70-130

Lab Sample ID: CRI 240-257467/83 Concentration Units: ug/L

CRQL Check Standard Source: MTTRCRIC_00042

Analyte	CRQL Check Standard				
	True	Found	Qualifiers	%R(1)	Limits
Iron	200	201		101	70-130
Manganese	15.0	15.3		102	70-130

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IIB-IN

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-257308/5 11/28/2016 08:58		CCB 240-257308/31 11/28/2016 11:10		CCB 240-257308/43 11/28/2016 12:01			
		Found	C	Found	C	Found	C	Found	C
Iron	100	100	U	100	U	100	U		
Manganese	15	15	U	15	U	15	U		

Italicized analytes were not requested for this sequence.

3-IN
INSTRUMENT BLANKS
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Concentration Units: ug/L

Analyte	RL	ICB 240-257467/5 11/29/2016 11:00		CCB 240-257467/19 11/29/2016 12:01		CCB 240-257467/31 11/29/2016 12:55			
		Found	C	Found	C	Found	C	Found	C
Iron	100	100	U	100	U	100	U		
Manganese	15	15	U	15	U	15	U		

Italicized analytes were not requested for this sequence.

3-IN
METHOD BLANK
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Concentration Units: ug/L Lab Sample ID: MB 240-257036/1-A

Instrument Code: I12 Batch No.: 257308

CAS No.	Analyte	Concentration	C	Q	Method
7439-89-6	Iron	100	U		6010C
7439-96-5	Manganese	15	U		6010C

FORM III-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICSA 240-257308/8 Instrument ID: I12

Lab File ID: I12112816A.asc ICS Source: MTTRICSAW_00031

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	**200000**	**194860**	**97**
Manganese		**1.75**	
Aluminum	*500000*	*521850*	*104*
Antimony		*2.22*	
Arsenic		*-4.72*	
Barium		*0.477*	
Beryllium		*0.248*	
Boron		*7.60*	
Cadmium		*0.405*	
Calcium	*500000*	*486590*	*97*
Chromium		*3.05*	
Cobalt		*-5.34*	
Copper		*-0.364*	
Lead		*0.266*	
Lithium		*3.99*	
Magnesium	*500000*	*519700*	*104*
Molybdenum		*-1.79*	
Nickel		*1.87*	
Potassium		*14.7*	
Selenium		*0.376*	
Silicon		*-4.81*	
Silver		*-2.68*	
Sodium		*27.6*	
Strontium		*9.90*	
Thallium		*7.41*	
Tin		*3.23*	
Titanium		*-2.29*	
Vanadium		*-3.10*	
Zinc		*6.85*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICSAB 240-257308/9 Instrument ID: I12

Lab File ID: I12112816A.asc ICS Source: MTICPICSABW_00012

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Iron	**200000**	**210220**	**105**
Manganese	**500**	**543**	**109**
Aluminum	*500000*	*561300*	*112*
Antimony	*1000*	*1132*	*113*
Arsenic	*1000*	*1143*	*114*
Barium	*500*	*546*	*109*
Beryllium	*500*	*531*	*106*
Boron	*500*	*564*	*113*
Cadmium	*1000*	*1152*	*115*
Calcium	*500000*	*527420*	*105*
Chromium	*500*	*533*	*107*
Cobalt	*500*	*547*	*109*
Copper	*500*	*587*	*117*
Lead	*1000*	*991*	*99*
Lithium	*500*	*576*	*115*
Magnesium	*500000*	*560620*	*112*
Molybdenum	*1000*	*1043*	*104*
Nickel	*1000*	*1047*	*105*
Potassium	*10000*	*11337*	*113*
Selenium	*1000*	*1112*	*111*
Silicon	*10000*	*10995*	*110*
Silver	*1000*	*1200*	*120*
Sodium	*10000*	*11395*	*114*
Strontium	*1500*	*1591*	*106*
Thallium	*1000*	*1068*	*107*
Tin	*500*	*569*	*114*
Titanium	*500*	*557*	*111*
Vanadium	*500*	*531*	*106*
Zinc	*1000*	*1111*	*111*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICSA 240-257467/8 Instrument ID: I12

Lab File ID: I12112916A.asc ICS Source: MTTRICSAW_00031

Concentration Units: ug/L

Analyte	True Solution A	Found Solution A	Percent Recovery
Iron	**200000**	**189760**	**95**
Manganese		**1.82**	
Aluminum	*500000*	*513490*	*103*
Antimony		*2.29*	
Arsenic		*-6.24*	
Barium		*0.631*	
Beryllium		*0.389*	
Boron		*8.53*	
Cadmium		*0.242*	
Calcium	*500000*	*468440*	*94*
Chromium		*2.47*	
Cobalt		*-4.37*	
Copper		*-0.597*	
Lead		*1.11*	
Lithium		*4.55*	
Magnesium	*500000*	*503530*	*101*
Molybdenum		*-1.39*	
Nickel		*3.15*	
Potassium		*-1.36*	
Selenium		*1.29*	
Silicon		*6.63*	
Silver		*-1.67*	
Sodium		*39.0*	
Strontium		*6.80*	
Thallium		*4.33*	
Tin		*1.58*	
Titanium		*-1.70*	
Vanadium		*-2.57*	
Zinc		*6.30*	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

4A-IN
INTERFERENCE CHECK STANDARD
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Lab Sample ID: ICSAB 240-257467/9 Instrument ID: I12

Lab File ID: I12112916A.asc ICS Source: MTICPICSABW_00012

Concentration Units: ug/L

Analyte	True Solution AB	Found Solution AB	Percent Recovery
Iron	**200000**	**195060**	**98**
Manganese	**500**	**502**	**100**
Aluminum	*500000*	*518690*	*104*
Antimony	*1000*	*1019*	*102*
Arsenic	*1000*	*1026*	*103*
Barium	*500*	*499*	*100*
Beryllium	*500*	*491*	*98*
Boron	*500*	*510*	*102*
Cadmium	*1000*	*1038*	*104*
Calcium	*500000*	*485300*	*97*
Chromium	*500*	*494*	*99*
Cobalt	*500*	*494*	*99*
Copper	*500*	*540*	*108*
Lead	*1000*	*906*	*91*
Lithium	*500*	*532*	*106*
Magnesium	*500000*	*514670*	*103*
Molybdenum	*1000*	*929*	*93*
Nickel	*1000*	*959*	*96*
Potassium	*10000*	*10391*	*104*
Selenium	*1000*	*1008*	*101*
Silicon	*10000*	*10159*	*102*
Silver	*1000*	*1106*	*111*
Sodium	*10000*	*10489*	*105*
Strontium	*1500*	*1466*	*98*
Thallium	*1000*	*959*	*96*
Tin	*500*	*514*	*103*
Titanium	*500*	*516*	*103*
Vanadium	*500*	*490*	*98*
Zinc	*1000*	*1006*	*101*

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM IVA-IN

5A-IN
MATRIX SPIKE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: SEMW-7I-112116 MS

Lab ID: 240-72440-2 MS

Lab Name: TestAmerica Canton

Job No.: 240-72440-1

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	SSR	C	Sample Result (SR)	C	Spike Added (SA)	%R	Control Limit %R	Q	Method
Iron	1670		610		1000	106	75-125		6010C
Manganese	631		110		500	104	75-125		6010C

SSR = Spiked Sample Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VA - IN

5A-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
METALS - TOTAL RECOVERABLE

Client ID: SEMW-7I-112116 MSD

Lab ID: 240-72440-2 MSD

Lab Name: TestAmerica Canton

Job No.: 240-72440-1

SDG No.:

Matrix: Water

Concentration Units: ug/L

% Solids:

Analyte	(SDR)	C	Spike Added (SA)	%R	Control Limit %R	RPD	RPD Limit	Q	Method
Iron	1670		1000	106	75-125	0	20		6010C
Manganese	630		500	104	75-125	0	20		6010C

SDR = Sample Duplicate Result

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VD - IN

7A-IN
LAB CONTROL SAMPLE
METALS - TOTAL RECOVERABLE

Lab ID: LCS 240-257036/2-A

Lab Name: TestAmerica Canton Job No.: 240-72440-1

Sample Matrix: Water LCS Source: MTICP1_00056

Analyte	Water(ug/L)							
	True	Found	C	%R	Limits		Q	Method
Iron	1000	1120		112	80	120		6010C
Manganese	500	543		109	80	120		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA - IN

8-IN
ICP-AES AND ICP-MS SERIAL DILUTIONS
METALS - TOTAL RECOVERABLE

Lab ID: 240-72440-2

SDG No:

Lab Name: TestAmerica Canton Job No: 240-72440-1

Matrix: Water Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	Method
Iron	610		639		NC		6010C
Manganese	110		130		NC		6010C

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIII-IN

9-IN
DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: I12

Method: 6010C MDL Date: 05/06/2016 13:42

Prep Method: 3005A

Analyte	Wavelength/ Mass	RL (ug/L)	MDL (ug/L)
Iron	271.441	100	25
Manganese	257.610	15	5.1

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
METALS - TOTAL RECOVERABLE

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: I12

Method: 6010C XMDL Date: 05/06/2016 13:44

Analyte	Wavelength/ Mass	XRL (ug/L)	XMDL (ug/L)
Iron	271.441	100	25
Manganese	257.610	15	5.1

FORM IX - IN

10-IN
ICP-AES INTERELEMENT CORRECTION FACTORS
METALS

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG No.:

ICP-AES Instrument ID: I12 Date: 08/08/2016

Analyte	Wave Length	Al	As	Ca	Co	Cr	Cu	Fe	Mn	Mo	Ni	Si	Ti	V	
Aluminum										0.008918				0.066045	
Antimony		-0.000064			-0.000244			-0.000049						0.002799	
Arsenic		0.000015			0.000192	0.000782			-0.000355	0.002123					
Beryllium														0.000282	
Cadmium			0.011285					0.000001							
Cobalt													0.002140		
Copper				0.000018	0.000199			-0.000017					-0.002777		
Lead		-0.00009					0.000101	0.000056			0.000131	0.00004			
Lithium				0.000011											
Nickel					0.000518			0.000057							
Selenium		-0.000031							0.000338						
Thallium		0.000022			0.003923				0.000571					0.001707	
Vanadium								0.000067							
Zinc						-0.001092									

X-IN

11-IN
LINEAR RANGES
METALS

Lab Name: TestAmerica Canton Job No: 240-72440-1

SDG No.:

Instrument ID: I12 Date: 08/18/2016 14:54

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	Method
Iron		500000	6010C
Manganese		15000	6010C

FORM XI - IN

12-IN
PREPARATION LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Prep Method: 3005A

Lab Sample ID	Preparation Date	Prep Batch	Initial Weight	Initial Volume (mL)	Final Volume (mL)
MB 240-257036/1-A	11/25/2016 14:00	257036		50	50
LCS 240-257036/2-A	11/25/2016 14:00	257036		50	50
240-72440-2	11/25/2016 14:00	257036		50	50
240-72440-2 MS	11/25/2016 14:00	257036		50	50
240-72440-2 MSD	11/25/2016 14:00	257036		50	50
240-72440-3	11/25/2016 14:00	257036		50	50
240-72440-4	11/25/2016 14:00	257036		50	50

FORM XII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/28/2016 08:40 End Date: 11/29/2016 05:53

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
ICIS 240-257308/1	1		08:40	X	X																						
CALSTD 240-257308/2 IC			08:45	X	X																						
CALSTD 240-257308/3 IC			08:49	X	X																						
ICV 240-257308/4	1		08:54	X	X																						
ICB 240-257308/5	1		08:58	X	X																						
CRI 240-257308/6	1		09:02	X	X																						
ZZZZZZ			09:07																								
ICSA 240-257308/8	1		09:11	X	X																						
ICSAB 240-257308/9	1		09:16	X	X																						
CCV 240-257308/10			09:20																								
CCB 240-257308/11			09:24																								
ZZZZZZ			09:28																								
ZZZZZZ			09:33																								
ZZZZZZ			09:37																								
ZZZZZZ			09:42																								
ZZZZZZ			09:46																								
ZZZZZZ			09:51																								
CCV 240-257308/18			09:55																								
CCB 240-257308/19			09:59																								
ZZZZZZ			10:23																								
ZZZZZZ			10:28																								
ZZZZZZ			10:32																								
ZZZZZZ			10:36																								
ZZZZZZ			10:40																								
ZZZZZZ			10:44																								
ZZZZZZ			10:48																								
ZZZZZZ			10:52																								
ZZZZZZ			10:57																								
ZZZZZZ			11:01																								
CCV 240-257308/30	1		11:06	X	X																						
CCB 240-257308/31	1		11:10	X	X																						
ZZZZZZ			11:14																								
MB 240-257036/1-A	1	R	11:19	X	X																						
LCS 240-257036/2-A	1	R	11:23	X	X																						
240-72440-2	1	R	11:27	X	X																						
240-72440-2 SD	5	R	11:32	X	X																						
240-72440-2 MS	1	R	11:36	X	X																						
240-72440-2 MSD	1	R	11:40	X	X																						
ZZZZZZ			11:44																								
ZZZZZZ			11:48																								
240-72440-4	1	R	11:52	X	X																						
CCV 240-257308/42	1		11:57	X	X																						

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/28/2016 08:40 End Date: 11/29/2016 05:53

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
CCB 240-257308/43	1		12:01	X	X																						
ZZZZZZ			12:05																								
ZZZZZZ			12:10																								
ZZZZZZ			12:14																								
ZZZZZZ			12:18																								
ZZZZZZ			12:23																								
ZZZZZZ			12:27																								
ZZZZZZ			12:32																								
ZZZZZZ			12:36																								
ZZZZZZ			12:41																								
ZZZZZZ			12:45																								
CCV 240-257308/54			12:50																								
CCB 240-257308/55			12:54																								
ZZZZZZ			12:58																								
ZZZZZZ			13:03																								
ZZZZZZ			13:07																								
ZZZZZZ			13:12																								
ZZZZZZ			13:16																								
ZZZZZZ			13:20																								
ZZZZZZ			13:25																								
ZZZZZZ			13:29																								
ZZZZZZ			13:33																								
ZZZZZZ			13:38																								
CCV 240-257308/66			13:42																								
CCB 240-257308/67			13:46																								
ZZZZZZ			13:51																								
ZZZZZZ			13:55																								
ZZZZZZ			14:00																								
ZZZZZZ			14:04																								
ZZZZZZ			14:08																								
ZZZZZZ			14:13																								
ZZZZZZ			14:17																								
ZZZZZZ			14:21																								
ZZZZZZ			14:26																								
ZZZZZZ			14:30																								
CCV 240-257308/78			14:35																								
CCB 240-257308/79			14:39																								
ZZZZZZ			14:43																								
ZZZZZZ			14:48																								
ZZZZZZ			15:58																								
ZZZZZZ			16:02																								
ZZZZZZ			16:07																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/28/2016 08:40 End Date: 11/29/2016 05:53

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
ZZZZZZ			16:11																								
ZZZZZZ			16:16																								
ZZZZZZ			16:20																								
ZZZZZZ			16:24																								
ZZZZZZ			16:29																								
CCV 240-257308/90			16:33																								
CCB 240-257308/91			16:37																								
ZZZZZZ			16:42																								
ZZZZZZ			16:46																								
ZZZZZZ			16:52																								
ZZZZZZ			16:57																								
ZZZZZZ			17:01																								
ZZZZZZ			17:06																								
ZZZZZZ			17:10																								
ZZZZZZ			17:14																								
ZZZZZZ			17:19																								
ZZZZZZ			17:23																								
CCV 240-257308/102			17:27																								
CCB 240-257308/103			17:31																								
ZZZZZZ			17:36																								
ZZZZZZ			17:40																								
ZZZZZZ			17:44																								
ZZZZZZ			17:48																								
ZZZZZZ			17:52																								
ZZZZZZ			17:57																								
ZZZZZZ			18:01																								
ZZZZZZ			18:06																								
ZZZZZZ			18:10																								
ZZZZZZ			18:14																								
CCV 240-257308/114			18:19																								
CCB 240-257308/115			18:23																								
ZZZZZZ			18:27																								
ZZZZZZ			18:31																								
ZZZZZZ			18:36																								
ZZZZZZ			18:40																								
ZZZZZZ			18:44																								
ZZZZZZ			18:48																								
ZZZZZZ			18:52																								
ZZZZZZ			18:57																								
ZZZZZZ			19:01																								
ZZZZZZ			19:06																								
CCV 240-257308/126			19:10																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/28/2016 08:40 End Date: 11/29/2016 05:53

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
CCB 240-257308/127			19:14																								
ZZZZZZ			19:18																								
ZZZZZZ			19:23																								
ZZZZZZ			19:27																								
ZZZZZZ			19:32																								
ZZZZZZ			19:36																								
ZZZZZZ			19:41																								
ZZZZZZ			19:45																								
ZZZZZZ			19:49																								
ZZZZZZ			19:54																								
ZZZZZZ			19:58																								
CCV 240-257308/138			20:03																								
CCB 240-257308/139			20:07																								
ZZZZZZ			20:11																								
ZZZZZZ			20:15																								
ZZZZZZ			20:20																								
ZZZZZZ			20:24																								
ZZZZZZ			20:29																								
ZZZZZZ			20:33																								
ZZZZZZ			20:38																								
ZZZZZZ			20:42																								
ZZZZZZ			20:46																								
ZZZZZZ			20:51																								
CCV 240-257308/150			20:55																								
CCB 240-257308/151			20:59																								
CRI 240-257308/152	1		21:04	X	X																						
ICSA 240-257308/153			21:08																								
ICSAB 240-257308/154			21:13																								
ZZZZZZ			21:17																								
ZZZZZZ			21:21																								
ZZZZZZ			21:26																								
ZZZZZZ			21:30																								
ZZZZZZ			21:34																								
ZZZZZZ			21:38																								
ZZZZZZ			21:42																								
CCV 240-257308/162			21:47																								
CCB 240-257308/163			21:51																								
ZZZZZZ			21:55																								
ZZZZZZ			22:00																								
ZZZZZZ			22:04																								
ZZZZZZ			22:08																								
ZZZZZZ			22:13																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/28/2016 08:40 End Date: 11/29/2016 05:53

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
ZZZZZZ			22:17																								
ZZZZZZ			22:22																								
ZZZZZZ			22:26																								
ZZZZZZ			22:31																								
ZZZZZZ			22:36																								
CCV 240-257308/174			22:40																								
CCB 240-257308/175			22:44																								
ZZZZZZ			22:49																								
ZZZZZZ			22:53																								
ZZZZZZ			22:58																								
ZZZZZZ			23:03																								
ZZZZZZ			23:07																								
ZZZZZZ			23:12																								
ZZZZZZ			23:16																								
ZZZZZZ			23:20																								
ZZZZZZ			23:25																								
ZZZZZZ			23:29																								
CCV 240-257308/186			23:34																								
CCB 240-257308/187			23:38																								
ZZZZZZ			23:42																								
ZZZZZZ			23:46																								
ZZZZZZ			23:51																								
ZZZZZZ			23:55																								
ZZZZZZ			00:00																								
ZZZZZZ			00:04																								
ZZZZZZ			00:08																								
ZZZZZZ			00:13																								
ZZZZZZ			00:17																								
ZZZZZZ			00:22																								
CCV 240-257308/198			00:26																								
CCB 240-257308/199			00:30																								
ZZZZZZ			00:35																								
ZZZZZZ			00:39																								
ZZZZZZ			00:43																								
ZZZZZZ			00:48																								
ZZZZZZ			00:52																								
ZZZZZZ			00:56																								
ZZZZZZ			01:01																								
ZZZZZZ			01:05																								
ZZZZZZ			01:10																								
ZZZZZZ			01:14																								
CCV 240-257308/210			01:18																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/28/2016 08:40 End Date: 11/29/2016 05:53

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
CCB 240-257308/211			01:22																								
ZZZZZZ			01:27																								
ZZZZZZ			01:31																								
ZZZZZZ			01:36																								
ZZZZZZ			01:40																								
ZZZZZZ			01:45																								
ZZZZZZ			01:49																								
ZZZZZZ			01:53																								
ZZZZZZ			01:57																								
ZZZZZZ			02:01																								
ZZZZZZ			02:05																								
CCV 240-257308/222			02:09																								
CCB 240-257308/223			02:13																								
ZZZZZZ			02:18																								
ZZZZZZ			02:22																								
ZZZZZZ			02:27																								
ZZZZZZ			02:31																								
ZZZZZZ			02:35																								
ZZZZZZ			02:40																								
ZZZZZZ			02:44																								
ZZZZZZ			02:48																								
ZZZZZZ			02:53																								
ZZZZZZ			02:57																								
CCV 240-257308/234			03:02																								
CCB 240-257308/235			03:06																								
ZZZZZZ			03:10																								
ZZZZZZ			03:14																								
ZZZZZZ			03:19																								
ZZZZZZ			03:23																								
ZZZZZZ			03:28																								
ZZZZZZ			03:32																								
ZZZZZZ			03:36																								
ZZZZZZ			03:41																								
ZZZZZZ			03:45																								
ZZZZZZ			03:49																								
CCV 240-257308/246			03:54																								
CCB 240-257308/247			03:58																								
ZZZZZZ			04:02																								
ZZZZZZ			04:06																								
ZZZZZZ			04:11																								
ZZZZZZ			04:15																								
ZZZZZZ			04:20																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/28/2016 08:40 End Date: 11/29/2016 05:53

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
ZZZZZZ			04:24																								
ZZZZZZ			04:29																								
ZZZZZZ			04:33																								
ZZZZZZ			04:38																								
ZZZZZZ			04:42																								
CCV 240-257308/258			04:47																								
CCB 240-257308/259			04:51																								
ZZZZZZ			04:55																								
ZZZZZZ			05:00																								
ZZZZZZ			05:04																								
ZZZZZZ			05:09																								
ZZZZZZ			05:13																								
ZZZZZZ			05:18																								
ZZZZZZ			05:22																								
ZZZZZZ			05:26																								
ZZZZZZ			05:31																								
ZZZZZZ			05:35																								
CCV 240-257308/270			05:40																								
CCB 240-257308/271			05:44																								
CCV 240-257308/272			05:49																								
CCB 240-257308/273			05:53																								

Prep Types:
R = Total Recoverable

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/29/2016 10:42 End Date: 11/30/2016 02:33

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
ICIS 240-257467/1	1		10:42	X	X																						
CALSTD 240-257467/2 IC			10:47	X	X																						
CALSTD 240-257467/3 IC			10:51	X	X																						
ICV 240-257467/4	1		10:56	X	X																						
ICB 240-257467/5	1		11:00	X	X																						
CRI 240-257467/6	1		11:04	X	X																						
ZZZZZZ			11:09																								
ICSA 240-257467/8	1		11:13	X	X																						
ICSAB 240-257467/9	1		11:18	X	X																						
CCV 240-257467/10			11:22																								
CCB 240-257467/11			11:26																								
ZZZZZZ			11:30																								
ZZZZZZ			11:35																								
ZZZZZZ			11:39																								
ZZZZZZ			11:44																								
ZZZZZZ			11:48																								
ZZZZZZ			11:53																								
CCV 240-257467/18	1		11:57	X	X																						
CCB 240-257467/19	1		12:01	X	X																						
240-72440-3	5	R	12:06	X	X																						
ZZZZZZ			12:10																								
ZZZZZZ			12:14																								
ZZZZZZ			12:18																								
ZZZZZZ			12:23																								
ZZZZZZ			12:27																								
ZZZZZZ			12:34																								
ZZZZZZ			12:38																								
ZZZZZZ			12:42																								
ZZZZZZ			12:47																								
CCV 240-257467/30	1		12:51	X	X																						
CCB 240-257467/31	1		12:55	X	X																						
ZZZZZZ			12:59																								
ZZZZZZ			13:03																								
ZZZZZZ			13:08																								
ZZZZZZ			13:12																								
ZZZZZZ			13:17																								
ZZZZZZ			13:21																								
ZZZZZZ			13:25																								
ZZZZZZ			13:30																								
ZZZZZZ			13:34																								
ZZZZZZ			13:39																								
CCV 240-257467/42			13:44																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/29/2016 10:42 End Date: 11/30/2016 02:33

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
CCB 240-257467/43			13:48																								
ZZZZZZ			13:52																								
ZZZZZZ			13:57																								
ZZZZZZ			14:01																								
ZZZZZZ			14:06																								
ZZZZZZ			14:10																								
ZZZZZZ			14:14																								
ZZZZZZ			14:19																								
ZZZZZZ			14:23																								
ZZZZZZ			14:27																								
ZZZZZZ			14:31																								
CCV 240-257467/54			14:35																								
CCB 240-257467/55			14:39																								
ZZZZZZ			14:44																								
ZZZZZZ			14:48																								
ZZZZZZ			14:53																								
ZZZZZZ			14:57																								
ZZZZZZ			15:01																								
ZZZZZZ			15:06																								
ZZZZZZ			15:10																								
ZZZZZZ			15:14																								
ZZZZZZ			15:18																								
ZZZZZZ			15:22																								
CCV 240-257467/66			15:26																								
CCB 240-257467/67			15:31																								
ZZZZZZ			15:35																								
ZZZZZZ			15:39																								
ZZZZZZ			15:44																								
ZZZZZZ			15:48																								
ZZZZZZ			15:53																								
ZZZZZZ			15:57																								
ZZZZZZ			16:02																								
ZZZZZZ			16:07																								
ZZZZZZ			16:11																								
ZZZZZZ			16:16																								
CCV 240-257467/78			16:20																								
CCB 240-257467/79			16:24																								
ZZZZZZ			16:29																								
ZZZZZZ			16:33																								
ZZZZZZ			16:38																								
CRI 240-257467/83	1		16:42	X	X																						
ZZZZZZ			16:47																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/29/2016 10:42 End Date: 11/30/2016 02:33

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
ZZZZZZ			16:51																								
ZZZZZZ			16:56																								
ZZZZZZ			17:00																								
ZZZZZZ			17:05																								
ZZZZZZ			17:09																								
CCV 240-257467/90			17:14																								
CCB 240-257467/91			17:18																								
ZZZZZZ			17:22																								
ZZZZZZ			17:27																								
ZZZZZZ			17:31																								
ZZZZZZ			17:36																								
ZZZZZZ			17:40																								
ZZZZZZ			17:45																								
ZZZZZZ			17:49																								
ZZZZZZ			17:54																								
ZZZZZZ			17:58																								
ZZZZZZ			18:02																								
CCV 240-257467/102			18:07																								
CCB 240-257467/103			18:11																								
ZZZZZZ			18:15																								
ZZZZZZ			18:19																								
ZZZZZZ			18:24																								
ZZZZZZ			18:28																								
ZZZZZZ			18:33																								
ZZZZZZ			18:37																								
ZZZZZZ			18:41																								
ZZZZZZ			18:45																								
ZZZZZZ			18:49																								
ZZZZZZ			18:53																								
CCV 240-257467/114			18:58																								
CCB 240-257467/115			19:02																								
ZZZZZZ			19:06																								
ZZZZZZ			19:11																								
ZZZZZZ			19:15																								
ZZZZZZ			19:19																								
ZZZZZZ			19:24																								
ZZZZZZ			19:28																								
ZZZZZZ			19:33																								
ZZZZZZ			19:37																								
ZZZZZZ			19:41																								
ZZZZZZ			19:46																								
CCV 240-257467/126			19:50																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/29/2016 10:42 End Date: 11/30/2016 02:33

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
CCB 240-257467/127			19:54																								
ZZZZZZ			19:59																								
ZZZZZZ			20:03																								
ZZZZZZ			20:08																								
ZZZZZZ			20:12																								
ZZZZZZ			20:16																								
ZZZZZZ			20:20																								
ZZZZZZ			20:25																								
ZZZZZZ			20:29																								
ZZZZZZ			20:34																								
ZZZZZZ			20:39																								
CCV 240-257467/138			20:43																								
CCB 240-257467/139			20:47																								
ZZZZZZ			20:52																								
ZZZZZZ			20:56																								
ZZZZZZ			21:01																								
ZZZZZZ			21:05																								
ZZZZZZ			21:10																								
ZZZZZZ			21:15																								
ZZZZZZ			21:19																								
ZZZZZZ			21:23																								
ZZZZZZ			21:28																								
ZZZZZZ			21:32																								
CCV 240-257467/150			21:36																								
CCB 240-257467/151			21:40																								
ZZZZZZ			21:45																								
ZZZZZZ			21:49																								
ZZZZZZ			21:53																								
ZZZZZZ			21:58																								
ZZZZZZ			22:02																								
ZZZZZZ			22:06																								
ZZZZZZ			22:10																								
ZZZZZZ			22:15																								
ZZZZZZ			22:19																								
ZZZZZZ			22:23																								
CCV 240-257467/162			22:27																								
CCB 240-257467/163			22:31																								
ZZZZZZ			22:36																								
ZZZZZZ			22:40																								
ZZZZZZ			22:45																								
ZZZZZZ			22:49																								
ZZZZZZ			22:54																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/29/2016 10:42 End Date: 11/30/2016 02:33

Lab Sample Id	D/F	Type	Time	Analytes																							
				Fe	Mn																						
ZZZZZZ			22:58																								
ZZZZZZ			23:03																								
ZZZZZZ			23:07																								
ZZZZZZ			23:11																								
ZZZZZZ			23:16																								
CCV 240-257467/174			23:20																								
CCB 240-257467/175			23:24																								
ZZZZZZ			23:29																								
ZZZZZZ			23:33																								
ZZZZZZ			23:38																								
ZZZZZZ			23:42																								
ZZZZZZ			23:47																								
ZZZZZZ			23:51																								
ZZZZZZ			23:55																								
ZZZZZZ			00:00																								
ZZZZZZ			00:04																								
ZZZZZZ			00:09																								
CCV 240-257467/186			00:13																								
CCB 240-257467/187			00:17																								
ZZZZZZ			00:22																								
ZZZZZZ			00:26																								
ZZZZZZ			00:30																								
ZZZZZZ			00:35																								
ZZZZZZ			00:39																								
ZZZZZZ			00:43																								
ZZZZZZ			00:47																								
ZZZZZZ			00:52																								
ZZZZZZ			00:56																								
ZZZZZZ			01:00																								
CCV 240-257467/198			01:05																								
CCB 240-257467/199			01:09																								
ZZZZZZ			01:13																								
ZZZZZZ			01:18																								
ZZZZZZ			01:22																								
ZZZZZZ			01:27																								
ZZZZZZ			01:31																								
ZZZZZZ			01:36																								
ZZZZZZ			01:40																								
ZZZZZZ			01:44																								
ZZZZZZ			01:49																								
ZZZZZZ			01:53																								
CCV 240-257467/210			01:58																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
METALS

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: I12 Analysis Method: 6010C

Start Date: 11/29/2016 10:42 End Date: 11/30/2016 02:33

Lab Sample Id	D/F	Type	Time	Analytes																								
				Fe	Mn																							
CCB 240-257467/211			02:02																									
ZZZZZZ			02:06																									
ZZZZZZ			02:11																									
ZZZZZZ			02:15																									
ZZZZZZ			02:20																									
ZZZZZZ			02:24																									
CCV 240-257467/217			02:29																									
CCB 240-257467/218			02:33																									

Prep Types:
R = Total Recoverable

FORM XIII-IN

METALS BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Batch Number: 257036 Batch Start Date: 11/25/16 14:00 Batch Analyst: Colosi, Alexander J

Batch Method: 3005A Batch End Date: 11/25/16 22:00

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	MTAGSPIKEW 00064	MTICP1 00056	MTICP2A 00065	MTTMHCL 00138
MB 240-257036/1		3005A, 6010C		50 mL	50 mL				2.5 mL
LCS 240-257036/2		3005A, 6010C		50 mL	50 mL	1 mL	1 mL	1 mL	2.5 mL
240-72440-L-2	SEMW-7I-112116	3005A, 6010C	R	50 mL	50 mL				2.5 mL
240-72440-L-2 MS	SEMW-7I-112116	3005A, 6010C	R	50 mL	50 mL	1 mL	1 mL	1 mL	2.5 mL
240-72440-L-2 MSD	SEMW-7I-112116	3005A, 6010C	R	50 mL	50 mL	1 mL	1 mL	1 mL	2.5 mL
240-72440-K-3	SEMW-8S-112116	3005A, 6010C	R	50 mL	50 mL				2.5 mL
240-72440-K-4	SEMW-8I-112116	3005A, 6010C	R	50 mL	50 mL				2.5 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	MTTMHNO3 00103					
MB 240-257036/1		3005A, 6010C		1 mL					
LCS 240-257036/2		3005A, 6010C		1 mL					
240-72440-L-2	SEMW-7I-112116	3005A, 6010C	R	1 mL					
240-72440-L-2 MS	SEMW-7I-112116	3005A, 6010C	R	1 mL					
240-72440-L-2 MSD	SEMW-7I-112116	3005A, 6010C	R	1 mL					
240-72440-K-3	SEMW-8S-112116	3005A, 6010C	R	1 mL					
240-72440-K-4	SEMW-8I-112116	3005A, 6010C	R	1 mL					

Batch Notes	
Filter Paper ID	9672596
Hot Block ID	HB2
Pipette ID	MP1
Digestion Tube/Cup ID	1512329

Basis	Basis Description
R	Total Recoverable

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG No.:

Project: MRC Block E Downgradient TCE

Client Sample ID	Lab Sample ID
SEMW-7I-112116	240-72440-2
SEMW-8S-112116	240-72440-3
SEMW-8I-112116	240-72440-4

Comments:

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Analyst: LKG Batch Start Date: 11/24/2016

Reporting Units: mg/L Analytical Batch No.: 256972

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
10	ICV	12:13	Sulfate	52.7	50.0	105	90-110		WCICLCS_00582
11	ICB	12:33	Sulfate	0.137				J	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Analyst: LCN Batch Start Date: 11/30/2016

Reporting Units: mg/L Analytical Batch No.: 257266

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
25	CCV	17:53	Sulfate	54.4	50.0	109	90-110		WCICCCV_00746
26	CCB	18:13	Sulfate	1.0				U	
37	CCV	21:55	Sulfate	54.3	50.0	109	90-110		WCICCCV_00746
38	CCB	22:15	Sulfate	1.0				U	
49	CCV	01:56	Sulfate	54.2	50.0	108	90-110		WCICCCV_00746
50	CCB	02:16	Sulfate	1.0				U	

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

2-IN
CALIBRATION QUALITY CONTROL
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Analyst: TPH Batch Start Date: 11/28/2016

Reporting Units: mg/L Analytical Batch No.: 257288

Sample Number	QC Type	Time	Analyte	Result	Spike Amount	(%) Recovery	Limits	Qual	Reagent
2	CCV	07:47	TOC Result 1	25.2	25.0	101	90-110		WC TOC CCV_00331
			Total Organic Carbon	25.2	25.0	101	90-110		WC TOC CCV_00331
3	CCB	07:54	TOC Result 1	1.0				U	
			Total Organic Carbon	1.0				U	
14	CCVL	11:06	TOC Result 1	4.91	5.00	98	90-110		WC TOC CCVL_00127
			Total Organic Carbon	4.91	5.00	98	90-110		WC TOC CCVL_00127
15	CCB	11:16	TOC Result 1	1.0				U	
			Total Organic Carbon	1.0				U	
26	CCV	15:22	TOC Result 1	24.7	25.0	99	90-110		WC TOC CCV_00331
			Total Organic Carbon	24.7	25.0	99	90-110		WC TOC CCV_00331

Note! Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM II-IN

3-IN
METHOD BLANK
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Method	Lab Sample ID	Analyte	Result	Qual	Units	RL	Dil
Batch ID: 256951	Date: 11/23/2016 09:41						
2320B-1997	MB 240-256951/4	Alkalinity	5.0	U	mg/L	5.0	1
Batch ID: 257266	Date: 11/30/2016 18:33						
300.0	MB 240-257266/27	Sulfate	1.0	U	mg/L	1.0	1
Batch ID: 257288	Date: 11/28/2016 08:04						
9060A	MB 240-257288/4	TOC Result 1	1.0	U	mg/L	1.0	1
9060A	MB 240-257288/4	Total Organic Carbon	1.0	U	mg/L	1.0	1

FORM III-IN

5-IN
MATRIX SPIKE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 257266	Date: 12/01/2016 00:16										
300.0	240-72440-2	Sulfate	7.9		mg/L						
300.0	240-72440-2 MS	Sulfate	66.1		mg/L	50.0	116	80-120			
Batch ID: 257288	Date: 11/28/2016 08:56										
9060A	240-72440-2	TOC Result 1	0.52	J	mg/L						
9060A	240-72440-2 MS	TOC Result 1	23.8		mg/L	25.0	93	65-134			
9060A	240-72440-2	Total Organic Carbon	0.56	J	mg/L						
9060A	240-72440-2 MS	Total Organic Carbon	23.8		mg/L	25.0	93	65-134			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

5-IN
MATRIX SPIKE DUPLICATE SAMPLE RECOVERY
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 257266 Date: 12/01/2016 00:36											
300.0	240-72440-2 MSD	Sulfate	67.1		mg/L	50.0	118	80-120	2	15	
Batch ID: 257288 Date: 11/28/2016 09:04											
9060A	240-72440-2 MSD	TOC Result 1	23.7		mg/L	25.0	93	65-134	0	10	
9060A	240-72440-2 MSD	Total Organic Carbon	23.7		mg/L	25.0	93	65-134	0	10	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM V-IN

6-IN
DUPLICATE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water

Method	Client Sample ID	Lab Sample ID	Analyte	Result	Unit	RPD	RPD Limit	Qual
Batch ID: 256951 Date: 11/23/2016 10:09								
2320B-1997		240-72435-A-1	Alkalinity	300	mg/L			
2320B-1997		240-72435-A-1 DU	Alkalinity	297	mg/L	0.6	20	

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VI-IN

7A-IN
LAB CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 256951	Date: 11/23/2016 09:35										
						LCS Source: WCPHENOMINER_00014					
2320B-1 997	LCS 240-256951/3	Alkalinity	264		mg/L	284	93	86-123			
Batch ID: 257266	Date: 11/30/2016 18:53										
						LCS Source: WCICLCS_00583					
300.0	LCS 240-257266/28	Sulfate	53.8		mg/L	50.0	108	90-110			
Batch ID: 257288	Date: 11/28/2016 08:20										
						LCS Source: WC LCS_00053					
9060A	LCS 240-257288/6	TOC Result 1	49.7		mg/L	46.3	107	80-120			
9060A	LCS 240-257288/6	Total Organic Carbon	49.7		mg/L	46.3	107	80-120			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

7A-IN
LOW LEVEL CONTROL SAMPLE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Matrix: Water

Method	Lab Sample ID	Analyte	Result	C	Unit	Spike Amount	Pct. Rec.	Limits	RPD	RPD Limit	Q
Batch ID: 257288	Date: 11/28/2016 08:13										
						LCS Source: WC LCS_00054					
9060A	LLCS 240-257288/5	TOC Result 1	4.74		mg/L	4.63	102	88-115			
9060A	LLCS 240-257288/5	Total Organic Carbon	4.74		mg/L	4.63	102	88-115			

Calculations are performed before rounding to avoid round-off errors in calculated results.

FORM VIIA-IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: STEVE

Method: 2320B-1997 MDL Date: 07/12/2013 09:18

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Alkalinity		5	1.9

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: STEVE

Method: 2320B-1997 XMDL Date: 07/12/2013 09:19

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Alkalinity		5	1.9

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: VERONICA

Method: 300.0 MDL Date: 08/12/2014 17:01

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
Sulfate		1	0.13

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: VERONICA

Method: 300.0 XMDL Date: 08/12/2014 17:02

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
Sulfate		1	0.13

FORM IX - IN

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: Clark

Method: 9060A MDL Date: 04/28/2015 15:58

Analyte	Wavelength/ Mass	RL (mg/L)	MDL (mg/L)
TOC Result 1		1	0.08
TOC Result 2		1	0.08
TOC Result 3		1	0.08
TOC Result 4		1	0.08
Total Organic Carbon		1	0.08

FORM IX - IN

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job Number: 240-72440-1

SDG Number:

Matrix: Water Instrument ID: Clark

Method: 9060A XMDL Date: 04/28/2015 15:59

Analyte	Wavelength/ Mass	XRL (mg/L)	XMDL (mg/L)
TOC Result 1		1	0.08
TOC Result 2		1	0.08
TOC Result 3		1	0.08
TOC Result 4		1	0.08
Total Organic Carbon		1	0.08

FORM IX - IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: STEVE Analysis Method: 2320B-1997

Start Date: 11/23/2016 09:04 End Date: 11/23/2016 13:47

Lab Sample Id	D/F	Type	Time	Analytes																							
				Alk																							
RINSE 240-256951/1			09:04																								
ZZZZZZ			09:23																								
LCS 240-256951/3	1	T	09:35	X																							
MB 240-256951/4	1	T	09:41	X																							
ZZZZZZ			09:45																								
ZZZZZZ			09:56																								
240-72435-A-1 DU	1	T	10:09	X																							
ZZZZZZ			10:24																								
ZZZZZZ			10:40																								
ZZZZZZ			11:03																								
240-72440-2	1	T	11:09	X																							
240-72440-3	1	T	11:14	X																							
240-72440-4	1	T	11:21	X																							
ZZZZZZ			11:30																								
ZZZZZZ			11:39																								
ZZZZZZ			11:43																								
ZZZZZZ			11:53																								
ZZZZZZ			12:04																								
ZZZZZZ			12:12																								
ZZZZZZ			12:22																								
ZZZZZZ			12:34																								
ZZZZZZ			12:40																								
ZZZZZZ			12:51																								
ZZZZZZ			13:00																								
ZZZZZZ			13:10																								
ZZZZZZ			13:20																								
ZZZZZZ			13:24																								
ZZZZZZ			13:34																								
ZZZZZZ			13:43																								
ZZZZZZ			13:47																								

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: VERONICA Analysis Method: 300.0

Start Date: 11/24/2016 09:12 End Date: 11/24/2016 12:33

Lab Sample Id	D/F	Type	Time	Analytes																							
				SO4																							
STD1 240-256972/1 IC	1		09:12	X																							
STD2 240-256972/2 IC	1		09:32	X																							
STD3 240-256972/3 IC	1		09:52	X																							
STD4 240-256972/4 IC	1		10:12	X																							
STD5 240-256972/5 ICRT	1		10:32	X																							
STD6 240-256972/6 IC	1		10:53	X																							
STD7 240-256972/7 IC	1		11:13	X																							
STD8 240-256972/8 IC	1		11:33	X																							
STD9 240-256972/9 IC	1		11:53	X																							
ICV 240-256972/10	1		12:13	X																							
ICB 240-256972/11	1		12:33	X																							

Prep Types:
=

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: VERONICA Analysis Method: 300.0

Start Date: 11/30/2016 09:49 End Date: 12/01/2016 02:16

Lab Sample Id	D/F	Type	Time	Analytes																							
				SO4																							
CCV 240-257266/1			09:49																								
CCB 240-257266/2			10:09																								
ZZZZZZ			10:29																								
ZZZZZZ			10:50																								
ZZZZZZ			11:10																								
ZZZZZZ			11:30																								
ZZZZZZ			11:50																								
ZZZZZZ			12:10																								
ZZZZZZ			12:30																								
ZZZZZZ			12:50																								
ZZZZZZ			13:11																								
ZZZZZZ			13:31																								
CCV 240-257266/13			13:51																								
CCB 240-257266/14			14:11																								
ZZZZZZ			14:31																								
ZZZZZZ			14:51																								
ZZZZZZ			15:12																								
ZZZZZZ			15:32																								
ZZZZZZ			15:52																								
ZZZZZZ			16:12																								
ZZZZZZ			16:32																								
ZZZZZZ			16:52																								
ZZZZZZ			17:12																								
ZZZZZZ			17:33																								
CCV 240-257266/25	1		17:53	X																							
CCB 240-257266/26	1		18:13	X																							
MB 240-257266/27	1	T	18:33	X																							
LCS 240-257266/28	1	T	18:53	X																							
ZZZZZZ			19:13																								
ZZZZZZ			19:34																								
ZZZZZZ			19:54																								
ZZZZZZ			20:14																								
ZZZZZZ			20:34																								
ZZZZZZ			20:54																								
ZZZZZZ			21:14																								
ZZZZZZ			21:34																								
CCV 240-257266/37	1		21:55	X																							
CCB 240-257266/38	1		22:15	X																							
ZZZZZZ			22:35																								
ZZZZZZ			22:55																								
ZZZZZZ			23:15																								

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: VERONICA Analysis Method: 300.0

Start Date: 11/30/2016 09:49 End Date: 12/01/2016 02:16

Lab Sample Id	D/F	Type	Time	Analytes																							
				SO4																							
ZZZZZZ			23:35																								
240-72440-2	1	T	23:55	X																							
240-72440-2 MS	1	T	00:16	X																							
240-72440-2 MSD	1	T	00:36	X																							
240-72440-3	10	T	00:56	X																							
240-72440-4	1	T	01:16	X																							
ZZZZZZ			01:36																								
CCV 240-257266/49	1		01:56	X																							
CCB 240-257266/50	1		02:16	X																							

Prep Types:
T = Total/NA

FORM XIII-IN

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Instrument ID: Clark Analysis Method: 9060A

Start Date: 11/28/2016 07:14 End Date: 11/28/2016 19:12

Lab Sample Id	D/F	Type	Time	Analytes																								
				TOC	TOC1	TOC2	TOC3	TOC4																				
ZZZZZZ			07:14																									
CCV 240-257288/2	1		07:47	X	X																							
CCB 240-257288/3	1		07:54	X	X																							
MB 240-257288/4	1	T	08:04	X	X																							
LLCS 240-257288/5	1	T	08:13	X	X																							
LCS 240-257288/6	1	T	08:20	X	X																							
240-72440-2	1	T	08:29	X	X	X	X	X																				
240-72440-2 MS	2	T	08:56	X	X																							
240-72440-2 MSD	2	T	09:04	X	X																							
240-72440-3	1	T	09:15	X	X	X	X	X																				
240-72440-4	1	T	09:43	X	X	X	X	X																				
ZZZZZZ			10:09																									
ZZZZZZ			10:37																									
CCVL 240-257288/14	1		11:06	X	X																							
CCB 240-257288/15	1		11:16	X	X																							
ZZZZZZ			11:24																									
ZZZZZZ			11:52																									
ZZZZZZ			12:20																									
ZZZZZZ			12:48																									
ZZZZZZ			13:16																									
ZZZZZZ			13:43																									
ZZZZZZ			14:09																									
ZZZZZZ			14:17																									
ZZZZZZ			14:27																									
ZZZZZZ			14:56																									
CCV 240-257288/26	1		15:22	X	X																							
CCB 240-257288/27			15:31																									
ZZZZZZ			15:41																									
ZZZZZZ			16:08																									
ZZZZZZ			16:35																									
ZZZZZZ			17:02																									
ZZZZZZ			17:31																									
ZZZZZZ			17:57																									
ZZZZZZ			18:25																									
CCVL 240-257288/35			18:54																									
CCV 240-257288/36			19:03																									
CCB 240-257288/37			19:12																									

Prep Types:
T = Total/NA

FORM XIII-IN

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Batch Number: 256951 Batch Start Date: 11/23/16 09:04 Batch Analyst: Nolle, Laura C

Batch Method: 2320B-1997 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	CalcMsg	FinalAmount	WCPHENOMINER 00014		
LCS 240-256951/3		2320B-1997		50 mL	BuretStart2 is blank	50 mL	50 mL		
MB 240-256951/4		2320B-1997		50 mL	BuretStart2 is blank	50 mL			
240-72435-A-1 DU		2320B-1997	T	50 mL	BuretStart2 is blank	50 mL			
240-72440-I-2	SEMW-7I-112116	2320B-1997	T	50 mL	BuretStart2 is blank	50 mL			
240-72440-I-3	SEMW-8S-112116	2320B-1997	T	50 mL	BuretStart2 is blank	50 mL			
240-72440-I-4	SEMW-8I-112116	2320B-1997	T	50 mL	BuretStart2 is blank	50 mL			

Batch Notes	
pH Buffer 1 ID	4-2777714
pH Buffer 2 ID	7-2793613
pH Buffer 3 ID	10-2777718
pH Buffer 4 ID	12-2793615
Sulfuric Acid Lot Number	2301144
Nominal Amount Used	50 mL
Probe ID	112
Normality of First Titrant	.02 N

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Batch Number: 256972 Batch Start Date: 11/24/16 09:12 Batch Analyst: Grossman, Lucas

Batch Method: 300.0 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WCICCALSOLN 00272	WCICLCS 00582			
STD1 240-256972/1 IC		300.0		5 mL	0.025 mL				
STD2 240-256972/2 IC		300.0		5 mL	0.125 mL				
STD3 240-256972/3 IC		300.0		5 mL	0.25 mL				
STD4 240-256972/4 IC		300.0		5 mL	0.5 mL				
STD5 240-256972/5 ICRT		300.0		5 mL	1.25 mL				
STD6 240-256972/6 IC		300.0		5 mL	2 mL				
STD7 240-256972/7 IC		300.0		5 mL	2.5 mL				
STD8 240-256972/8 IC		300.0		5 mL	3.75 mL				
STD9 240-256972/9 IC		300.0		5 mL	5 mL				
ICV 240-256972/10		300.0		5 mL		5 mL			
ICB 240-256972/11		300.0		5 mL					

Batch Notes	

Basis	Basis Description

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Batch Number: 257266 Batch Start Date: 11/30/16 09:49 Batch Analyst: Nolle, Laura C

Batch Method: 300.0 Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	WCICCCV 00746	WCICLCS 00583	WCICSOLNA1 00015	WCICSOLNB1 00013	
CCV 240-257266/25		300.0		5 mL	5 mL				
CCB 240-257266/26		300.0		5 mL					
MB 240-257266/27		300.0		5 mL					
LCS 240-257266/28		300.0		5 mL		5 mL			
CCV 240-257266/37		300.0		5 mL	5 mL				
CCB 240-257266/38		300.0		5 mL					
240-72440-I-2	SEMW-7I-112116	300.0	T	5 mL					
240-72440-I-2 MS	SEMW-7I-112116	300.0	T	5 mL			0.1 mL	0.1 mL	
240-72440-I-2 MSD	SEMW-7I-112116	300.0	T	5 mL			0.1 mL	0.1 mL	
240-72440-I-3	SEMW-8S-112116	300.0	T	5 mL					
240-72440-I-4	SEMW-8I-112116	300.0	T	5 mL					
CCV 240-257266/49		300.0		5 mL	5 mL				
CCB 240-257266/50		300.0		5 mL					

Batch Notes	

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-72440-1

SDG No.:

Batch Number: 257288 Batch Start Date: 11/28/16 07:14 Batch Analyst: Harshman, Tom

Batch Method: 9060A Batch End Date: 11/28/16 19:12

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	WC LCS 00053	WC LCS 00054	WC TOC CCV 00331	WC TOC CCVL 00127
CCV 240-257288/2		9060A		40 mL	40 mL			40 mL	
CCB 240-257288/3		9060A		40 mL	40 mL				
MB 240-257288/4		9060A		40 mL	40 mL				
LLCS 240-257288/5		9060A		40 mL	40 mL		4 mL		
LCS 240-257288/6		9060A		40 mL	40 mL	40 mL			
240-72440-H-2	SEMW-7I-112116	9060A	T	40 mL	40 mL				
240-72440-H-2 MS	SEMW-7I-112116	9060A	T	40 mL	40 mL			20 mL	
240-72440-H-2 MSD	SEMW-7I-112116	9060A	T	40 mL	40 mL			20 mL	
240-72440-G-3	SEMW-8S-112116	9060A	T	40 mL	40 mL				
240-72440-H-4	SEMW-8I-112116	9060A	T	40 mL	40 mL				
CCVL 240-257288/14		9060A		40 mL	40 mL				40 mL
CCB 240-257288/15		9060A		40 mL	40 mL				
CCV 240-257288/26		9060A		40 mL	40 mL			40 mL	

Batch Notes	
Phosphoric Acid ID	2741151
Pipette ID	C1
Sodium Persulfate ID	2741152

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: John McFadden
Test America
4101 Shuffel Street NW
North Canton, OH 44720

Phone:

Fax:

Identifier: 085NK **Date Rec:** 11/22/2016 **Report Date:** 11/29/2016

Client Project #:

Client Project Name:

Purchase Order #:

Analysis Requested: CENSUS

Reviewed By:

NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

Quality Assurance/Quality Control Data

Samples Received **11/22/2016**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
DHC	11/22/2016	11/29/2016	0 °C	117%	non-detect	non-detect
DHBt	11/22/2016	11/29/2016	0 °C	104%	non-detect	non-detect
BVC	11/22/2016	11/29/2016	0 °C	109%	non-detect	non-detect
TCE	11/22/2016	11/29/2016	0 °C	111%	non-detect	non-detect
VCR	11/22/2016	11/29/2016	0 °C	107%	non-detect	non-detect

Nondetected results for 1,1,2-trichloro-1,2,2-trifluoroethane in samples MRC-D3-I and MRC-D4-I were reported from samples analyzed at dilution (200x and 10x, respectively), resulting in elevated detection limits. 1,1,2-Trichloro-1,2,2-trifluoroethane was not reported by the laboratory in the undiluted analysis of these samples.

The laboratory noted that: samples appear to have fine particulates in the amber vials. It appears that the water may have interacted with the particulates as there are a lot of tiny bubbles in all of the amber vials. These tiny bubbles may add up to a larger bubble that may be greater than 6mm if the tiny bubbles combine.

The following compound was detected in the method blank for VOC analysis at the maximum concentration indicated below:

Compound	Concentration (ug/L)	Action Level (ug/L)
Trichloroethene(1)	0.228	1.14

(1) – Maximum concentration in method blank affecting samples in analysis batch 193465.

Action level of 5X the maximum concentration were established to evaluate for blank contamination. Dilution factor, if necessary, was taken into consideration during the application of the action level. No action was taken as trichloroethene results were greater than the blank action level.

VOC laboratory control sample (LCS)/LCS duplicate (LCSD) recovery relative percent difference was outside QC limits for 1,2-dichloroethane, carbon disulfide, dichlorobromomethane, tetrachloroethene, and vinyl chloride. Not action was taken as LCS/LCSD percent recoveries were acceptable.

Executive Summary

Laboratory Performance: Calibration noncompliance was noted for select VOCs. Trichloroethene was present in a method blank. 1,1,2-Trichloro-1,2,2-trifluoroethane exceeded the calibration limit in sample MRC-D4-S.

Other Factors Affecting Data Quality: None.

The data for these analyses were reviewed with reference to "National Functional Guidelines for Organic Review" (September 2016). The text of this report has been formulated to address only those areas affecting data quality.

Tetra Tech, Inc.
for Leanne Ganser
Environmental Scientist/Data Validator

Tetra Tech, Inc.
Joseph A. Samchuck
Data Validation Manager

Attachments:
Appendix A – Qualified Analytical Results
Appendix B – Results as Reported by the Laboratory
Appendix C – Support Documentation

Appendix A

Qualified Analytical Results

Qualifier Codes:

A = Lab Blank Contamination
B = Field Blank Contamination
C = Calibration Noncompliance (i.e., % RSDs, %Ds, ICVs, CCVs, RRFs, etc.)
C01 = GC/MS Tuning Noncompliance
D = MS/MSD Recovery Noncompliance
E = LCS/LCSD Recovery Noncompliance
F = Lab Duplicate Imprecision
G = Field Duplicate Imprecision
H = Holding Time Exceedance
I = ICP Serial Dilution Noncompliance
J = ICP PDS Recovery Noncompliance; MSA's r < 0.995
K = ICP Interference - includes ICS % R Noncompliance
L = Instrument Calibration Range Exceedance
M = Sample Preservation Noncompliance
N = Internal Standard Noncompliance
N01 = Internal Standard Recovery Noncompliance Dioxins
N02 = Recovery Standard Noncompliance Dioxins
N03 = Clean-up Standard Noncompliance Dioxins
O = Poor Instrument Performance (i.e., base-time drifting)
P = Uncertainty near detection limit (< 2 x IDL for inorganics and <CRQL for organics)
Q = Other problems (can encompass a number of issues; i.e.chromatography,interferences, etc.)
R = Surrogates Recovery Noncompliance
S = Pesticide/PCB Resolution
T = % Breakdown Noncompliance for DDT and Endrin
U = RPD between columns/detectors >40% for positive results determined via GC/HPLC
V = Non-linear calibrations; correlation coefficient r < 0.995
W = EMPC result
X = Signal to noise response drop
Y = Percent solids <30%
Z = Uncertainty at 2 standard deviations is greater than sample activity
Z1 = Tentatively Identified Compound considered presumptively present
Z2 = Tentatively Identified Compound column bleed
Z3 = Tentatively Identified Compound aldol condensate
Z4 = Sample activity is less than the at uncertainty at 3 standard deviations and greater than the MDC
Z5 = Sample activity is less than the at uncertainty at 3 standard deviations and less than the MDC

PROJ_NO: 07896	NSAMPLE	MRC-D2-D			MRC-D2-D-DL			MRC-D2-I			MRC-D2-I-DL		
SDG: 240-71528-1	LAB_ID	240-71528-3			240-71528-3			240-71528-2			240-71528-2		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.27	U					0.27	U				
1,1,2,2-TETRACHLOROETHANE		0.37	U					0.37	U				
1,1,2-TRICHLOROETHANE		0.31	U					0.31	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		3.3						2.1					
1,1-DICHLOROETHANE		0.34	U					0.34	U				
1,1-DICHLOROETHENE		0.32	U					1.2					
1,2,4-TRICHLOROBENZENE		0.49	UJ	C				0.49	UJ	C			
1,2-DIBROMO-3-CHLOROPROPANE		0.4	UJ	C				0.4	UJ	C			
1,2-DIBROMOETHANE		0.51	U					0.51	U				
1,2-DICHLOROBENZENE		0.23	U					0.23	U				
1,2-DICHLOROETHANE		0.24	U					0.24	U				
1,2-DICHLOROPROPANE		0.35	U					0.35	U				
1,3-DICHLOROBENZENE		0.21	U					0.21	U				
1,4-DICHLOROBENZENE		0.24	U					0.24	U				
2-BUTANONE		2.6	UJ	C				11	J	C			
2-HEXANONE		2	UJ	C				2	UJ	C			
4-METHYL-2-PENTANONE		2.2	UJ	C				2.2	UJ	C			
ACETONE		4.1	J	CP				13	J	C			
BENZENE		0.18	U					1.1					
BROMODICHLOROMETHANE		0.57	U					0.57	U				
BROMOFORM		0.76	UJ	C				0.76	UJ	C			
BROMOMETHANE		0.59	U					0.59	U				
CARBON DISULFIDE		0.53	U					0.53	U				
CARBON TETRACHLORIDE		0.56	U					0.56	U				
CHLOROBENZENE		0.15	U					0.15	U				
CHLORODIBROMOMETHANE		0.44	UJ	C				0.44	UJ	C			
CHLOROETHANE		0.58	UJ	C				0.58	UJ	C			
CHLOROFORM		2						3.2					
CHLOROMETHANE		0.38	U					0.38	U				
CIS-1,2-DICHLOROETHENE		15						13					
CIS-1,3-DICHLOROPROPENE		0.32	U					0.32	U				
CYCLOHEXANE		0.27	U					0.27	U				
DICHLORODIFLUOROMETHANE		0.47	U					0.47	U				
ETHYLBENZENE		0.25	U					0.32	J	P			
ISOPROPYLBENZENE		0.21	U					0.21	U				

PROJ_NO: 07896	NSAMPLE	MRC-D2-S			MRC-D2-S-DL			MRC-D3-D			MRC-D3-D-DL		
SDG: 240-71528-1	LAB_ID	240-71528-1			240-71528-1			240-71528-7			240-71528-7		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.27	U					0.27	U				
1,1,2,2-TETRACHLOROETHANE		0.37	U					0.37	U				
1,1,2-TRICHLOROETHANE		0.36	J	P				0.31	U				
1,1,2-TRICHLOROTRIFLUOROETHANE		25						0.24	U				
1,1-DICHLOROETHANE		0.34	U					0.34	U				
1,1-DICHLOROETHENE		2.8						0.66	J	P			
1,2,4-TRICHLOROBENZENE		0.49	UJ	C				0.49	UJ	C			
1,2-DIBROMO-3-CHLOROPROPANE		0.4	UJ	C				0.4	UJ	C			
1,2-DIBROMOETHANE		0.51	U					0.51	U				
1,2-DICHLOROBENZENE		0.23	U					0.23	U				
1,2-DICHLOROETHANE		0.24	U					0.24	U				
1,2-DICHLOROPROPANE		0.35	U					0.35	U				
1,3-DICHLOROBENZENE		0.21	U					0.27	J	P			
1,4-DICHLOROBENZENE		0.24	U					0.24	U				
2-BUTANONE		2.6	UJ	C				5.1	J	CP			
2-HEXANONE		2	UJ	C				2	UJ	C			
4-METHYL-2-PENTANONE		2.2	UJ	C				2.2	UJ	C			
ACETONE		4.9	J	CP				8.3	J	CP			
BENZENE		0.18	U					0.65	J	P			
BROMODICHLOROMETHANE		0.57	U					0.57	U				
BROMOFORM		0.76	UJ	C				0.76	UJ	C			
BROMOMETHANE		0.59	U					0.59	U				
CARBON DISULFIDE		0.53	U					0.53	U				
CARBON TETRACHLORIDE		0.56	U					0.56	U				
CHLOROBENZENE		0.81	J	P				0.15	U				
CHLORODIBROMOMETHANE		0.44	UJ	C				0.44	UJ	C			
CHLOROETHANE		0.58	UJ	C				0.58	UJ	C			
CHLOROFORM		4.2						2.1					
CHLOROMETHANE		0.38	U					0.38	U				
CIS-1,2-DICHLOROETHENE		27						8.1					
CIS-1,3-DICHLOROPROPENE		0.32	U					0.32	U				
CYCLOHEXANE		0.27	U					0.27	U				
DICHLORODIFLUOROMETHANE		0.47	U					0.47	U				
ETHYLBENZENE		0.25	U					0.3	J	P			
ISOPROPYLBENZENE		0.21	U					0.21	U				

PROJ_NO: 07896	NSAMPLE	MRC-D3-I			MRC-D3-I-DL			MRC-D3-S			MRC-D3-S-DL		
SDG: 240-71528-1	LAB_ID	240-71528-6			240-71528-6			240-71528-5			240-71528-5		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE		0.27	U					0.27	U				
1,1,2,2-TETRACHLOROETHANE		0.37	U					0.37	U				
1,1,2-TRICHLOROETHANE		0.31	U					1					
1,1,2-TRICHLOROTRIFLUOROETHANE					48	U					47	J	P
1,1-DICHLOROETHANE		0.34	U					0.34	U				
1,1-DICHLOROETHENE		1.2						5.6					
1,2,4-TRICHLOROBENZENE		0.49	UJ	C				0.49	UJ	C			
1,2-DIBROMO-3-CHLOROPROPANE		0.4	UJ	C				0.4	UJ	C			
1,2-DIBROMOETHANE		0.51	U					0.51	U				
1,2-DICHLOROBENZENE		0.23	U					0.23	U				
1,2-DICHLOROETHANE		0.24	U					0.69	J	P			
1,2-DICHLOROPROPANE		0.35	U					0.35	U				
1,3-DICHLOROBENZENE		0.49	J	P				0.42	J	P			
1,4-DICHLOROBENZENE		0.25	J	P				0.81	J	P			
2-BUTANONE		2.6	UJ	C				4.9	J	CP			
2-HEXANONE		2	UJ	C				2	UJ	C			
4-METHYL-2-PENTANONE		2.2	UJ	C				2.2	UJ	C			
ACETONE		3.2	J	CP				9.7	J	CP			
BENZENE		0.18	U					0.71	J	P			
BROMODICHLOROMETHANE		0.57	U					0.57	U				
BROMOFORM		0.76	UJ	C				0.76	UJ	C			
BROMOMETHANE		0.59	U					0.59	U				
CARBON DISULFIDE		0.53	U					0.53	U				
CARBON TETRACHLORIDE		0.73	J	P				0.56	U				
CHLOROBENZENE		0.24	J	P				7					
CHLORODIBROMOMETHANE		0.44	UJ	C				0.44	UJ	C			
CHLOROETHANE		0.58	UJ	C				0.58	UJ	C			
CHLOROFORM		3.2						13					
CHLOROMETHANE		0.38	U					0.38	U				
CIS-1,2-DICHLOROETHENE		21						44					
CIS-1,3-DICHLOROPROPENE		0.32	U					0.32	U				
CYCLOHEXANE		0.27	U					0.27	U				
DICHLORODIFLUOROMETHANE		0.47	U					0.47	U				
ETHYLBENZENE		0.25	U					0.25	U				
ISOPROPYLBENZENE		0.21	U					0.21	U				

PROJ_NO: 07896	NSAMPLE	MRC-D3-S-DL2			MRC-D4-D			MRC-D4-D-DL			MRC-D4-I		
SDG: 240-71528-1	LAB_ID	240-71528-5			240-71528-10			240-71528-10			240-71528-9		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE					0.27	U					0.27	U	
1,1,2,2-TETRACHLOROETHANE					0.37	U					0.37	U	
1,1,2-TRICHLOROETHANE					0.31	U					0.31	U	
1,1,2-TRICHLOROTRIFLUOROETHANE					0.24	U							
1,1-DICHLOROETHANE					0.34	U					0.34	U	
1,1-DICHLOROETHENE					0.32	U					0.32	U	
1,2,4-TRICHLOROBENZENE								27					
1,2-DIBROMO-3-CHLOROPROPANE					0.4	UJ	C				0.4	UJ	C
1,2-DIBROMOETHANE					0.51	U					0.51	U	
1,2-DICHLOROBENZENE					1.4						8.8		
1,2-DICHLOROETHANE					0.24	U					0.24	U	
1,2-DICHLOROPROPANE					0.35	U					0.35	U	
1,3-DICHLOROBENZENE					12						46		
1,4-DICHLOROBENZENE					7.7						33		
2-BUTANONE					3.8	J	CP				9.2	J	CP
2-HEXANONE					2	UJ	C				2	UJ	C
4-METHYL-2-PENTANONE					2.2	UJ	C				2.2	UJ	C
ACETONE					4.3	J	CP				7.7	J	CP
BENZENE					0.39	J	P				1.7		
BROMODICHLOROMETHANE					0.57	U					0.57	U	
BROMOFORM					0.76	UJ	C				0.76	UJ	C
BROMOMETHANE					0.59	U					0.59	U	
CARBON DISULFIDE					0.53	U					0.53	U	
CARBON TETRACHLORIDE					0.56	U					0.56	U	
CHLOROBENZENE					6.3						41		
CHLORODIBROMOMETHANE					0.44	UJ	C				0.44	UJ	C
CHLOROETHANE					0.58	UJ	C				0.58	UJ	C
CHLOROFORM					0.91	J	P				0.92	J	P
CHLOROMETHANE					0.38	U					0.38	U	
CIS-1,2-DICHLOROETHENE					5.4						2.4		
CIS-1,3-DICHLOROPROPENE					0.32	U					0.32	U	
CYCLOHEXANE					0.27	U					0.27	U	
DICHLORODIFLUOROMETHANE					0.47	U					0.47	U	
ETHYLBENZENE					0.25	U					0.25	U	
ISOPROPYLBENZENE					0.21	U					0.21	U	

PROJ_NO: 07896	NSAMPLE	MRC-D4-I-DL			MRC-D4-S			MRC-D4-S-DL			TB-103116		
SDG: 240-71528-1	LAB_ID	240-71528-9			240-71528-8			240-71528-8			240-71528-4		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
1,1,1-TRICHLOROETHANE					0.27	U					0.27	U	
1,1,2,2-TETRACHLOROETHANE					0.37	U					0.37	U	
1,1,2-TRICHLOROETHANE					0.63	J	P				0.31	U	
1,1,2-TRICHLOROTRIFLUOROETHANE		2.4	U		87	J	L				0.24	U	
1,1-DICHLOROETHANE					0.34	U					0.34	U	
1,1-DICHLOROETHENE					2.4						0.32	U	
1,2,4-TRICHLOROBENZENE		160			0.49	UJ	C				0.49	UJ	C
1,2-DIBROMO-3-CHLOROPROPANE					0.4	UJ	C				0.4	UJ	C
1,2-DIBROMOETHANE					0.51	U					0.51	U	
1,2-DICHLOROBENZENE					0.31	J	P				0.23	U	
1,2-DICHLOROETHANE					0.33	J	P				0.24	U	
1,2-DICHLOROPROPANE					0.35	U					0.35	U	
1,3-DICHLOROBENZENE					1						0.21	U	
1,4-DICHLOROBENZENE					1.4						0.24	U	
2-BUTANONE					2.6	UJ	C				2.6	UJ	C
2-HEXANONE					2	UJ	C				2	UJ	C
4-METHYL-2-PENTANONE					2.2	UJ	C				2.2	UJ	C
ACETONE					3.1	UJ	C				3.1	UJ	C
BENZENE					0.46	J	P				0.18	U	
BROMODICHLOROMETHANE					0.57	U					0.57	U	
BROMOFORM					0.76	UJ	C				0.76	UJ	C
BROMOMETHANE					0.59	U					0.59	U	
CARBON DISULFIDE					0.53	U					0.53	U	
CARBON TETRACHLORIDE					0.71	J	P				0.56	U	
CHLOROBENZENE					7.7						0.15	U	
CHLORODIBROMOMETHANE					0.44	UJ	C				0.44	UJ	C
CHLOROETHANE					0.58	UJ	C				0.58	UJ	C
CHLOROFORM					6.8						0.27	U	
CHLOROMETHANE					0.38	U					0.38	U	
CIS-1,2-DICHLOROETHENE					21						0.3	U	
CIS-1,3-DICHLOROPROPENE					0.32	U					0.32	U	
CYCLOHEXANE					0.27	U					0.27	U	
DICHLORODIFLUOROMETHANE					0.47	U					0.47	U	
ETHYLBENZENE					0.25	U					0.25	U	
ISOPROPYLBENZENE					0.21	U					0.21	U	

PROJ_NO: 07896	NSAMPLE	MRC-D2-D			MRC-D2-D-DL			MRC-D2-I			MRC-D2-I-DL		
SDG: 240-71528-1	LAB_ID	240-71528-3			240-71528-3			240-71528-2			240-71528-2		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		1.4	U					1.4	U				
METHYL CYCLOHEXANE		0.19	U					0.19	U				
METHYL TERT-BUTYL ETHER		7.4						6.3					
METHYLENE CHLORIDE		0.94	U					0.94	U				
STYRENE		0.22	U					0.23	J	P			
TETRACHLOROETHENE		0.24	U					0.24	U				
TOLUENE		0.17	J	P				1.2					
TOTAL XYLENES		0.27	U					0.52	J	P			
TRANS-1,2-DICHLOROETHENE		0.2	U					0.2	U				
TRANS-1,3-DICHLOROPROPENE		0.22	U					0.22	U				
TRICHLOROETHENE					1300						1300		
TRICHLOROFLUOROMETHANE		0.4	U					0.4	U				
VINYL CHLORIDE		0.17	U					0.17	U				

PROJ_NO: 07896	NSAMPLE	MRC-D2-S			MRC-D2-S-DL			MRC-D3-D			MRC-D3-D-DL		
SDG: 240-71528-1	LAB_ID	240-71528-1			240-71528-1			240-71528-7			240-71528-7		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		1.4	U					1.4	U				
METHYL CYCLOHEXANE		0.19	U					0.19	U				
METHYL TERT-BUTYL ETHER		4.9						7.7					
METHYLENE CHLORIDE		0.94	U					0.94	U				
STYRENE		0.22	U					0.22	U				
TETRACHLOROETHENE		0.24	U					0.24	U				
TOLUENE		0.27	J	P				0.81	J	P			
TOTAL XYLENES		0.27	U					0.36	J	P			
TRANS-1,2-DICHLOROETHENE		0.2	U					0.2	U				
TRANS-1,3-DICHLOROPROPENE		0.22	U					0.22	U				
TRICHLOROETHENE					5100						460		
TRICHLOROFLUOROMETHANE		0.4	U					0.4	U				
VINYL CHLORIDE		0.17	U					0.17	U				

PROJ_NO: 07896	NSAMPLE	MRC-D3-I			MRC-D3-I-DL			MRC-D3-S			MRC-D3-S-DL		
SDG: 240-71528-1	LAB_ID	240-71528-6			240-71528-6			240-71528-5			240-71528-5		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE		1.4	U					1.4	U				
METHYL CYCLOHEXANE		0.19	U					0.19	U				
METHYL TERT-BUTYL ETHER		1.3						0.55	J	P			
METHYLENE CHLORIDE		0.94	U					0.94	U				
STYRENE		0.22	U					0.22	U				
TETRACHLOROETHENE		0.25	J	P				0.38	J	P			
TOLUENE		0.16	U					0.69	J	P			
TOTAL XYLENES		0.27	U					0.27	U				
TRANS-1,2-DICHLOROETHENE		0.24	J	P				0.58	J	P			
TRANS-1,3-DICHLOROPROPENE		0.22	U					0.22	U				
TRICHLOROETHENE					6000								
TRICHLOROFLUOROMETHANE		0.4	U					0.4	U				
VINYL CHLORIDE		0.17	U					0.17	U				

PROJ_NO: 07896	NSAMPLE	MRC-D3-S-DL2			MRC-D4-D			MRC-D4-D-DL			MRC-D4-I		
SDG: 240-71528-1	LAB_ID	240-71528-5			240-71528-10			240-71528-10			240-71528-9		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE					1.4	U					1.4	U	
METHYL CYCLOHEXANE					0.19	U					0.19	U	
METHYL TERT-BUTYL ETHER					5.7						2.9		
METHYLENE CHLORIDE					0.94	U					0.94	U	
STYRENE					0.22	U					0.22	U	
TETRACHLOROETHENE					0.24	U					0.24	U	
TOLUENE					0.23	J	P				0.39	J	P
TOTAL XYLENES					0.27	U					0.27	U	
TRANS-1,2-DICHLOROETHENE					0.2	U					0.2	U	
TRANS-1,3-DICHLOROPROPENE					0.22	U					0.22	U	
TRICHLOROETHENE		11000						45					
TRICHLOROFLUOROMETHANE					0.4	U					0.4	U	
VINYL CHLORIDE					0.17	U					0.17	U	

PROJ_NO: 07896	NSAMPLE	MRC-D4-I-DL			MRC-D4-S			MRC-D4-S-DL			TB-103116		
SDG: 240-71528-1	LAB_ID	240-71528-9			240-71528-8			240-71528-8			240-71528-4		
FRACTION: OV	SAMP_DATE	10/31/2016			10/31/2016			10/31/2016			10/31/2016		
MEDIA: WATER	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/L			UG/L			UG/L			UG/L		
	PCT_SOLIDS	0.0			0.0			0.0			0.0		
	DUP_OF												
PARAMETER		RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD
METHYL ACETATE					1.4	U					1.4	U	
METHYL CYCLOHEXANE					0.19	U					0.19	U	
METHYL TERT-BUTYL ETHER					0.73	J	P				0.2	U	
METHYLENE CHLORIDE					0.94	U					0.94	U	
STYRENE					0.22	U					0.22	U	
TETRACHLOROETHENE					0.47	J	P				0.24	U	
TOLUENE					0.16	U					0.16	U	
TOTAL XYLENES					0.27	U					0.27	U	
TRANS-1,2-DICHLOROETHENE					0.2	U					0.2	U	
TRANS-1,3-DICHLOROPROPENE					0.22	U					0.22	U	
TRICHLOROETHENE		77						18000			0.2	U	
TRICHLOROFLUOROMETHANE					0.4	U					0.4	U	
VINYL CHLORIDE					0.17	U					0.17	U	

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S | Lab Sample ID: 240-71528-1

Matrix: Water | Lab File ID: 7110317.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	25		1.0	0.24
79-00-5	1,1,2-Trichloroethane	0.36	J	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	2.8		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	4.9	J	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	0.81	J	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	4.2		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	27		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S | Lab Sample ID: 240-71528-1

Matrix: Water | Lab File ID: 7110317.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:59

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	4.9		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.27	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	*Trichloroethene*	*1300*	*E*	*1.0*	*0.20*
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	85		77-127
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S DL | Lab Sample ID: 240-71528-1 DL

Matrix: Water | Lab File ID: 7110620.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:10

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	200	U	200	54
79-34-5	1,1,2,2-Tetrachloroethane	200	U	200	74
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	48
79-00-5	1,1,2-Trichloroethane	200	U	200	61
75-34-3	1,1-Dichloroethane	200	U	200	68
75-35-4	1,1-Dichloroethene	200	U	200	64
120-82-1	1,2,4-Trichlorobenzene	200	U	200	99
96-12-8	1,2-Dibromo-3-Chloropropane	400	U	400	79
95-50-1	1,2-Dichlorobenzene	200	U	200	46
107-06-2	1,2-Dichloroethane	200	U	200	48
78-87-5	1,2-Dichloropropane	200	U	200	69
541-73-1	1,3-Dichlorobenzene	200	U	200	41
106-46-7	1,4-Dichlorobenzene	200	U	200	49
78-93-3	2-Butanone (MEK)	2000	U	2000	510
591-78-6	2-Hexanone	2000	U	2000	400
108-10-1	4-Methyl-2-pentanone (MIBK)	2000	U	2000	440
67-64-1	Acetone	2000	U *	2000	630
71-43-2	Benzene	200	U	200	36
75-25-2	Bromoform	200	U	200	150
74-83-9	Bromomethane	200	U	200	120
75-15-0	Carbon disulfide	200	U	200	110
56-23-5	Carbon tetrachloride	200	U	200	110
108-90-7	Chlorobenzene	200	U	200	29
124-48-1	Chlorodibromomethane	200	U	200	87
75-00-3	Chloroethane	200	U	200	120
67-66-3	Chloroform	200	U	200	53
74-87-3	Chloromethane	200	U	200	76
156-59-2	cis-1,2-Dichloroethene	200	U	200	61
10061-01-5	cis-1,3-Dichloropropene	200	U	200	64
110-82-7	Cyclohexane	200	U	200	55
75-71-8	Dichlorodifluoromethane	200	U	200	94
75-27-4	Dichlorobromomethane	200	U	200	110
100-41-4	Ethylbenzene	200	U	200	50
98-82-8	Isopropylbenzene	200	U	200	41
79-20-9	Methyl acetate	2000	U	2000	280

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S DL | Lab Sample ID: 240-71528-1 DL

Matrix: Water | Lab File ID: 7110620.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:10

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	200	U	200	37
1634-04-4	Methyl tert-butyl ether	200	U	200	39
75-09-2	Methylene Chloride	200	U	200	190
100-42-5	Styrene	200	U	200	43
127-18-4	Tetrachloroethene	200	U	200	49
108-88-3	Toluene	200	U	200	31
156-60-5	trans-1,2-Dichloroethene	200	U	200	40
10061-02-6	trans-1,3-Dichloropropene	200	U	200	44
79-01-6	Trichloroethene	5100	B	200	40
75-69-4	Trichlorofluoromethane	200	U	200	81
75-01-4	Vinyl chloride	200	U	200	34
1330-20-7	Xylenes, Total	400	U	400	54
106-93-4	Ethylene Dibromide	200	U	200	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-127
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I | Lab Sample ID: 240-71528-2

Matrix: Water | Lab File ID: 7110318.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.1		1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.2		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	11		10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	13		10	3.1
71-43-2	Benzene	1.1		1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	3.2		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	13		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	0.32	J	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I | Lab Sample ID: 240-71528-2

Matrix: Water | Lab File ID: 7110318.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:26

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	6.3		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	0.23	J	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	1.2		1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	0.52	J	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	99		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I DL | Lab Sample ID: 240-71528-2 DL

Matrix: Water | Lab File ID: 7110612.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 14:29

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
79-34-5	1,1,2,2-Tetrachloroethane	40	U	40	15
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	40	U	40	9.5
79-00-5	1,1,2-Trichloroethane	40	U	40	12
75-34-3	1,1-Dichloroethane	40	U	40	14
75-35-4	1,1-Dichloroethene	40	U	40	13
120-82-1	1,2,4-Trichlorobenzene	40	U	40	20
96-12-8	1,2-Dibromo-3-Chloropropane	80	U	80	16
95-50-1	1,2-Dichlorobenzene	40	U	40	9.2
107-06-2	1,2-Dichloroethane	40	U	40	9.6
78-87-5	1,2-Dichloropropane	40	U	40	14
541-73-1	1,3-Dichlorobenzene	40	U	40	8.3
106-46-7	1,4-Dichlorobenzene	40	U	40	9.7
78-93-3	2-Butanone (MEK)	400	U	400	100
591-78-6	2-Hexanone	400	U	400	80
108-10-1	4-Methyl-2-pentanone (MIBK)	400	U	400	88
67-64-1	Acetone	400	U *	400	130
71-43-2	Benzene	40	U	40	7.3
75-25-2	Bromoform	40	U	40	30
74-83-9	Bromomethane	40	U	40	23
75-15-0	Carbon disulfide	40	U	40	21
56-23-5	Carbon tetrachloride	40	U	40	22
108-90-7	Chlorobenzene	40	U	40	5.8
124-48-1	Chlorodibromomethane	40	U	40	17
75-00-3	Chloroethane	40	U	40	23
67-66-3	Chloroform	40	U	40	11
74-87-3	Chloromethane	40	U	40	15
156-59-2	cis-1,2-Dichloroethene	13	J	40	12
10061-01-5	cis-1,3-Dichloropropene	40	U	40	13
110-82-7	Cyclohexane	40	U	40	11
75-71-8	Dichlorodifluoromethane	40	U	40	19
75-27-4	Dichlorobromomethane	40	U	40	23
100-41-4	Ethylbenzene	40	U	40	10
98-82-8	Isopropylbenzene	40	U	40	8.2
79-20-9	Methyl acetate	400	U	400	56
108-87-2	Methylcyclohexane	40	U	40	7.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-I DL | Lab Sample ID: 240-71528-2 DL

Matrix: Water | Lab File ID: 7110612.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:55

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 14:29

Soil Aliquot Vol: | Dilution Factor: 40

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	40	U	40	7.8
75-09-2	Methylene Chloride	40	U	40	38
100-42-5	Styrene	40	U	40	8.6
127-18-4	Tetrachloroethene	40	U	40	9.8
108-88-3	Toluene	40	U	40	6.2
156-60-5	trans-1,2-Dichloroethene	40	U	40	8.0
10061-02-6	trans-1,3-Dichloropropene	40	U	40	8.9
79-01-6	Trichloroethene	1300	B	40	7.9
75-69-4	Trichlorofluoromethane	40	U	40	16
75-01-4	Vinyl chloride	40	U	40	6.7
1330-20-7	Xylenes, Total	80	U	80	11
106-93-4	Ethylene Dibromide	40	U	40	21

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	87		80-120
1868-53-7	Dibromofluoromethane (Surr)	86		77-127
460-00-4	4-Bromofluorobenzene (Surr)	94		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D | Lab Sample ID: 240-71528-3

Matrix: Water | Lab File ID: 7110319.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	3.3		1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	4.1	J	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	2.0		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	15		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D | Lab Sample ID: 240-71528-3

Matrix: Water | Lab File ID: 7110319.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 15:53

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	7.4		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.17	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	84		80-120
1868-53-7	Dibromofluoromethane (Surr)	85		77-127
460-00-4	4-Bromofluorobenzene (Surr)	94		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D DL | Lab Sample ID: 240-71528-3 DL

Matrix: Water | Lab File ID: 7110711.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:24

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	30	U	30	8.1
79-34-5	1,1,2,2-Tetrachloroethane	30	U	30	11
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	30	U	30	7.1
79-00-5	1,1,2-Trichloroethane	30	U	30	9.2
75-34-3	1,1-Dichloroethane	30	U	30	10
75-35-4	1,1-Dichloroethene	30	U	30	9.6
120-82-1	1,2,4-Trichlorobenzene	30	U	30	15
96-12-8	1,2-Dibromo-3-Chloropropane	60	U	60	12
95-50-1	1,2-Dichlorobenzene	30	U	30	6.9
107-06-2	1,2-Dichloroethane	30	U	30	7.2
78-87-5	1,2-Dichloropropane	30	U	30	10
541-73-1	1,3-Dichlorobenzene	30	U	30	6.2
106-46-7	1,4-Dichlorobenzene	30	U	30	7.3
78-93-3	2-Butanone (MEK)	300	U	300	77
591-78-6	2-Hexanone	300	U	300	60
108-10-1	4-Methyl-2-pentanone (MIBK)	300	U	300	66
67-64-1	Acetone	300	U	300	94
71-43-2	Benzene	30	U	30	5.5
75-25-2	Bromoform	30	U	30	23
74-83-9	Bromomethane	30	U	30	18
75-15-0	Carbon disulfide	30	U	30	16
56-23-5	Carbon tetrachloride	30	U	30	17
108-90-7	Chlorobenzene	30	U	30	4.4
124-48-1	Chlorodibromomethane	30	U	30	13
75-00-3	Chloroethane	30	U	30	17
67-66-3	Chloroform	30	U	30	8.0
74-87-3	Chloromethane	30	U	30	11
156-59-2	cis-1,2-Dichloroethene	17	J	30	9.1
10061-01-5	cis-1,3-Dichloropropene	30	U	30	9.6
110-82-7	Cyclohexane	30	U	30	8.2
75-71-8	Dichlorodifluoromethane	30	U	30	14
75-27-4	Dichlorobromomethane	30	U	30	17
100-41-4	Ethylbenzene	30	U	30	7.6
98-82-8	Isopropylbenzene	30	U	30	6.2
79-20-9	Methyl acetate	300	U	300	42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-D DL | Lab Sample ID: 240-71528-3 DL

Matrix: Water | Lab File ID: 7110711.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:12

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:24

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	30	U	30	5.6
1634-04-4	Methyl tert-butyl ether	7.8	J	30	5.9
75-09-2	Methylene Chloride	30	U	30	28
100-42-5	Styrene	30	U	30	6.5
127-18-4	Tetrachloroethene	30	U	30	7.3
108-88-3	Toluene	30	U	30	4.7
156-60-5	trans-1,2-Dichloroethene	30	U	30	6.0
10061-02-6	trans-1,3-Dichloropropene	30	U	30	6.7
79-01-6	Trichloroethene	1300		30	5.9
75-69-4	Trichlorofluoromethane	30	U	30	12
75-01-4	Vinyl chloride	30	U	30	5.0
1330-20-7	Xylenes, Total	60	U	60	8.1
106-93-4	Ethylene Dibromide	30	U	30	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: TB-103116 | Lab Sample ID: 240-71528-4

Matrix: Water | Lab File ID: 7110316.D

Analysis Method: 8260C | Date Collected: 10/31/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: TB-103116 | Lab Sample ID: 240-71528-4

Matrix: Water | Lab File ID: 7110316.D

Analysis Method: 8260C | Date Collected: 10/31/2016 00:00

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 14:31

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S | Lab Sample ID: 240-71528-5

Matrix: Water | Lab File ID: 7110320.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	*1,1,2-Trichloro-1,2,2-trifluoroethane*	*100*	*E*	*1.0*	*0.24*
79-00-5	1,1,2-Trichloroethane	1.0		1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	5.6		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	0.69	J *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.42	J	1.0	0.21
106-46-7	1,4-Dichlorobenzene	0.81	J	1.0	0.24
78-93-3	2-Butanone (MEK)	4.9	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	9.7	J	10	3.1
71-43-2	Benzene	0.71	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	7.0		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	13		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	44		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S | Lab Sample ID: 240-71528-5

Matrix: Water | Lab File ID: 7110320.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:21

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	0.55	J	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	0.38	J *	1.0	0.24
108-88-3	Toluene	0.69	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	0.58	J	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		77-127
460-00-4	4-Bromofluorobenzene (Surr)	107		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL | Lab Sample ID: 240-71528-5 DL

Matrix: Water | Lab File ID: 7110616.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 16:20

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	100	U	100	27
79-34-5	1,1,2,2-Tetrachloroethane	100	U	100	37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	47	J	100	24
79-00-5	1,1,2-Trichloroethane	100	U	100	31
75-34-3	1,1-Dichloroethane	100	U	100	34
75-35-4	1,1-Dichloroethene	100	U	100	32
120-82-1	1,2,4-Trichlorobenzene	100	U	100	49
96-12-8	1,2-Dibromo-3-Chloropropane	200	U	200	40
95-50-1	1,2-Dichlorobenzene	100	U	100	23
107-06-2	1,2-Dichloroethane	100	U	100	24
78-87-5	1,2-Dichloropropane	100	U	100	35
541-73-1	1,3-Dichlorobenzene	100	U	100	21
106-46-7	1,4-Dichlorobenzene	100	U	100	24
78-93-3	2-Butanone (MEK)	1000	U	1000	260
591-78-6	2-Hexanone	1000	U	1000	200
108-10-1	4-Methyl-2-pentanone (MIBK)	1000	U	1000	220
67-64-1	Acetone	1000	U *	1000	310
71-43-2	Benzene	100	U	100	18
75-25-2	Bromoform	100	U	100	76
74-83-9	Bromomethane	100	U	100	59
75-15-0	Carbon disulfide	100	U	100	53
56-23-5	Carbon tetrachloride	100	U	100	56
108-90-7	Chlorobenzene	100	U	100	15
124-48-1	Chlorodibromomethane	100	U	100	44
75-00-3	Chloroethane	100	U	100	58
67-66-3	Chloroform	100	U	100	27
74-87-3	Chloromethane	100	U	100	38
156-59-2	cis-1,2-Dichloroethene	100	U	100	30
10061-01-5	cis-1,3-Dichloropropene	100	U	100	32
110-82-7	Cyclohexane	100	U	100	27
75-71-8	Dichlorodifluoromethane	100	U	100	47
75-27-4	Dichlorobromomethane	100	U	100	57
100-41-4	Ethylbenzene	100	U	100	25
98-82-8	Isopropylbenzene	100	U	100	21
79-20-9	Methyl acetate	1000	U	1000	140

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL | Lab Sample ID: 240-71528-5 DL

Matrix: Water | Lab File ID: 7110616.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 16:20

Soil Aliquot Vol: | Dilution Factor: 100

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	*Methylcyclohexane*	*100*	*U*	*100*	*19*
1634-04-4	*Methyl tert-butyl ether*	*100*	*U*	*100*	*20*
75-09-2	*Methylene Chloride*	*100*	*U*	*100*	*94*
100-42-5	*Styrene*	*100*	*U*	*100*	*22*
127-18-4	*Tetrachloroethene*	*100*	*U*	*100*	*24*
108-88-3	*Toluene*	*100*	*U*	*100*	*16*
156-60-5	*trans-1,2-Dichloroethene*	*100*	*U*	*100*	*20*
10061-02-6	*trans-1,3-Dichloropropene*	*100*	*U*	*100*	*22*
79-01-6	*Trichloroethene*	*12000*	*E B*	*100*	*20*
75-69-4	*Trichlorofluoromethane*	*100*	*U*	*100*	*40*
75-01-4	*Vinyl chloride*	*100*	*U*	*100*	*17*
1330-20-7	*Xylenes, Total*	*200*	*U*	*200*	*27*
106-93-4	*Ethylene Dibromide*	*100*	*U*	*100*	*51*

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		77-127
460-00-4	4-Bromofluorobenzene (Surr)	94		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL2 | Lab Sample ID: 240-71528-5 DL2

Matrix: Water | Lab File ID: 7110621.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:37

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	500	U	500	140
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	190
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	120
79-00-5	1,1,2-Trichloroethane	500	U	500	150
75-34-3	1,1-Dichloroethane	500	U	500	170
75-35-4	1,1-Dichloroethene	500	U	500	160
120-82-1	1,2,4-Trichlorobenzene	500	U	500	250
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U	1000	200
95-50-1	1,2-Dichlorobenzene	500	U	500	120
107-06-2	1,2-Dichloroethane	500	U	500	120
78-87-5	1,2-Dichloropropane	500	U	500	170
541-73-1	1,3-Dichlorobenzene	500	U	500	100
106-46-7	1,4-Dichlorobenzene	500	U	500	120
78-93-3	2-Butanone (MEK)	5000	U	5000	1300
591-78-6	2-Hexanone	5000	U	5000	1000
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	1100
67-64-1	Acetone	5000	U *	5000	1600
71-43-2	Benzene	500	U	500	91
75-25-2	Bromoform	500	U	500	380
74-83-9	Bromomethane	500	U	500	290
75-15-0	Carbon disulfide	500	U	500	260
56-23-5	Carbon tetrachloride	500	U	500	280
108-90-7	Chlorobenzene	500	U	500	73
124-48-1	Chlorodibromomethane	500	U	500	220
75-00-3	Chloroethane	500	U	500	290
67-66-3	Chloroform	500	U	500	130
74-87-3	Chloromethane	500	U	500	190
156-59-2	cis-1,2-Dichloroethene	500	U	500	150
10061-01-5	cis-1,3-Dichloropropene	500	U	500	160
110-82-7	Cyclohexane	500	U	500	140
75-71-8	Dichlorodifluoromethane	500	U	500	240
75-27-4	Dichlorobromomethane	500	U	500	290
100-41-4	Ethylbenzene	500	U	500	130
98-82-8	Isopropylbenzene	500	U	500	100
79-20-9	Methyl acetate	5000	U	5000	700

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-S DL2 | Lab Sample ID: 240-71528-5 DL2

Matrix: Water | Lab File ID: 7110621.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:37

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	500	U	500	93
1634-04-4	Methyl tert-butyl ether	500	U	500	98
75-09-2	Methylene Chloride	500	U	500	470
100-42-5	Styrene	500	U	500	110
127-18-4	Tetrachloroethene	500	U	500	120
108-88-3	Toluene	500	U	500	78
156-60-5	trans-1,2-Dichloroethene	500	U	500	100
10061-02-6	trans-1,3-Dichloropropene	500	U	500	110
79-01-6	Trichloroethene	11000	B	500	99
75-69-4	Trichlorofluoromethane	500	U	500	200
75-01-4	Vinyl chloride	500	U	500	84
1330-20-7	Xylenes, Total	1000	U	1000	140
106-93-4	Ethylene Dibromide	500	U	500	260

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	92		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	97		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I | Lab Sample ID: 240-71528-6

Matrix: Water | Lab File ID: 7110321.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.2		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.49	J	1.0	0.21
106-46-7	1,4-Dichlorobenzene	0.25	J	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	3.2	J	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	0.73	J	1.0	0.56
108-90-7	Chlorobenzene	0.24	J	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	3.2		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	21		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.3		1.0	0.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I | Lab Sample ID: 240-71528-6

Matrix: Water | Lab File ID: 7110321.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 16:49

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	0.25	J *	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	0.24	J	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I DL | Lab Sample ID: 240-71528-6 DL

Matrix: Water | Lab File ID: 7110622.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:04

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	200	U	200	54
79-34-5	1,1,2,2-Tetrachloroethane	200	U	200	74
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	200	U	200	48
79-00-5	1,1,2-Trichloroethane	200	U	200	61
75-34-3	1,1-Dichloroethane	200	U	200	68
75-35-4	1,1-Dichloroethene	200	U	200	64
120-82-1	1,2,4-Trichlorobenzene	200	U	200	99
96-12-8	1,2-Dibromo-3-Chloropropane	400	U	400	79
95-50-1	1,2-Dichlorobenzene	200	U	200	46
107-06-2	1,2-Dichloroethane	200	U	200	48
78-87-5	1,2-Dichloropropane	200	U	200	69
541-73-1	1,3-Dichlorobenzene	200	U	200	41
106-46-7	1,4-Dichlorobenzene	200	U	200	49
78-93-3	2-Butanone (MEK)	2000	U	2000	510
591-78-6	2-Hexanone	2000	U	2000	400
108-10-1	4-Methyl-2-pentanone (MIBK)	2000	U	2000	440
67-64-1	Acetone	2000	U *	2000	630
71-43-2	Benzene	200	U	200	36
75-25-2	Bromoform	200	U	200	150
74-83-9	Bromomethane	200	U	200	120
75-15-0	Carbon disulfide	200	U	200	110
56-23-5	Carbon tetrachloride	200	U	200	110
108-90-7	Chlorobenzene	200	U	200	29
124-48-1	Chlorodibromomethane	200	U	200	87
75-00-3	Chloroethane	200	U	200	120
67-66-3	Chloroform	200	U	200	53
74-87-3	Chloromethane	200	U	200	76
156-59-2	cis-1,2-Dichloroethene	200	U	200	61
10061-01-5	cis-1,3-Dichloropropene	200	U	200	64
110-82-7	Cyclohexane	200	U	200	55
75-71-8	Dichlorodifluoromethane	200	U	200	94
75-27-4	Dichlorobromomethane	200	U	200	110
100-41-4	Ethylbenzene	200	U	200	50
98-82-8	Isopropylbenzene	200	U	200	41
79-20-9	Methyl acetate	2000	U	2000	280

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-I DL | Lab Sample ID: 240-71528-6 DL

Matrix: Water | Lab File ID: 7110622.D

Analysis Method: 8260C | Date Collected: 10/31/2016 10:50

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:04

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	200	U	200	37
1634-04-4	Methyl tert-butyl ether	200	U	200	39
75-09-2	Methylene Chloride	200	U	200	190
100-42-5	Styrene	200	U	200	43
127-18-4	Tetrachloroethene	200	U	200	49
108-88-3	Toluene	200	U	200	31
156-60-5	trans-1,2-Dichloroethene	200	U	200	40
10061-02-6	trans-1,3-Dichloropropene	200	U	200	44
79-01-6	Trichloroethene	6000	B	200	40
75-69-4	Trichlorofluoromethane	200	U	200	81
75-01-4	Vinyl chloride	200	U	200	34
1330-20-7	Xylenes, Total	400	U	400	54
106-93-4	Ethylene Dibromide	200	U	200	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	90		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	95		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D | Lab Sample ID: 240-71528-7

Matrix: Water | Lab File ID: 7110322.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	0.66	J	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	0.27	J	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	5.1	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	8.3	J	10	3.1
71-43-2	Benzene	0.65	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	2.1		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	8.1		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	0.30	J	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D | Lab Sample ID: 240-71528-7

Matrix: Water | Lab File ID: 7110322.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:17

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	7.7		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.81	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	0.36	J	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	89		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	89		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D DL | Lab Sample ID: 240-71528-7 DL

Matrix: Water | Lab File ID: 7110712.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:52

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	30	U	30	8.1
79-34-5	1,1,2,2-Tetrachloroethane	30	U	30	11
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	30	U	30	7.1
79-00-5	1,1,2-Trichloroethane	30	U	30	9.2
75-34-3	1,1-Dichloroethane	30	U	30	10
75-35-4	1,1-Dichloroethene	30	U	30	9.6
120-82-1	1,2,4-Trichlorobenzene	30	U	30	15
96-12-8	1,2-Dibromo-3-Chloropropane	60	U	60	12
95-50-1	1,2-Dichlorobenzene	30	U	30	6.9
107-06-2	1,2-Dichloroethane	30	U	30	7.2
78-87-5	1,2-Dichloropropane	30	U	30	10
541-73-1	1,3-Dichlorobenzene	30	U	30	6.2
106-46-7	1,4-Dichlorobenzene	30	U	30	7.3
78-93-3	2-Butanone (MEK)	300	U	300	77
591-78-6	2-Hexanone	300	U	300	60
108-10-1	4-Methyl-2-pentanone (MIBK)	300	U	300	66
67-64-1	Acetone	300	U	300	94
71-43-2	Benzene	30	U	30	5.5
75-25-2	Bromoform	30	U	30	23
74-83-9	Bromomethane	30	U	30	18
75-15-0	Carbon disulfide	30	U	30	16
56-23-5	Carbon tetrachloride	30	U	30	17
108-90-7	Chlorobenzene	30	U	30	4.4
124-48-1	Chlorodibromomethane	30	U	30	13
75-00-3	Chloroethane	30	U	30	17
67-66-3	Chloroform	30	U	30	8.0
74-87-3	Chloromethane	30	U	30	11
156-59-2	cis-1,2-Dichloroethene	30	U	30	9.1
10061-01-5	cis-1,3-Dichloropropene	30	U	30	9.6
110-82-7	Cyclohexane	30	U	30	8.2
75-71-8	Dichlorodifluoromethane	30	U	30	14
75-27-4	Dichlorobromomethane	30	U	30	17
100-41-4	Ethylbenzene	30	U	30	7.6
98-82-8	Isopropylbenzene	30	U	30	6.2
79-20-9	Methyl acetate	300	U	300	42

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D3-D DL | Lab Sample ID: 240-71528-7 DL

Matrix: Water | Lab File ID: 7110712.D

Analysis Method: 8260C | Date Collected: 10/31/2016 11:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 13:52

Soil Aliquot Vol: | Dilution Factor: 30

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	30	U	30	5.6
1634-04-4	Methyl tert-butyl ether	9.6	J	30	5.9
75-09-2	Methylene Chloride	30	U	30	28
100-42-5	Styrene	30	U	30	6.5
127-18-4	Tetrachloroethene	30	U	30	7.3
108-88-3	Toluene	30	U	30	4.7
156-60-5	trans-1,2-Dichloroethene	30	U	30	6.0
10061-02-6	trans-1,3-Dichloropropene	30	U	30	6.7
79-01-6	Trichloroethene	460		30	5.9
75-69-4	Trichlorofluoromethane	30	U	30	12
75-01-4	Vinyl chloride	30	U	30	5.0
1330-20-7	Xylenes, Total	60	U	60	8.1
106-93-4	Ethylene Dibromide	30	U	30	15

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	85		77-127
460-00-4	4-Bromofluorobenzene (Surr)	90		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S | Lab Sample ID: 240-71528-8

Matrix: Water | Lab File ID: 7110323.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	*1,1,2-Trichloro-1,2,2-trifluoroethane*	*87*	*E*	*1.0*	*0.24*
79-00-5	1,1,2-Trichloroethane	0.63	J	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	2.4		1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	0.31	J	1.0	0.23
107-06-2	1,2-Dichloroethane	0.33	J *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0		1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.4		1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	0.46	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	0.71	J	1.0	0.56
108-90-7	Chlorobenzene	7.7		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	6.8		1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	21		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S | Lab Sample ID: 240-71528-8

Matrix: Water | Lab File ID: 7110323.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 17:44

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	0.73	J	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	0.47	J *	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	87		80-120
1868-53-7	Dibromofluoromethane (Surr)	88		77-127
460-00-4	4-Bromofluorobenzene (Surr)	105		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S DL | Lab Sample ID: 240-71528-8 DL

Matrix: Water | Lab File ID: 7110626.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 20:54

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	500	U	500	140
79-34-5	1,1,2,2-Tetrachloroethane	500	U	500	190
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	500	U	500	120
79-00-5	1,1,2-Trichloroethane	500	U	500	150
75-34-3	1,1-Dichloroethane	500	U	500	170
75-35-4	1,1-Dichloroethene	500	U	500	160
120-82-1	1,2,4-Trichlorobenzene	500	U	500	250
96-12-8	1,2-Dibromo-3-Chloropropane	1000	U	1000	200
95-50-1	1,2-Dichlorobenzene	500	U	500	120
107-06-2	1,2-Dichloroethane	500	U	500	120
78-87-5	1,2-Dichloropropane	500	U	500	170
541-73-1	1,3-Dichlorobenzene	500	U	500	100
106-46-7	1,4-Dichlorobenzene	500	U	500	120
78-93-3	2-Butanone (MEK)	5000	U	5000	1300
591-78-6	2-Hexanone	5000	U	5000	1000
108-10-1	4-Methyl-2-pentanone (MIBK)	5000	U	5000	1100
67-64-1	Acetone	5000	U *	5000	1600
71-43-2	Benzene	500	U	500	91
75-25-2	Bromoform	500	U	500	380
74-83-9	Bromomethane	500	U	500	290
75-15-0	Carbon disulfide	500	U	500	260
56-23-5	Carbon tetrachloride	500	U	500	280
108-90-7	Chlorobenzene	500	U	500	73
124-48-1	Chlorodibromomethane	500	U	500	220
75-00-3	Chloroethane	500	U	500	290
67-66-3	Chloroform	500	U	500	130
74-87-3	Chloromethane	500	U	500	190
156-59-2	cis-1,2-Dichloroethene	500	U	500	150
10061-01-5	cis-1,3-Dichloropropene	500	U	500	160
110-82-7	Cyclohexane	500	U	500	140
75-71-8	Dichlorodifluoromethane	500	U	500	240
75-27-4	Dichlorobromomethane	500	U	500	290
100-41-4	Ethylbenzene	500	U	500	130
98-82-8	Isopropylbenzene	500	U	500	100
79-20-9	Methyl acetate	5000	U	5000	700

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-S DL | Lab Sample ID: 240-71528-8 DL

Matrix: Water | Lab File ID: 7110626.D

Analysis Method: 8260C | Date Collected: 10/31/2016 12:52

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 20:54

Soil Aliquot Vol: | Dilution Factor: 500

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	500	U	500	93
1634-04-4	Methyl tert-butyl ether	500	U	500	98
75-09-2	Methylene Chloride	500	U	500	470
100-42-5	Styrene	500	U	500	110
127-18-4	Tetrachloroethene	500	U	500	120
108-88-3	Toluene	500	U	500	78
156-60-5	trans-1,2-Dichloroethene	500	U	500	100
10061-02-6	trans-1,3-Dichloropropene	500	U	500	110
79-01-6	Trichloroethene	18000	B	500	99
75-69-4	Trichlorofluoromethane	500	U	500	200
75-01-4	Vinyl chloride	500	U	500	84
1330-20-7	Xylenes, Total	1000	U	1000	140
106-93-4	Ethylene Dibromide	500	U	500	260

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	83		80-120
1868-53-7	Dibromofluoromethane (Surr)	93		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	100		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I | Lab Sample ID: 240-71528-9

Matrix: Water | Lab File ID: 7110324.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	*1,2,4-Trichlorobenzene*	*110*	*E*	*1.0*	*0.49*
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	8.8		1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	46		1.0	0.21
106-46-7	1,4-Dichlorobenzene	33		1.0	0.24
78-93-3	2-Butanone (MEK)	9.2	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	7.7	J	10	3.1
71-43-2	Benzene	1.7		1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	41		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	0.92	J	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	2.4		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	2.9		1.0	0.20

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I | Lab Sample ID: 240-71528-9

Matrix: Water | Lab File ID: 7110324.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:12

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.39	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I DL | Lab Sample ID: 240-71528-9 DL

Matrix: Water | Lab File ID: 7110623.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:32

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	10	U	10	2.7
79-34-5	1,1,2,2-Tetrachloroethane	10	U	10	3.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	10	U	10	2.4
79-00-5	1,1,2-Trichloroethane	10	U	10	3.1
75-34-3	1,1-Dichloroethane	10	U	10	3.4
75-35-4	1,1-Dichloroethene	10	U	10	3.2
120-82-1	1,2,4-Trichlorobenzene	160		10	4.9
96-12-8	1,2-Dibromo-3-Chloropropane	20	U	20	4.0
95-50-1	1,2-Dichlorobenzene	9.5	J	10	2.3
107-06-2	1,2-Dichloroethane	10	U	10	2.4
78-87-5	1,2-Dichloropropane	10	U	10	3.5
541-73-1	1,3-Dichlorobenzene	56		10	2.1
106-46-7	1,4-Dichlorobenzene	40		10	2.4
78-93-3	2-Butanone (MEK)	100	U	100	26
591-78-6	2-Hexanone	100	U	100	20
108-10-1	4-Methyl-2-pentanone (MIBK)	100	U	100	22
67-64-1	Acetone	100	U *	100	31
71-43-2	Benzene	10	U	10	1.8
75-25-2	Bromoform	10	U	10	7.6
74-83-9	Bromomethane	10	U	10	5.9
75-15-0	Carbon disulfide	10	U	10	5.3
56-23-5	Carbon tetrachloride	10	U	10	5.6
108-90-7	Chlorobenzene	56		10	1.5
124-48-1	Chlorodibromomethane	10	U	10	4.4
75-00-3	Chloroethane	10	U	10	5.8
67-66-3	Chloroform	10	U	10	2.7
74-87-3	Chloromethane	10	U	10	3.8
156-59-2	cis-1,2-Dichloroethene	10	U	10	3.0
10061-01-5	cis-1,3-Dichloropropene	10	U	10	3.2
110-82-7	Cyclohexane	10	U	10	2.7
75-71-8	Dichlorodifluoromethane	10	U	10	4.7
75-27-4	Dichlorobromomethane	10	U	10	5.7
100-41-4	Ethylbenzene	10	U	10	2.5
98-82-8	Isopropylbenzene	10	U	10	2.1
79-20-9	Methyl acetate	100	U	100	14

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-I DL | Lab Sample ID: 240-71528-9 DL

Matrix: Water | Lab File ID: 7110623.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:10

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:32

Soil Aliquot Vol: | Dilution Factor: 10

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	10	U	10	1.9
1634-04-4	Methyl tert-butyl ether	2.4	J	10	2.0
75-09-2	Methylene Chloride	10	U	10	9.4
100-42-5	Styrene	10	U	10	2.2
127-18-4	Tetrachloroethene	10	U	10	2.4
108-88-3	Toluene	10	U	10	1.6
156-60-5	trans-1,2-Dichloroethene	10	U	10	2.0
10061-02-6	trans-1,3-Dichloropropene	10	U	10	2.2
79-01-6	Trichloroethene	77	B	10	2.0
75-69-4	Trichlorofluoromethane	10	U	10	4.0
75-01-4	Vinyl chloride	10	U	10	1.7
1330-20-7	Xylenes, Total	20	U	20	2.7
106-93-4	Ethylene Dibromide	10	U	10	5.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	88		80-120
1868-53-7	Dibromofluoromethane (Surr)	94		77-127
460-00-4	4-Bromofluorobenzene (Surr)	96		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D | Lab Sample ID: 240-71528-10

Matrix: Water | Lab File ID: 7110325.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.4		1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U *	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	12		1.0	0.21
106-46-7	1,4-Dichlorobenzene	7.7		1.0	0.24
78-93-3	2-Butanone (MEK)	3.8	J	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	4.3	J	10	3.1
71-43-2	Benzene	0.39	J	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U *	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	6.3		1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	0.91	J	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	5.4		1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U *	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D | Lab Sample ID: 240-71528-10

Matrix: Water | Lab File ID: 7110325.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 18:39

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
1634-04-4	Methyl tert-butyl ether	5.7		1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U *	1.0	0.24
108-88-3	Toluene	0.23	J	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U *	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	89		80-120
1868-53-7	Dibromofluoromethane (Surr)	86		77-127
460-00-4	4-Bromofluorobenzene (Surr)	95		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	88		72-134

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D DL | Lab Sample ID: 240-71528-10 DL

Matrix: Water | Lab File ID: 7110624.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:59

Soil Aliquot Vol: | Dilution Factor: 2.5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	2.5	U	2.5	0.68
79-34-5	1,1,2,2-Tetrachloroethane	2.5	U	2.5	0.93
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2.5	U	2.5	0.60
79-00-5	1,1,2-Trichloroethane	2.5	U	2.5	0.77
75-34-3	1,1-Dichloroethane	2.5	U	2.5	0.85
75-35-4	1,1-Dichloroethene	2.5	U	2.5	0.80
120-82-1	1,2,4-Trichlorobenzene	27		2.5	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	5.0	U	5.0	0.99
95-50-1	1,2-Dichlorobenzene	1.5	J	2.5	0.58
107-06-2	1,2-Dichloroethane	2.5	U	2.5	0.60
78-87-5	1,2-Dichloropropane	2.5	U	2.5	0.86
541-73-1	1,3-Dichlorobenzene	12		2.5	0.52
106-46-7	1,4-Dichlorobenzene	7.7		2.5	0.61
78-93-3	2-Butanone (MEK)	25	U	25	6.4
591-78-6	2-Hexanone	25	U	25	5.0
108-10-1	4-Methyl-2-pentanone (MIBK)	25	U	25	5.5
67-64-1	Acetone	25	U *	25	7.9
71-43-2	Benzene	2.5	U	2.5	0.46
75-25-2	Bromoform	2.5	U	2.5	1.9
74-83-9	Bromomethane	2.5	U	2.5	1.5
75-15-0	Carbon disulfide	2.5	U	2.5	1.3
56-23-5	Carbon tetrachloride	2.5	U	2.5	1.4
108-90-7	Chlorobenzene	6.5		2.5	0.37
124-48-1	Chlorodibromomethane	2.5	U	2.5	1.1
75-00-3	Chloroethane	2.5	U	2.5	1.4
67-66-3	Chloroform	0.83	J	2.5	0.67
74-87-3	Chloromethane	2.5	U	2.5	0.95
156-59-2	cis-1,2-Dichloroethene	5.1		2.5	0.76
10061-01-5	cis-1,3-Dichloropropene	2.5	U	2.5	0.80
110-82-7	Cyclohexane	2.5	U	2.5	0.68
75-71-8	Dichlorodifluoromethane	2.5	U	2.5	1.2
75-27-4	Dichlorobromomethane	2.5	U	2.5	1.4
100-41-4	Ethylbenzene	2.5	U	2.5	0.63
98-82-8	Isopropylbenzene	2.5	U	2.5	0.51
79-20-9	Methyl acetate	25	U	25	3.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D4-D DL | Lab Sample ID: 240-71528-10 DL

Matrix: Water | Lab File ID: 7110624.D

Analysis Method: 8260C | Date Collected: 10/31/2016 13:22

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 19:59

Soil Aliquot Vol: | Dilution Factor: 2.5

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	2.5	U	2.5	0.47
1634-04-4	Methyl tert-butyl ether	6.0		2.5	0.49
75-09-2	Methylene Chloride	2.5	U	2.5	2.4
100-42-5	Styrene	2.5	U	2.5	0.54
127-18-4	Tetrachloroethene	2.5	U	2.5	0.61
108-88-3	Toluene	2.5	U	2.5	0.39
156-60-5	trans-1,2-Dichloroethene	2.5	U	2.5	0.50
10061-02-6	trans-1,3-Dichloropropene	2.5	U	2.5	0.56
79-01-6	Trichloroethene	45	B	2.5	0.50
75-69-4	Trichlorofluoromethane	2.5	U	2.5	1.0
75-01-4	Vinyl chloride	2.5	U	2.5	0.42
1330-20-7	Xylenes, Total	5.0	U	5.0	0.68
106-93-4	Ethylene Dibromide	2.5	U	2.5	1.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	82		80-120
1868-53-7	Dibromofluoromethane (Surr)	87		77-127
460-00-4	4-Bromofluorobenzene (Surr)	92		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	92		72-134

Appendix C

Support Documentation

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: Block E Downgradient TCE GW

Report Number: 240-71528-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

The 8260C VOC analysis was performed at TetstAmerica Pittsburgh Laboratory.

TestAmerica Canton attests to the validity of the laboratory data generated by TestAmerica facilities reported herein. All analyses performed by TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of TestAmerica and its client.

RECEIPT

The samples were received on 11/1/2016 9:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 1.8º C.

The samples were collected in amber vials, except for sample TB-103116 that was in clear vials. The samples appear to have fine particulates in the amber vials. It appears that the water may have interacted with the particulates as there are a lot of tiny bubbles in all of the amber vials. These tiny bubbles may add up to a larger bubble that may be greater than 6mm if the tiny bubbles combine.

LOW LEVEL VOLATILE ORGANIC COMPOUNDS

Samples MRC-D2-S (240-71528-1), MRC-D2-I (240-71528-2), MRC-D2-D (240-71528-3), TB-103116 (240-71528-4), MRC-D3-S (240-71528-5), MRC-D3-I (240-71528-6), MRC-D3-D (240-71528-7), MRC-D4-S (240-71528-8), MRC-D4-I (240-71528-9) and MRC-D4-D (240-71528-10) were analyzed for Low Level Volatile Organic Compounds in accordance with SW-846 Method 8260C. The samples were analyzed on 11/03/2016, 11/06/2016 and 11/07/2016.

Trichloroethene was detected in method blank MB 180-193465/8 at a level that was above the method detection limit but below the reporting limit. The value should be considered an estimate, and has been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

1,2-Dichloroethane, Carbon disulfide, Dichlorobromomethane, Tetrachloroethene and Vinyl chloride exceeded the RPD limit for LCSD 180-193223/5. Acetone exceeded the RPD limit for LCSD 180-193465/14.

Samples MRC-D2-S (240-71528-1)[200X], MRC-D2-I (240-71528-2)[40X], MRC-D2-D (240-71528-3)[30X], MRC-D3-S (240-71528-5)[100X], MRC-D3-S (240-71528-5)[500X], MRC-D3-I (240-71528-6)[200X], MRC-D3-D (240-71528-7)[30X], MRC-D4-S (240-71528-8)[500X], MRC-D4-I (240-71528-9)[10X] and MRC-D4-D (240-71528-10)[2.5X] required dilution prior to analysis to bring the concentration of target analytes within the calibration range. The reporting limits have been adjusted accordingly.

All initial undiluted analysis are being reported to reach client's reporting limit requirements. Trichloroethene and 1,1,2-Trichloro-1,2,2-trifluoroethane are not reported in some analysis if carryover was suspected in an analysis that followed a sample that contained those analytes in an over-range sample prior to that analyses.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 193223 recovered outside control limits for the following analytes: 1,2-Dichloroethane, Carbon disulfide, Dichlorobromomethane, Tetrachloroethene and Vinyl chloride.

The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 193465 recovered outside control limits for the following analytes: Acetone.

The continuing calibration verification (CCV) analyzed in batch 193223 was outside the method criteria for the following analyte: 1,2,4-Trichlorobenzene, 1,2-Dibromo-3-Chloropropane, 2-Butanone , 2-Hexanone, 4-Methyl-2-pentanone, Acetone, Bromoform, Chlorodibromomethane and Chloroethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-193465 was outside the method criteria for the following analytes: 1,2,4-Trichlorobenzene, 4-Methyl-2-pentanone , Acetone and Bromoform. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

The continuing calibration verification (CCV) analyzed in batch 180-193501 was outside the method criteria for the following analytes: Acetone, Bromoform and Chlorodibromomethane. A CCV standard at or below the reporting limit (RL) was analyzed with the affected samples and found to be acceptable. As indicated in the reference method, sample analysis may proceed; however, any detection for the affected analyte(s) is considered estimated.

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds (GC/MS)	SW846	TAL PIT

Protocol References:

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

Laboratory References:

TAL PIT = TestAmerica Pittsburgh, 301 Alpha Drive, RIDC Park, Pittsburgh, PA 15238, TEL (412)963-7058

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-71528-1	MRC-D2-S	Water	10/31/16 09:45	11/01/16 09:15
240-71528-2	MRC-D2-I	Water	10/31/16 09:55	11/01/16 09:15
240-71528-3	MRC-D2-D	Water	10/31/16 10:12	11/01/16 09:15
240-71528-4	TB-103116	Water	10/31/16 00:00	11/01/16 09:15
240-71528-5	MRC-D3-S	Water	10/31/16 10:45	11/01/16 09:15
240-71528-6	MRC-D3-I	Water	10/31/16 10:50	11/01/16 09:15
240-71528-7	MRC-D3-D	Water	10/31/16 11:10	11/01/16 09:15
240-71528-8	MRC-D4-S	Water	10/31/16 12:52	11/01/16 09:15
240-71528-9	MRC-D4-I	Water	10/31/16 13:10	11/01/16 09:15
240-71528-10	MRC-D4-D	Water	10/31/16 13:22	11/01/16 09:15

TestAmerica Baltimore
7526 Connelley Drive
Suite F
Hanover, MD 21076
Phone: 410.766.2516 Fax:

180325
1.4|1.8
BALTIMORE

Chain of Custody Record

000017

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

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

Client Contact	Project Manager: Chris Pike	Site Contact: Stu Cameron	Date: 10/31/16	COC No:
Company Name: Tetra Tech	Tel/Fax: (410)302-1624	Lab Contact: John McFadden	Carrier:	1 of 1 COCs
Address: 20251 Century Blvd Ste 200	Analysis Turnaround Time			Sampler:
City/State/Zip: Germantown MD 20874	☐ CALENDAR DAYS ☒ WORKING DAYS			For Lab Use Only:
Phone: (301) 528-5552	TAT if different from Below 5 day			Walk-in Client:
Fax:	☐ 2 weeks			Lab Sampling:
Project Name: Block E Downgradient TCE GW	☒ 1 week			
Site: Middle River Complex, MD	☐ 2 days			Job / SDG No.:
PO# 112IC07896	☐ 1 day			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	VOCs	Sample Specific Notes:
MRC-D2-S	10/31/16	0945	G	AQ	3			X	
MRC-D2-I		0955	G	AQ	3			X	
MRC-D2-D		1012	G	AQ	3			X	
TB-103116		—	G	AQ	2			X	
MRC-D3-S		1045		AQ	3			X	
MRC-D3-I		1050		AQ	3			X	
MRC-D3-D		1110		AQ	3			X	
MRC-D4-S		1252		AQ	3			X	
MRC-D4-I		1310		AQ	3			X	
MRC-D4-D		1322		AQ	3			X	
								2	

240-71528 Chain of Custody

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

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample.
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☒ Unknown

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

Special Instructions/QC Requirements & Comments:

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

Relinquished by:	Company:	Date/Time:	Received by:	Company:	Date/Time:
[signature]	Tetra Tech	10/31/16-1600	[signature]	TestAmerica	10-31-2016/1600
Relinquished by: [signature]	Company: TestAmerica	Date/Time: 10-31-2016/1640	Received by:	Company:	Date/Time:
Relinquished by:	Company:	Date/Time:	Received in Laboratory by: [signature]	Company: TA NC	Date/Time: 11/1/16 0915

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 71528
Canton Facility

Client Tetra Tech Site Name BlakE Cooler unpacked by: [illegible]
Cooler Received on 11/1/16 Opened on 11/1/16
FedEx: 1st Grd (Exp) UPS FAS Stetson Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time 9:15 Storage Location

TestAmerica Cooler # Foam Box (Client Cooler) Box Other
Packing material used: (Bubble Wrap) Foam Plastic Bag None Other
COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF +0.4 °C) Observed Cooler Temp. 1.4 °C Corrected Cooler Temp. 1.8 °C
   IR GUN #36 (CF +1.3°C) Observed Cooler Temp. ____ °C Corrected Cooler Temp. ____ °C
2. Were custody seals on the outside of the cooler(s)? If Yes Quantity 1 (Yes) No
   -Were custody seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? (Yes) No
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 11-15 have been checked at the originating laboratory.
11. Were sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC682547**
12. Were VOAs on the COC? (Yes) No
13. Were air bubbles >6 mm in any VOA vials? Yes (No) NA
14. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # Covered (Yes) ~~No~~ 11/1/16
15. Was a LL Hg or Me Hg trip blank present? Yes (No)

Contacted PM ____ Date ____ by ____ via Verbal Voice Mail Other

Concerning ____

16. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by: GS

17. SAMPLE CONDITION

Sample(s) ____ were received after the recommended holding time had expired.
Sample(s) ____ were received in a broken container.
Sample(s) ____ were received with bubble >6 mm in diameter. (Notify PM)

18. SAMPLE PRESERVATION

Sample(s) ____ were further preserved in the laboratory.
Time preserved: ____ Preservative(s) added/Lot number(s): ____.

Ref: SOP NC-SC-0005, Sample Receiving
L:\QAQC\QA Department\QA TARDIS\Document Control\Work Instructions\In Revision\WI-NC-099-101216 Cooler Receipt Form.doc djl

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: Block E Downgradient TCE GW

TestAmerica Job ID: 240-71528-1

GC/MS VOA

Analysis Batch: 193223

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71528-1	MRC-D2-S	Total/NA	Water	8260C	
240-71528-2	MRC-D2-I	Total/NA	Water	8260C	
240-71528-3	MRC-D2-D	Total/NA	Water	8260C	
240-71528-4	TB-103116	Total/NA	Water	8260C	
240-71528-5	MRC-D3-S	Total/NA	Water	8260C	
240-71528-6	MRC-D3-I	Total/NA	Water	8260C	
240-71528-7	MRC-D3-D	Total/NA	Water	8260C	
240-71528-8	MRC-D4-S	Total/NA	Water	8260C	
240-71528-9	MRC-D4-I	Total/NA	Water	8260C	
240-71528-10	MRC-D4-D	Total/NA	Water	8260C	
MB 180-193223/8	Method Blank	Total/NA	Water	8260C	
LCS 180-193223/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-193223/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 193465

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71528-1 - DL	MRC-D2-S	Total/NA	Water	8260C	
240-71528-2 - DL	MRC-D2-I	Total/NA	Water	8260C	
240-71528-5 - DL	MRC-D3-S	Total/NA	Water	8260C	
240-71528-5 - DL2	MRC-D3-S	Total/NA	Water	8260C	
240-71528-6 - DL	MRC-D3-I	Total/NA	Water	8260C	
240-71528-8 - DL	MRC-D4-S	Total/NA	Water	8260C	
240-71528-9 - DL	MRC-D4-I	Total/NA	Water	8260C	
240-71528-10 - DL	MRC-D4-D	Total/NA	Water	8260C	
MB 180-193465/8	Method Blank	Total/NA	Water	8260C	
LCS 180-193465/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-193465/14	Lab Control Sample Dup	Total/NA	Water	8260C	

Analysis Batch: 193502

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-71528-3 - DL	MRC-D2-D	Total/NA	Water	8260C	
240-71528-7 - DL	MRC-D3-D	Total/NA	Water	8260C	
MB 180-193502/8	Method Blank	Total/NA	Water	8260C	
LCS 180-193502/4	Lab Control Sample	Total/NA	Water	8260C	
LCSD 180-193502/5	Lab Control Sample Dup	Total/NA	Water	8260C	

Method 8260C Low Level

Volatile Organic Compounds (GC/MS) by Method 8260C Low Level

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7092601.D BFB Injection Date: 09/26/2016

Instrument ID: CHHP7 BFB Injection Time: 08:04

Analysis Batch No.: 189143

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	20.3
75	30.0 - 60.0 % of mass 95	55.0
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.9
173	Less than 2.0 % of mass 174	0.4 (0.5) 1
174	50.0 - 120.00 % of mass 95	78.9
175	5.0 - 9.0 % of mass 174	6.2 (7.9) 1
176	95.0 - 101.0 % of mass 174	79.3 (100.5) 1
177	5.0 - 9.0 % of mass 176	5.5 (6.9) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	IC 180-189143/4	7092604.D	09/26/2016	10:49
	IC 180-189143/6	7092606.D	09/26/2016	12:39
	IC 180-189143/7	7092607.D	09/26/2016	13:06
	IC 180-189143/8	7092608.D	09/26/2016	14:00
	IC 180-189143/9	7092609.D	09/26/2016	14:28
	IC 180-189143/10	7092610.D	09/26/2016	15:04
	IC 180-189143/14	7092614.D	09/26/2016	17:48
	ICIS 180-189143/16	7092616.D	09/26/2016	18:43

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110301.D BFB Injection Date: 11/03/2016

Instrument ID: CHHP7 BFB Injection Time: 07:13

Analysis Batch No.: 193223

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.8
75	30.0 - 60.0 % of mass 95	53.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.1
173	Less than 2.0 % of mass 174	0.2 (0.3) 1
174	50.0 - 120.00 % of mass 95	81.7
175	5.0 - 9.0 % of mass 174	6.1 (7.5) 1
176	95.0 - 101.0 % of mass 174	80.9 (99.1) 1
177	5.0 - 9.0 % of mass 176	5.7 (7.1) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-193223/3	7110303.D	11/03/2016	08:32
	LCS 180-193223/4	7110304.D	11/03/2016	08:59
	LCSD 180-193223/5	7110305.D	11/03/2016	09:26
	MB 180-193223/8	7110308.D	11/03/2016	10:48
TB-103116	240-71528-4	7110316.D	11/03/2016	14:31
MRC-D2-S	240-71528-1	7110317.D	11/03/2016	14:59
MRC-D2-I	240-71528-2	7110318.D	11/03/2016	15:26
MRC-D2-D	240-71528-3	7110319.D	11/03/2016	15:53
MRC-D3-S	240-71528-5	7110320.D	11/03/2016	16:21
MRC-D3-I	240-71528-6	7110321.D	11/03/2016	16:49
MRC-D3-D	240-71528-7	7110322.D	11/03/2016	17:17
MRC-D4-S	240-71528-8	7110323.D	11/03/2016	17:44
MRC-D4-I	240-71528-9	7110324.D	11/03/2016	18:12
MRC-D4-D	240-71528-10	7110325.D	11/03/2016	18:39

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110601.D BFB Injection Date: 11/06/2016

Instrument ID: CHHP7 BFB Injection Time: 09:27

Analysis Batch No.: 193465

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.4	
75	30.0 - 60.0 % of mass 95	53.8	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.6	
173	Less than 2.0 % of mass 174	0.5	(0.6) 1
174	50.0 - 120.00 % of mass 95	78.9	
175	5.0 - 9.0 % of mass 174	6.2	(7.8) 1
176	95.0 - 101.0 % of mass 174	78.3	(99.2) 1
177	5.0 - 9.0 % of mass 176	5.5	(7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-193465/2	7110602.D	11/06/2016	10:07
	LCS 180-193465/4	7110604.D	11/06/2016	10:50
	MB 180-193465/8	7110608.D	11/06/2016	12:38
MRC-D2-I DL	240-71528-2 DL	7110612.D	11/06/2016	14:29
	LCSD 180-193465/14	7110614.D	11/06/2016	15:24
MRC-D3-S DL	240-71528-5 DL	7110616.D	11/06/2016	16:20
MRC-D2-S DL	240-71528-1 DL	7110620.D	11/06/2016	18:10
MRC-D3-S DL2	240-71528-5 DL2	7110621.D	11/06/2016	18:37
MRC-D3-I DL	240-71528-6 DL	7110622.D	11/06/2016	19:04
MRC-D4-I DL	240-71528-9 DL	7110623.D	11/06/2016	19:32
MRC-D4-D DL	240-71528-10 DL	7110624.D	11/06/2016	19:59
MRC-D4-S DL	240-71528-8 DL	7110626.D	11/06/2016	20:54

FORM V
GC/MS VOA INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110701.D BFB Injection Date: 11/07/2016

Instrument ID: CHHP7 BFB Injection Time: 08:22

Analysis Batch No.: 193502

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	18.7
75	30.0 - 60.0 % of mass 95	53.7
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	7.2
173	Less than 2.0 % of mass 174	0.5 (0.6) 1
174	50.0 - 120.00 % of mass 95	83.6
175	5.0 - 9.0 % of mass 174	6.5 (7.7) 1
176	95.0 - 101.0 % of mass 174	83.6 (100.1) 1
177	5.0 - 9.0 % of mass 176	5.9 (7.0) 2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	CCVIS 180-193502/3	7110703.D	11/07/2016	09:44
	LCS 180-193502/4	7110704.D	11/07/2016	10:11
	LCSD 180-193502/5	7110705.D	11/07/2016	10:37
	MB 180-193502/8	7110708.D	11/07/2016	12:01
MRC-D2-D DL	240-71528-3 DL	7110711.D	11/07/2016	13:24
MRC-D3-D DL	240-71528-7 DL	7110712.D	11/07/2016	13:52

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	IC 180-189143/4	7092604.D
Level 2	IC 180-189143/14	7092614.D
Level 3	ICIS 180-189143/16	7092616.D
Level 4	IC 180-189143/6	7092606.D
Level 5	IC 180-189143/7	7092607.D
Level 6	IC 180-189143/8	7092608.D
Level 7	IC 180-189143/9	7092609.D
Level 8	IC 180-189143/10	7092610.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Dichlorodifluoromethane	0.2179 0.3141	0.2842 0.3492	0.2337 0.3123	0.2879	0.2871	Ave		0.2858			0.1000	15.0		20.0			
Chloromethane	0.2676 0.3036	0.3162 0.3345	0.2777 0.2907	0.2984	0.2934	Ave		0.2978			0.1000	7.1		20.0			
Vinyl chloride	0.2365 0.2921	0.3117 0.3146	0.2595 0.2817	0.2850	0.2858	Ave		0.2834			0.1000	9.1		20.0			
1,3-Butadiene	0.2510 0.2653	0.2811 0.2833	0.2224 0.2370	0.2670	0.2634	Ave		0.2588			0.0100	8.1		20.0			
Bromomethane	0.1332 0.1082	0.1406 0.1179	0.1121 0.0941	0.1036	0.1075	Ave		0.1147			0.0500	13.5		20.0			
Chloroethane	0.1146 0.1697	0.1821 0.1891	0.1507 0.1630	0.1642	0.1655	Ave		0.1624			0.0500	14.0		20.0			
Dichlorofluoromethane	0.3260 0.4070	0.4841 0.4543	0.4227 0.4156	0.3989	0.4053	Ave		0.4142			0.0100	11.1		20.0			
Trichlorofluoromethane	0.1629 0.2581	0.3173 +++++	0.2730 +++++	0.2975	0.3075	Lin2	-0.656	0.3010			0.1000				0.9900		0.9900
Ethyl ether	0.1691 0.2325	0.2645 0.2560	0.2470 0.2227	0.2195	0.2225	Ave		0.2292			0.0100	12.9		20.0			
1,1-Dichloroethene	0.1820 0.2431	0.2930 0.2607	0.2415 0.2544	0.2383	0.2366	Ave		0.2437			0.1000	12.7		20.0			
1,1,2-Trichloro-1,2,2-trifluoroethane	0.1432 0.2053	0.2504 0.2236	0.2205 0.2197	0.2063	0.2049	Ave		0.2092			0.1000	14.6		20.0			
Acetone	0.1137 0.1090	0.1641 0.1204	0.1455 0.1131	0.1235	0.1149	Ave		0.1255			0.0500	15.3		20.0			
Iodomethane	0.3033 0.3568	0.4649 0.3899	0.4058 0.3722	0.3643	0.3601	Ave		0.3772			0.0100	12.3		20.0			
Carbon disulfide	0.5459 0.6651	0.8723 0.7283	0.7393 0.7185	0.6767	0.6756	Ave		0.7027			0.1000	13.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Allyl chloride	0.1264 0.1695	0.1947 0.1771	0.1703 0.1723	0.1619	0.1580	Ave		0.1663			0.0100	11.7		20.0			
Methyl acetate	0.2021 0.2400	0.3351 0.2587	0.2979 0.2283	0.2739	0.2613	Ave		0.2622			0.1000	15.8		20.0			
Methylene Chloride	0.1657 0.2791	0.3776 0.3034	0.3220 0.2852	0.2857	0.2797	Lin1	-0.152	0.2930			0.1000				0.9930		0.9900
tert-Butyl alcohol	0.7004 1.0374	1.3485 1.1265	1.1211 1.2340	0.9915	0.9727	Ave		1.0665			0.0100	18.2		20.0			
Acrylonitrile	0.1004 0.1158	0.1675 0.1230	0.1468 0.1117	0.1312	0.1257	Ave		0.1278			0.0100	16.6		20.0			
trans-1,2-Dichloroethene	0.2070 0.2103	0.3081 0.2228	0.2478 0.2148	0.2240	0.2172	Ave		0.2315			0.1000	14.4		20.0			
Methyl tert-butyl ether	0.5980 0.7181	1.0129 0.7858	0.9069 0.7187	0.7901	0.7461	Ave		0.7846			0.1000	16.1		20.0			
Hexane	0.1791 0.2303	0.2985 0.2527	0.2432 0.2616	0.2270	0.2278	Ave		0.2400			0.0100	14.2		20.0			
1,1-Dichloroethane	0.3729 0.4479	0.5422 0.4886	0.4921 0.4641	0.4521	0.4458	Ave		0.4632			0.2000	10.5		20.0			
2,2-Dichloropropane	0.0183 0.1894	0.1972 0.2080	0.1542 0.1951	0.1743	0.1715	Lin1	-0.912	0.1975			0.0100				0.9940		0.9900
cis-1,2-Dichloroethene	0.2103 0.2851	0.3563 0.3022	0.3193 0.2809	0.2825	0.2813	Ave		0.2897			0.1000	14.3		20.0			
2-Butanone (MEK)	0.1774 0.1696	0.2692 0.1920	0.2260 0.1765	0.1933	0.1816	Ave		0.1982			0.0500	16.9		20.0			
Chlorobromomethane	0.1026 0.1362	0.1700 0.1460	0.1545 0.1374	0.1365	0.1361	Ave		0.1399			0.0100	13.8		20.0			
Tetrahydrofuran	0.0915 0.1153	0.1533 0.1253	0.1422 0.1173	0.1290	0.1201	Ave		0.1242			0.0100	14.9		20.0			
Chloroform	0.3686 0.4556	0.6018 0.4922	0.5261 0.4640	0.4652	0.4524	Ave		0.4782			0.2000	14.0		20.0			
1,1,1-Trichloroethane	0.2516 0.3202	0.3902 0.3556	0.3326 0.3371	0.3210	0.3272	Ave		0.3294			0.1000	11.9		20.0			
Cyclohexane	0.2582 0.3084	0.4063 0.3262	0.3307 0.3225	0.3227	0.3119	Ave		0.3234			0.1000	12.6		20.0			
Carbon tetrachloride	0.2161 0.2595	0.3362 0.2850	0.2745 0.2827	0.2636	0.2573	Ave		0.2719			0.1000	12.4		20.0			
1,1-Dichloropropene	0.2683 0.2953	0.4162 0.3202	0.3356 0.3040	0.3127	0.3029	Ave		0.3194			0.0100	13.7		20.0			
Isobutyl alcohol	0.0052 0.0103	0.0126 0.0111	0.0114 0.0111	0.0110	0.0104	Lin2	-0.727	0.0115			0.0100				0.9910		0.9900

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Benzene	0.8519 0.8869	1.2881 0.9392	1.0876 0.8750	0.9525	0.9293	Ave		0.9763			0.5000	14.9		20.0			
1,2-Dichloroethane	0.2963 0.3563	0.4841 0.3880	0.4278 0.3603	0.3758	0.3534	Ave		0.3803			0.1000	14.7		20.0			
n-Heptane	0.0511 0.1681	0.2154 0.1849	0.1846 0.1906	0.1682	0.1669	Lin1	-0.482	0.1842			0.0100				0.9930		0.9900
Trichloroethene	0.2014 0.2497	0.3308 0.2665	0.2825 0.2643	0.2443	0.2424	Ave		0.2602			0.2000	14.3		20.0			
Methylcyclohexane	0.2438 0.3060	0.3963 0.3365	0.3092 0.3372	0.3076	0.3002	Ave		0.3171			0.1000	13.6		20.0			
1,2-Dichloropropane	0.2169 0.2362	0.3474 0.2510	0.2990 0.2404	0.2514	0.2447	Ave		0.2609			0.1000	16.1		20.0			
1,4-Dioxane	0.0020 0.0030	0.0031 0.0031	0.0031 0.0028	0.0036	0.0034	Ave		0.0030		*	0.0100	15.9		20.0			
Dibromomethane	0.1323 0.1691	0.2289 0.1851	0.2063 0.1736	0.1808	0.1744	Ave		0.1813			0.0100	15.5		20.0			
Dichlorobromomethane	0.2782 0.3609	0.4768 0.3958	0.4304 0.3917	0.3572	0.3617	Ave		0.3816			0.2000	15.3		20.0			
cis-1,3-Dichloropropene	0.3385 0.4467	0.5671 0.4988	0.5002 0.4839	0.4443	0.4379	Ave		0.4647			0.2000	14.2		20.0			
4-Methyl-2-pentanone (MIBK)	1.6126 1.3798	2.2490 1.5915	1.9413 1.3932	1.5617	1.5200	Ave		1.6561			0.1000	17.9		20.0			
Toluene	3.8305 3.6064	5.7820 3.9227	4.7202 3.5596	3.9784	3.8922	Ave		4.1615			0.4000	17.9		20.0			
trans-1,3-Dichloropropene	1.2011 1.5998	2.0335 1.8165	1.7676 1.6710	1.6105	1.5864	Ave		1.6608			0.1000	14.4		20.0			
Ethyl methacrylate	1.3328 1.6159	2.2860 1.8233	2.0513 1.6282	1.7983	1.6913	Ave		1.7784			0.0100	16.3		20.0			
1,1,2-Trichloroethane	0.9148 0.9675	1.4957 1.0751	1.2663 0.9952	1.0856	1.0206	Ave		1.1026			0.1000	17.3		20.0			
Tetrachloroethene	0.6669 0.6914	0.9814 0.7628	0.8037 0.7154	0.7531	0.7358	Ave		0.7638			0.2000	12.8		20.0			
1,3-Dichloropropane	1.6617 1.7212	2.6097 1.9152	2.2145 1.7245	1.8712	1.7929	Ave		1.9389			0.0100	16.6		20.0			
2-Hexanone	1.1486 0.9578	1.5985 1.1140	1.3512 0.9908	1.1176	1.0543	Ave		1.1666			0.1000	18.1		20.0			
Chlorodibromomethane	0.9163 1.0604	1.4978 1.2053	1.3052 1.1406	1.1048	1.0696	Ave		1.1625			0.1000	15.2		20.0			
Ethylene Dibromide	0.8602 1.0575	1.5658 1.2147	1.3738 1.1576	1.1406	1.0786	Ave		1.1811			0.1000	18.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Chlorobenzene	2.1373 2.4716	3.7502 2.7756	3.1254 2.5699	2.6668	2.5606	Ave		2.7572			0.5000	17.7		20.0			
1,1,1,2-Tetrachloroethane	0.7418 0.8210	1.2658 0.9063	1.0565 0.8704	0.8828	0.8542	Ave		0.9249			0.0100	17.7		20.0			
Ethylbenzene	1.0703 1.2112	1.9048 1.3306	1.5639 1.2366	1.3548	1.3186	Ave		1.3739			0.1000	18.7		20.0			
m-Xylene & p-Xylene	1.4944 1.5914	2.3486 1.7707	1.9790 1.6645	1.6860	1.6595	Ave		1.7743			0.1000	15.3		20.0			
o-Xylene	1.4433 1.6680	2.5343 1.8502	2.1049 1.7621	1.7713	1.7577	Ave		1.8615			0.3000	17.6		20.0			
Styrene	2.5047 2.6078	4.1985 2.8599	3.4341 2.5920	2.9259	2.8733	Ave		2.9995			0.3000	18.8		20.0			
Bromoform	0.5810 0.8562	1.1761 0.9661	0.9929 0.9368	0.8817	0.8334	Ave		0.9030			0.1000	18.7		20.0			
Isopropylbenzene	3.6138 3.8657	5.9360 4.2285	4.7808 4.0055	4.2275	4.1180	Ave		4.3470			0.1000	16.7		20.0			
Bromobenzene	0.6911 0.8461	1.1413 0.9466	0.9772 0.8998	0.8425	0.8492	Ave		0.8992			0.0100	14.5		20.0			
1,1,2,2-Tetrachloroethane	1.2649 1.3620	2.2817 +++++	1.9504 +++++	1.6093	1.5076	Qua	6.0786	1.7793	-0.002649		0.3000				0.9910		0.9900
trans-1,4-Dichloro-2-butene	0.2209 0.3370	0.4326 0.3765	0.3829 0.3771	0.3312	0.3193	Ave		0.3472			0.0100	18.0		20.0			
1,2,3-Trichloropropane	0.3076 0.3677	0.5199 0.3988	0.4322 0.3952	0.3730	0.3560	Ave		0.3938			0.0100	15.9		20.0			
N-Propylbenzene	0.6255 0.7475	1.0051 0.8170	0.8094 0.8203	0.7297	0.7460	Ave		0.7876			0.0100	13.8		20.0			
2-Chlorotoluene	0.6043 0.7165	0.9337 0.7843	0.7905 0.7979	0.6883	0.7128	Ave		0.7535			0.0100	12.9		20.0			
1,3,5-Trimethylbenzene	1.9636 2.4649	3.3566 2.6964	2.7316 2.6708	2.4263	2.4303	Ave		2.5925			0.0100	15.2		20.0			
4-Chlorotoluene	0.5700 0.7022	0.9908 0.7736	0.8267 0.7665	0.6900	0.6893	Ave		0.7511			0.0100	16.4		20.0			
tert-Butylbenzene	1.6167 2.0569	2.5893 2.2904	2.1566 2.3010	1.9874	2.0667	Ave		2.1331			0.0100	13.3		20.0			
1,2,4-Trimethylbenzene	2.1170 2.5820	3.4836 2.8188	2.8895 2.7477	2.5886	2.5961	Ave		2.7279			0.0100	14.1		20.0			
sec-Butylbenzene	2.1916 2.8490	3.7515 3.1128	2.9348 3.1568	2.7594	2.8204	Ave		2.9470			0.0100	14.9		20.0			
1,3-Dichlorobenzene	1.2146 1.4932	2.0458 1.6497	1.6722 1.6012	1.4765	1.4856	Ave		1.5798			0.6000	15.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
4-Isopropyltoluene	1.8414 2.1722	3.0088 2.3588	2.4452 2.4015	2.1851	2.2070	Ave		2.3275			0.0100	14.3		20.0			
1,4-Dichlorobenzene	1.1438 1.4044	1.9856 1.5595	1.6515 1.5384	1.4049	1.3896	Ave		1.5097			0.5000	16.2		20.0			
n-Butylbenzene	1.5412 2.0938	2.6771 2.2980	2.1689 2.3193	2.0379	2.0433	Ave		2.1475			0.0100	15.0		20.0			
1,2-Dichlorobenzene	1.1859 1.4372	2.0459 1.5750	1.7348 1.5244	1.4647	1.4721	Ave		1.5550			0.4000	16.1		20.0			
1,2-Dibromo-3-Chloropropane	0.1880 0.3257	0.3659 0.3745	0.3367 +++++	0.3072	0.3062	Ave		0.3149			0.0500	19.7		20.0			
1,2,4-Trichlorobenzene	0.7459 0.9592	1.1515 1.0660	1.0018 1.0987	0.9431	0.9193	Ave		0.9857			0.2000	12.8		20.0			
Hexachlorobutadiene	0.2786 0.3397	0.4515 0.3690	0.3594 0.4164	0.3444	0.3335	Ave		0.3616			0.0100	14.6		20.0			
Naphthalene	2.0818 2.5039	3.0098 2.7201	2.8047 2.7449	2.6949	2.5403	Ave		2.6376			0.0100	10.4		20.0			
1,2,3-Trichlorobenzene	0.6066 0.7449	0.8796 0.8211	0.8137 0.8417	0.7756	0.7371	Ave		0.7775			0.0100	10.8		20.0			
Dibromofluoromethane (Surr)	+++++ 0.1893	0.2501 0.1863	0.2425 +++++	0.1875	0.1916	Ave		0.2079				14.4		20.0			
1,2-Dichloroethane-d4 (Surr)	+++++ 0.2697	0.3592 0.2719	0.3600 +++++	0.2830	0.2793	Ave		0.3039				14.3		20.0			
Toluene-d8 (Surr)	+++++ 2.8356	4.1505 2.8439	3.6997 +++++	2.8849	3.0262	Lin2	39.984	2.6134							0.9900		0.9900
4-Bromofluorobenzene (Surr)	+++++ 1.1601	1.5804 1.2107	1.4387 1.0659	1.1662	1.1881	Ave		1.2586				14.5		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193223/3 Calibration Date: 11/03/2016 08:32

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2858	0.2565	0.1000	8.97	10.0	-10.3	20.0
Chloromethane	Ave	0.2978	0.2521	0.1000	8.47	10.0	-15.3	20.0
Vinyl chloride	Ave	0.2834	0.2340	0.1000	8.26	10.0	-17.4	20.0
Bromomethane	Ave	0.1147	0.1111	0.0500	9.69	10.0	-3.1	20.0
Chloroethane	Ave	0.1624	0.1277	0.0500	7.87	10.0	-21.3*	20.0
Trichlorofluoromethane	Lin2		0.2535	0.1000	8.86	10.0	-11.4	20.0
Ethyl ether	Ave	0.2292	0.2171	0.0100	9.47	10.0	-5.3	20.0
1,1-Dichloroethene	Ave	0.2437	0.2187	0.1000	8.98	10.0	-10.2	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2092	0.2068	0.1000	9.88	10.0	-1.2	20.0
Acetone	Ave	0.1255	0.0951	0.0500	15.2	20.0	-24.2*	20.0
Iodomethane	Ave	0.3772	0.3362	0.0100	8.91	10.0	-10.9	20.0
Carbon disulfide	Ave	0.7027	0.6163	0.1000	8.77	10.0	-12.3	20.0
Allyl chloride	Ave	0.1663	0.1477	0.0100	8.88	10.0	-11.2	20.0
Methyl acetate	Ave	0.2622	0.2674	0.1000	51.0	50.0	2.0	20.0
Methylene Chloride	Lin1		0.2668	0.1000	9.21	10.0	-7.9	20.0
tert-Butyl alcohol	Ave	1.067	0.8965	0.0100	84.1	100	-15.9	20.0
Acrylonitrile	Ave	0.1278	0.1263	0.0100	98.9	100	-1.1	20.0
trans-1,2-Dichloroethene	Ave	0.2315	0.2097	0.1000	9.06	10.0	-9.4	20.0
Methyl tert-butyl ether	Ave	0.7846	0.7729	0.1000	9.85	10.0	-1.5	20.0
Hexane	Ave	0.2400	0.2273	0.0100	9.47	10.0	-5.3	20.0
1,1-Dichloroethane	Ave	0.4632	0.4256	0.2000	9.19	10.0	-8.1	20.0
2,2-Dichloropropane	Lin1		0.2062	0.0100	11.4	10.0	13.7	20.0
cis-1,2-Dichloroethene	Ave	0.2897	0.2720	0.1000	9.39	10.0	-6.1	20.0
2-Butanone (MEK)	Ave	0.1982	0.1583	0.0500	16.0	20.0	-20.1*	20.0
Chlorobromomethane	Ave	0.1399	0.1317	0.0100	9.41	10.0	-5.9	20.0
Tetrahydrofuran	Ave	0.1242	0.1205	0.0100	19.4	20.0	-3.0	20.0
Chloroform	Ave	0.4782	0.4388	0.2000	9.17	10.0	-8.3	20.0
1,1,1-Trichloroethane	Ave	0.3294	0.3111	0.1000	9.44	10.0	-5.6	20.0
Cyclohexane	Ave	0.3234	0.3235	0.1000	10.0	10.0	0.0	20.0
Carbon tetrachloride	Ave	0.2719	0.2264	0.1000	8.33	10.0	-16.7	20.0
1,1-Dichloropropene	Ave	0.3194	0.3108	0.0100	9.73	10.0	-2.7	20.0
Isobutyl alcohol	Lin2		0.0130	0.0100	295	250	18.1	20.0
Benzene	Ave	0.9763	0.9502	0.5000	9.73	10.0	-2.7	20.0
1,2-Dichloroethane	Ave	0.3803	0.3495	0.1000	9.19	10.0	-8.1	20.0
n-Heptane	Lin1		0.1777	0.0100	10.2	10.0	1.7	20.0
Trichloroethene	Ave	0.2602	0.2436	0.2000	9.36	10.0	-6.4	20.0
Methylcyclohexane	Ave	0.3171	0.3036	0.1000	9.57	10.0	-4.3	20.0
1,2-Dichloropropane	Ave	0.2609	0.2432	0.1000	9.32	10.0	-6.8	20.0
1,4-Dioxane	Ave	0.0030	0.0035*	0.0100	234	200	17.2	20.0
Dibromomethane	Ave	0.1813	0.1625	0.0100	8.96	10.0	-10.4	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193223/3 Calibration Date: 11/03/2016 08:32

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorobromomethane	Ave	0.3816	0.3119	0.2000	8.17	10.0	-18.3	20.0
cis-1,3-Dichloropropene	Ave	0.4647	0.4066	0.2000	8.75	10.0	-12.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.656	1.260	0.1000	15.2	20.0	-23.9*	20.0
Toluene	Ave	4.162	3.979	0.4000	9.56	10.0	-4.4	20.0
trans-1,3-Dichloropropene	Ave	1.661	1.495	0.1000	9.00	10.0	-10.0	20.0
Ethyl methacrylate	Ave	1.778	1.717	0.0100	9.66	10.0	-3.4	20.0
1,1,2-Trichloroethane	Ave	1.103	1.030	0.1000	9.34	10.0	-6.6	20.0
Tetrachloroethene	Ave	0.7638	0.7391	0.2000	9.68	10.0	-3.2	20.0
1,3-Dichloropropane	Ave	1.939	1.793	0.0100	9.25	10.0	-7.5	20.0
2-Hexanone	Ave	1.167	0.8795	0.1000	15.1	20.0	-24.6*	20.0
Chlorodibromomethane	Ave	1.163	0.9012	0.1000	7.75	10.0	-22.5*	20.0
Ethylene Dibromide	Ave	1.181	1.081	0.1000	9.16	10.0	-8.4	20.0
Chlorobenzene	Ave	2.757	2.460	0.5000	8.92	10.0	-10.8	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9249	0.7743	0.0100	8.37	10.0	-16.3	20.0
Ethylbenzene	Ave	1.374	1.242	0.1000	9.04	10.0	-9.6	20.0
m-Xylene & p-Xylene	Ave	1.774	1.557	0.1000	8.78	10.0	-12.2	20.0
o-Xylene	Ave	1.861	1.691	0.3000	9.08	10.0	-9.2	20.0
Styrene	Ave	3.000	2.654	0.3000	8.85	10.0	-11.5	20.0
Bromoform	Ave	0.9030	0.6194	0.1000	6.86	10.0	-31.4*	20.0
Isopropylbenzene	Ave	4.347	3.878	0.1000	8.92	10.0	-10.8	20.0
1,1,2,2-Tetrachloroethane	Qua		1.463	0.3000	8.02	10.0	-19.8	20.0
Bromobenzene	Ave	0.8992	0.7823	0.0100	8.70	10.0	-13.0	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3472	0.2893	0.0100	8.33	10.0	-16.7	20.0
1,2,3-Trichloropropane	Ave	0.3938	0.3374	0.0100	8.57	10.0	-14.3	20.0
N-Propylbenzene	Ave	0.7876	0.6745	0.0100	8.56	10.0	-14.4	20.0
2-Chlorotoluene	Ave	0.7535	0.6321	0.0100	8.39	10.0	-16.1	20.0
1,3,5-Trimethylbenzene	Ave	2.593	2.152	0.0100	8.30	10.0	-17.0	20.0
4-Chlorotoluene	Ave	0.7511	0.6544	0.0100	8.71	10.0	-12.9	20.0
tert-Butylbenzene	Ave	2.133	1.760	0.0100	8.25	10.0	-17.5	20.0
1,2,4-Trimethylbenzene	Ave	2.728	2.320	0.0100	8.50	10.0	-15.0	20.0
sec-Butylbenzene	Ave	2.947	2.396	0.0100	8.13	10.0	-18.7	20.0
1,3-Dichlorobenzene	Ave	1.580	1.359	0.6000	8.60	10.0	-14.0	20.0
4-Isopropyltoluene	Ave	2.328	1.886	0.0100	8.10	10.0	-19.0	20.0
1,4-Dichlorobenzene	Ave	1.510	1.289	0.5000	8.54	10.0	-14.6	20.0
n-Butylbenzene	Ave	2.147	1.704	0.0100	7.94	10.0	-20.6*	20.0
1,2-Dichlorobenzene	Ave	1.555	1.381	0.4000	8.88	10.0	-11.2	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3149	0.2151	0.0500	6.83	10.0	-31.7*	20.0
1,2,4-Trichlorobenzene	Ave	0.9857	0.7027	0.2000	7.13	10.0	-28.7*	20.0
Hexachlorobutadiene	Ave	0.3616	0.2946	0.0100	8.15	10.0	-18.5	20.0
Naphthalene	Ave	2.638	1.868	0.0100	7.08	10.0	-29.2*	20.0
1,2,3-Trichlorobenzene	Ave	0.7775	0.5431	0.0100	6.99	10.0	-30.1*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193223/3 Calibration Date: 11/03/2016 08:32

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110303.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2079	0.1774		8.53	10.0	-14.7	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3039	0.2669		8.78	10.0	-12.2	20.0
Toluene-d8 (Surr)	Lin2		2.950		8.23	10.0	-17.7	20.0
4-Bromofluorobenzene (Surr)	Ave	1.259	1.147		9.11	10.0	-8.9	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193465/2 Calibration Date: 11/06/2016 10:07

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2858	0.2693	0.1000	9.42	10.0	-5.8	20.0
Chloromethane	Ave	0.2978	0.2648	0.1000	8.89	10.0	-11.1	20.0
Vinyl chloride	Ave	0.2834	0.2438	0.1000	8.60	10.0	-14.0	20.0
Bromomethane	Ave	0.1147	0.1348	0.0500	11.8	10.0	17.6	20.0
Chloroethane	Ave	0.1624	0.1322	0.0500	8.14	10.0	-18.6	20.0
Trichlorofluoromethane	Lin2		0.2445	0.1000	8.56	10.0	-14.4	20.0
Ethyl ether	Ave	0.2292	0.1994	0.0100	8.70	10.0	-13.0	20.0
1,1-Dichloroethene	Ave	0.2437	0.2154	0.1000	8.84	10.0	-11.6	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2092	0.1926	0.1000	9.20	10.0	-8.0	20.0
Acetone	Ave	0.1255	0.1566	0.0500	24.9	20.0	24.7*	20.0
Iodomethane	Ave	0.3772	0.3267	0.0100	8.66	10.0	-13.4	20.0
Carbon disulfide	Ave	0.7027	0.6267	0.1000	8.92	10.0	-10.8	20.0
Allyl chloride	Ave	0.1663	0.1461	0.0100	8.79	10.0	-12.1	20.0
Methyl acetate	Ave	0.2622	0.2607	0.1000	49.7	50.0	-0.6	20.0
Methylene Chloride	Lin1		0.2588	0.1000	8.94	10.0	-10.6	20.0
tert-Butyl alcohol	Ave	1.067	0.8865	0.0100	83.1	100	-16.9	20.0
Acrylonitrile	Ave	0.1278	0.1240	0.0100	97.0	100	-3.0	20.0
trans-1,2-Dichloroethene	Ave	0.2315	0.2131	0.1000	9.21	10.0	-7.9	20.0
Methyl tert-butyl ether	Ave	0.7846	0.7800	0.1000	9.94	10.0	-0.6	20.0
Hexane	Ave	0.2400	0.2160	0.0100	9.00	10.0	-10.0	20.0
1,1-Dichloroethane	Ave	0.4632	0.4337	0.2000	9.36	10.0	-6.4	20.0
2,2-Dichloropropane	Lin1		0.2202	0.0100	12.1	10.0	20.7*	20.0
cis-1,2-Dichloroethene	Ave	0.2897	0.2702	0.1000	9.33	10.0	-6.7	20.0
2-Butanone (MEK)	Ave	0.1982	0.1933	0.0500	19.5	20.0	-2.5	20.0
Chlorobromomethane	Ave	0.1399	0.1318	0.0100	9.42	10.0	-5.8	20.0
Tetrahydrofuran	Ave	0.1242	0.1250	0.0100	20.1	20.0	0.6	20.0
Chloroform	Ave	0.4782	0.4481	0.2000	9.37	10.0	-6.3	20.0
1,1,1-Trichloroethane	Ave	0.3294	0.3197	0.1000	9.71	10.0	-2.9	20.0
Cyclohexane	Ave	0.3234	0.3175	0.1000	9.82	10.0	-1.8	20.0
Carbon tetrachloride	Ave	0.2719	0.2405	0.1000	8.85	10.0	-11.5	20.0
1,1-Dichloropropene	Ave	0.3194	0.3063	0.0100	9.59	10.0	-4.1	20.0
Isobutyl alcohol	Lin2		0.0132	0.0100	301	250	20.6*	20.0
Benzene	Ave	0.9763	0.9205	0.5000	9.43	10.0	-5.7	20.0
1,2-Dichloroethane	Ave	0.3803	0.3467	0.1000	9.12	10.0	-8.8	20.0
n-Heptane	Lin1		0.1612	0.0100	9.28	10.0	-7.2	20.0
Trichloroethene	Ave	0.2602	0.2497	0.2000	9.59	10.0	-4.1	20.0
Methylcyclohexane	Ave	0.3171	0.2983	0.1000	9.41	10.0	-5.9	20.0
1,2-Dichloropropane	Ave	0.2609	0.2458	0.1000	9.42	10.0	-5.8	20.0
1,4-Dioxane	Ave	0.0030	0.0043*	0.0100	285	200	42.7*	20.0
Dibromomethane	Ave	0.1813	0.1683	0.0100	9.28	10.0	-7.2	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193465/2 Calibration Date: 11/06/2016 10:07

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorobromomethane	Ave	0.3816	0.3217	0.2000	8.43	10.0	-15.7	20.0
cis-1,3-Dichloropropene	Ave	0.4647	0.4300	0.2000	9.25	10.0	-7.5	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.656	1.288	0.1000	15.6	20.0	-22.2*	20.0
Toluene	Ave	4.162	3.920	0.4000	9.42	10.0	-5.8	20.0
trans-1,3-Dichloropropene	Ave	1.661	1.578	0.1000	9.50	10.0	-5.0	20.0
Ethyl methacrylate	Ave	1.778	1.717	0.0100	9.65	10.0	-3.5	20.0
1,1,2-Trichloroethane	Ave	1.103	1.006	0.1000	9.12	10.0	-8.8	20.0
Tetrachloroethene	Ave	0.7638	0.7015	0.2000	9.18	10.0	-8.2	20.0
1,3-Dichloropropane	Ave	1.939	1.799	0.0100	9.28	10.0	-7.2	20.0
2-Hexanone	Ave	1.167	1.021	0.1000	17.5	20.0	-12.5	20.0
Chlorodibromomethane	Ave	1.163	0.9579	0.1000	8.24	10.0	-17.6	20.0
Ethylene Dibromide	Ave	1.181	1.121	0.1000	9.49	10.0	-5.1	20.0
Chlorobenzene	Ave	2.757	2.481	0.5000	9.00	10.0	-10.0	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9249	0.7991	0.0100	8.64	10.0	-13.6	20.0
Ethylbenzene	Ave	1.374	1.287	0.1000	9.37	10.0	-6.3	20.0
m-Xylene & p-Xylene	Ave	1.774	1.598	0.1000	9.01	10.0	-9.9	20.0
o-Xylene	Ave	1.861	1.730	0.3000	9.29	10.0	-7.1	20.0
Styrene	Ave	3.000	2.737	0.3000	9.12	10.0	-8.8	20.0
Bromoform	Ave	0.9030	0.7025	0.1000	7.78	10.0	-22.2*	20.0
Isopropylbenzene	Ave	4.347	4.013	0.1000	9.23	10.0	-7.7	20.0
1,1,2,2-Tetrachloroethane	Qua		1.490	0.3000	8.19	10.0	-18.1	20.0
Bromobenzene	Ave	0.8992	0.7975	0.0100	8.87	10.0	-11.3	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3472	0.2705	0.0100	7.79	10.0	-22.1*	20.0
1,2,3-Trichloropropane	Ave	0.3938	0.3365	0.0100	8.55	10.0	-14.5	20.0
N-Propylbenzene	Ave	0.7876	0.6281	0.0100	7.98	10.0	-20.2*	20.0
2-Chlorotoluene	Ave	0.7535	0.6195	0.0100	8.22	10.0	-17.8	20.0
1,3,5-Trimethylbenzene	Ave	2.593	2.110	0.0100	8.14	10.0	-18.6	20.0
4-Chlorotoluene	Ave	0.7511	0.6153	0.0100	8.19	10.0	-18.1	20.0
tert-Butylbenzene	Ave	2.133	1.733	0.0100	8.13	10.0	-18.7	20.0
1,2,4-Trimethylbenzene	Ave	2.728	2.263	0.0100	8.29	10.0	-17.1	20.0
sec-Butylbenzene	Ave	2.947	2.389	0.0100	8.11	10.0	-18.9	20.0
1,3-Dichlorobenzene	Ave	1.580	1.310	0.6000	8.29	10.0	-17.1	20.0
4-Isopropyltoluene	Ave	2.328	1.880	0.0100	8.08	10.0	-19.2	20.0
1,4-Dichlorobenzene	Ave	1.510	1.242	0.5000	8.23	10.0	-17.7	20.0
n-Butylbenzene	Ave	2.147	1.713	0.0100	7.98	10.0	-20.2*	20.0
1,2-Dichlorobenzene	Ave	1.555	1.317	0.4000	8.47	10.0	-15.3	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3149	0.2583	0.0500	8.20	10.0	-18.0	20.0
1,2,4-Trichlorobenzene	Ave	0.9857	0.7534	0.2000	7.64	10.0	-23.6*	20.0
Hexachlorobutadiene	Ave	0.3616	0.3134	0.0100	8.67	10.0	-13.3	20.0
Naphthalene	Ave	2.638	4.826	0.0100	18.3	10.0	83.0*	20.0
1,2,3-Trichlorobenzene	Ave	0.7775	0.5448	0.0100	7.01	10.0	-29.9*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193465/2 Calibration Date: 11/06/2016 10:07

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110602.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2079	0.1844		8.87	10.0	-11.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3039	0.2719		8.95	10.0	-10.5	20.0
Toluene-d8 (Surr)	Lin2		2.975		8.32	10.0	-16.8	20.0
4-Bromofluorobenzene (Surr)	Ave	1.259	1.246		9.90	10.0	-1.0	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193502/3 Calibration Date: 11/07/2016 09:44

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110703.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.2858	0.3032	0.1000	10.6	10.0	6.1	20.0
Chloromethane	Ave	0.2978	0.2735	0.1000	9.18	10.0	-8.2	20.0
Vinyl chloride	Ave	0.2834	0.2515	0.1000	8.87	10.0	-11.3	20.0
Bromomethane	Ave	0.1147	0.1104	0.0500	9.63	10.0	-3.7	20.0
Chloroethane	Ave	0.1624	0.1309	0.0500	8.06	10.0	-19.4	20.0
Trichlorofluoromethane	Lin2		0.2623	0.1000	9.15	10.0	-8.5	20.0
Ethyl ether	Ave	0.2292	0.2022	0.0100	8.82	10.0	-11.8	20.0
1,1-Dichloroethene	Ave	0.2437	0.2182	0.1000	8.95	10.0	-10.5	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2092	0.2131	0.1000	10.2	10.0	1.8	20.0
Acetone	Ave	0.1255	0.1670	0.0500	26.6	20.0	33.0*	20.0
Iodomethane	Ave	0.3772	0.3315	0.0100	8.79	10.0	-12.1	20.0
Carbon disulfide	Ave	0.7027	0.6291	0.1000	8.95	10.0	-10.5	20.0
Allyl chloride	Ave	0.1663	0.1435	0.0100	8.63	10.0	-13.7	20.0
Methyl acetate	Ave	0.2622	0.2740	0.1000	52.2	50.0	4.5	20.0
Methylene Chloride	Lin1		0.2673	0.1000	9.23	10.0	-7.7	20.0
tert-Butyl alcohol	Ave	1.067	0.9118	0.0100	85.5	100	-14.5	20.0
Acrylonitrile	Ave	0.1278	0.1308	0.0100	102	100	2.4	20.0
trans-1,2-Dichloroethene	Ave	0.2315	0.2178	0.1000	9.41	10.0	-5.9	20.0
Methyl tert-butyl ether	Ave	0.7846	0.7736	0.1000	9.86	10.0	-1.4	20.0
Hexane	Ave	0.2400	0.2459	0.0100	10.2	10.0	2.4	20.0
1,1-Dichloroethane	Ave	0.4632	0.4437	0.2000	9.58	10.0	-4.2	20.0
2,2-Dichloropropane	Lin1		0.1801	0.0100	10.0	10.0	0.4	20.0
cis-1,2-Dichloroethene	Ave	0.2897	0.2689	0.1000	9.28	10.0	-7.2	20.0
2-Butanone (MEK)	Ave	0.1982	0.2101	0.0500	21.2	20.0	6.0	20.0
Chlorobromomethane	Ave	0.1399	0.1327	0.0100	9.49	10.0	-5.1	20.0
Tetrahydrofuran	Ave	0.1242	0.1306	0.0100	21.0	20.0	5.1	20.0
Chloroform	Ave	0.4782	0.4436	0.2000	9.28	10.0	-7.2	20.0
1,1,1-Trichloroethane	Ave	0.3294	0.3112	0.1000	9.45	10.0	-5.5	20.0
Cyclohexane	Ave	0.3234	0.3473	0.1000	10.7	10.0	7.4	20.0
Carbon tetrachloride	Ave	0.2719	0.2337	0.1000	8.59	10.0	-14.1	20.0
1,1-Dichloropropene	Ave	0.3194	0.3241	0.0100	10.1	10.0	1.5	20.0
Isobutyl alcohol	Lin2		0.0140	0.0100	317	250	26.9*	20.0
Benzene	Ave	0.9763	0.9559	0.5000	9.79	10.0	-2.1	20.0
1,2-Dichloroethane	Ave	0.3803	0.3570	0.1000	9.39	10.0	-6.1	20.0
n-Heptane	Lin1		0.2032	0.0100	11.6	10.0	15.6	20.0
Trichloroethene	Ave	0.2602	0.2550	0.2000	9.80	10.0	-2.0	20.0
Methylcyclohexane	Ave	0.3171	0.3233	0.1000	10.2	10.0	2.0	20.0
1,2-Dichloropropane	Ave	0.2609	0.2463	0.1000	9.44	10.0	-5.6	20.0
Dibromomethane	Ave	0.1813	0.1684	0.0100	9.29	10.0	-7.1	20.0
1,4-Dioxane	Ave	0.0030	0.0045*	0.0100	297	200	48.6*	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193502/3 Calibration Date: 11/07/2016 09:44

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110703.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorobromomethane	Ave	0.3816	0.3122	0.2000	8.18	10.0	-18.2	20.0
cis-1,3-Dichloropropene	Ave	0.4647	0.4100	0.2000	8.82	10.0	-11.8	20.0
4-Methyl-2-pentanone (MIBK)	Ave	1.656	1.439	0.1000	17.4	20.0	-13.1	20.0
Toluene	Ave	4.162	4.166	0.4000	10.0	10.0	0.1	20.0
trans-1,3-Dichloropropene	Ave	1.661	1.525	0.1000	9.19	10.0	-8.1	20.0
Ethyl methacrylate	Ave	1.778	1.786	0.0100	10.0	10.0	0.4	20.0
1,1,2-Trichloroethane	Ave	1.103	1.046	0.1000	9.49	10.0	-5.1	20.0
Tetrachloroethene	Ave	0.7638	0.7791	0.2000	10.2	10.0	2.0	20.0
1,3-Dichloropropane	Ave	1.939	1.918	0.0100	9.89	10.0	-1.1	20.0
2-Hexanone	Ave	1.167	1.134	0.1000	19.4	20.0	-2.8	20.0
Chlorodibromomethane	Ave	1.163	0.9024	0.1000	7.76	10.0	-22.4*	20.0
Ethylene Dibromide	Ave	1.181	1.138	0.1000	9.64	10.0	-3.6	20.0
Chlorobenzene	Ave	2.757	2.613	0.5000	9.48	10.0	-5.2	20.0
1,1,1,2-Tetrachloroethane	Ave	0.9249	0.8100	0.0100	8.76	10.0	-12.4	20.0
Ethylbenzene	Ave	1.374	1.335	0.1000	9.72	10.0	-2.8	20.0
m-Xylene & p-Xylene	Ave	1.774	1.680	0.1000	9.47	10.0	-5.3	20.0
o-Xylene	Ave	1.861	1.806	0.3000	9.70	10.0	-3.0	20.0
Styrene	Ave	3.000	2.915	0.3000	9.72	10.0	-2.8	20.0
Bromoform	Ave	0.9030	0.6463	0.1000	7.16	10.0	-28.4*	20.0
Isopropylbenzene	Ave	4.347	4.190	0.1000	9.64	10.0	-3.6	20.0
Bromobenzene	Ave	0.8992	0.8249	0.0100	9.17	10.0	-8.3	20.0
1,1,2,2-Tetrachloroethane	Qua		1.614	0.3000	8.99	10.0	-10.1	20.0
trans-1,4-Dichloro-2-butene	Ave	0.3472	0.3051	0.0100	8.79	10.0	-12.1	20.0
1,2,3-Trichloropropane	Ave	0.3938	0.3777	0.0100	9.59	10.0	-4.1	20.0
N-Propylbenzene	Ave	0.7876	0.7024	0.0100	8.92	10.0	-10.8	20.0
2-Chlorotoluene	Ave	0.7535	0.6703	0.0100	8.90	10.0	-11.0	20.0
1,3,5-Trimethylbenzene	Ave	2.593	2.279	0.0100	8.79	10.0	-12.1	20.0
4-Chlorotoluene	Ave	0.7511	0.6704	0.0100	8.92	10.0	-10.8	20.0
tert-Butylbenzene	Ave	2.133	1.866	0.0100	8.75	10.0	-12.5	20.0
1,2,4-Trimethylbenzene	Ave	2.728	2.463	0.0100	9.03	10.0	-9.7	20.0
sec-Butylbenzene	Ave	2.947	2.589	0.0100	8.78	10.0	-12.2	20.0
1,3-Dichlorobenzene	Ave	1.580	1.412	0.6000	8.94	10.0	-10.6	20.0
4-Isopropyltoluene	Ave	2.328	2.008	0.0100	8.63	10.0	-13.7	20.0
1,4-Dichlorobenzene	Ave	1.510	1.339	0.5000	8.87	10.0	-11.3	20.0
n-Butylbenzene	Ave	2.147	1.842	0.0100	8.58	10.0	-14.2	20.0
1,2-Dichlorobenzene	Ave	1.555	1.422	0.4000	9.14	10.0	-8.6	20.0
1,2-Dibromo-3-Chloropropane	Ave	0.3149	0.2557	0.0500	8.12	10.0	-18.8	20.0
1,2,4-Trichlorobenzene	Ave	0.9857	0.8377	0.2000	8.50	10.0	-15.0	20.0
Hexachlorobutadiene	Ave	0.3616	0.3468	0.0100	9.59	10.0	-4.1	20.0
Naphthalene	Ave	2.638	2.458	0.0100	9.32	10.0	-6.8	20.0
1,2,3-Trichlorobenzene	Ave	0.7775	0.6640	0.0100	8.54	10.0	-14.6	20.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab Sample ID: CCVIS 180-193502/3 Calibration Date: 11/07/2016 09:44

Instrument ID: CHHP7 Calib Start Date: 09/26/2016 10:49

GC Column: DB-624 ID: 0.18(mm) Calib End Date: 09/26/2016 18:43

Lab File ID: 7110703.D Conc. Units: ug/L Heated Purge: (Y/N) N

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dibromofluoromethane (Surr)	Ave	0.2079	0.1801		8.67	10.0	-13.3	20.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3039	0.2665		8.77	10.0	-12.3	20.0
Toluene-d8 (Surr)	Lin2		3.008		8.45	10.0	-15.5	20.0
4-Bromofluorobenzene (Surr)	Ave	1.259	1.206		9.58	10.0	-4.2	20.0

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110308.D Lab Sample ID: MB 180-193223/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 11/03/2016 10:48

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-193223/4	7110304.D	11/03/2016 08:59
	LCSD 180-193223/5	7110305.D	11/03/2016 09:26
TB-103116	240-71528-4	7110316.D	11/03/2016 14:31
MRC-D2-S	240-71528-1	7110317.D	11/03/2016 14:59
MRC-D2-I	240-71528-2	7110318.D	11/03/2016 15:26
MRC-D2-D	240-71528-3	7110319.D	11/03/2016 15:53
MRC-D3-S	240-71528-5	7110320.D	11/03/2016 16:21
MRC-D3-I	240-71528-6	7110321.D	11/03/2016 16:49
MRC-D3-D	240-71528-7	7110322.D	11/03/2016 17:17
MRC-D4-S	240-71528-8	7110323.D	11/03/2016 17:44
MRC-D4-I	240-71528-9	7110324.D	11/03/2016 18:12
MRC-D4-D	240-71528-10	7110325.D	11/03/2016 18:39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193223/8

Matrix: Water | Lab File ID: 7110308.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 10:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193223/8

Matrix: Water | Lab File ID: 7110308.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/03/2016 10:48

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193223 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	97		80-120
1868-53-7	Dibromofluoromethane (Surr)	91		77-127
460-00-4	4-Bromofluorobenzene (Surr)	100		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110608.D Lab Sample ID: MB 180-193465/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 11/06/2016 12:38

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-193465/4	7110604.D	11/06/2016 10:50
MRC-D2-I DL	240-71528-2 DL	7110612.D	11/06/2016 14:29
	LCSD 180-193465/14	7110614.D	11/06/2016 15:24
MRC-D3-S DL	240-71528-5 DL	7110616.D	11/06/2016 16:20
MRC-D2-S DL	240-71528-1 DL	7110620.D	11/06/2016 18:10
MRC-D3-S DL2	240-71528-5 DL2	7110621.D	11/06/2016 18:37
MRC-D3-I DL	240-71528-6 DL	7110622.D	11/06/2016 19:04
MRC-D4-I DL	240-71528-9 DL	7110623.D	11/06/2016 19:32
MRC-D4-D DL	240-71528-10 DL	7110624.D	11/06/2016 19:59
MRC-D4-S DL	240-71528-8 DL	7110626.D	11/06/2016 20:54

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193465/8

Matrix: Water | Lab File ID: 7110608.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 12:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193465/8

Matrix: Water | Lab File ID: 7110608.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 12:38

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	0.228	J	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	86		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-127
460-00-4	4-Bromofluorobenzene (Surr)	93		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	90		72-134

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Lab File ID: 7110708.D Lab Sample ID: MB 180-193502/8

Matrix: Water Heated Purge:(Y/N) N

Instrument ID: CHHP7 Date Analyzed: 11/07/2016 12:01

GC Column: DB-624 ID: 0.18(mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 180-193502/4	7110704.D	11/07/2016 10:11
	LCSD 180-193502/5	7110705.D	11/07/2016 10:37
MRC-D2-D DL	240-71528-3 DL	7110711.D	11/07/2016 13:24
MRC-D3-D DL	240-71528-7 DL	7110712.D	11/07/2016 13:52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193502/8

Matrix: Water | Lab File ID: 7110708.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 12:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	0.27
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	0.37
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	0.24
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	0.31
75-34-3	1,1-Dichloroethane	1.0	U	1.0	0.34
75-35-4	1,1-Dichloroethene	1.0	U	1.0	0.32
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	0.49
96-12-8	1,2-Dibromo-3-Chloropropane	2.0	U	2.0	0.40
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	0.23
107-06-2	1,2-Dichloroethane	1.0	U	1.0	0.24
78-87-5	1,2-Dichloropropane	1.0	U	1.0	0.35
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	0.21
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	0.24
78-93-3	2-Butanone (MEK)	10	U	10	2.6
591-78-6	2-Hexanone	10	U	10	2.0
108-10-1	4-Methyl-2-pentanone (MIBK)	10	U	10	2.2
67-64-1	Acetone	10	U	10	3.1
71-43-2	Benzene	1.0	U	1.0	0.18
75-25-2	Bromoform	1.0	U	1.0	0.76
74-83-9	Bromomethane	1.0	U	1.0	0.59
75-15-0	Carbon disulfide	1.0	U	1.0	0.53
56-23-5	Carbon tetrachloride	1.0	U	1.0	0.56
108-90-7	Chlorobenzene	1.0	U	1.0	0.15
124-48-1	Chlorodibromomethane	1.0	U	1.0	0.44
75-00-3	Chloroethane	1.0	U	1.0	0.58
67-66-3	Chloroform	1.0	U	1.0	0.27
74-87-3	Chloromethane	1.0	U	1.0	0.38
156-59-2	cis-1,2-Dichloroethene	1.0	U	1.0	0.30
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	0.32
110-82-7	Cyclohexane	1.0	U	1.0	0.27
75-71-8	Dichlorodifluoromethane	1.0	U	1.0	0.47
75-27-4	Dichlorobromomethane	1.0	U	1.0	0.57
100-41-4	Ethylbenzene	1.0	U	1.0	0.25
98-82-8	Isopropylbenzene	1.0	U	1.0	0.21
79-20-9	Methyl acetate	10	U	10	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: | Lab Sample ID: MB 180-193502/8

Matrix: Water | Lab File ID: 7110708.D

Analysis Method: 8260C | Date Collected:

Sample wt/vol: 5(mL) | Date Analyzed: 11/07/2016 12:01

Soil Aliquot Vol: | Dilution Factor: 1

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193502 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	1.0	U	1.0	0.19
1634-04-4	Methyl tert-butyl ether	1.0	U	1.0	0.20
75-09-2	Methylene Chloride	1.0	U	1.0	0.94
100-42-5	Styrene	1.0	U	1.0	0.22
127-18-4	Tetrachloroethene	1.0	U	1.0	0.24
108-88-3	Toluene	1.0	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	1.0	U	1.0	0.20
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	0.22
79-01-6	Trichloroethene	1.0	U	1.0	0.20
75-69-4	Trichlorofluoromethane	1.0	U	1.0	0.40
75-01-4	Vinyl chloride	1.0	U	1.0	0.17
1330-20-7	Xylenes, Total	2.0	U	2.0	0.27
106-93-4	Ethylene Dibromide	1.0	U	1.0	0.51

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	85		80-120
1868-53-7	Dibromofluoromethane (Surr)	82		77-127
460-00-4	4-Bromofluorobenzene (Surr)	91		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		72-134

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low

GC Column (1): DB-624 ID: 0.18(mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
MRC-D2-S	240-71528-1	85	90	86	98
MRC-D2-S DL	240-71528-1 DL	90	96	91	98
MRC-D2-I	240-71528-2	88	95	89	99
MRC-D2-I DL	240-71528-2 DL	86	89	87	94
MRC-D2-D	240-71528-3	85	88	84	94
MRC-D2-D DL	240-71528-3 DL	88	92	88	95
TB-103116	240-71528-4	88	92	89	93
MRC-D3-S	240-71528-5	87	90	90	107
MRC-D3-S DL	240-71528-5 DL	89	96	86	94
MRC-D3-S DL2	240-71528-5 DL2	88	97	92	98
MRC-D3-I	240-71528-6	88	89	86	96
MRC-D3-I DL	240-71528-6 DL	89	95	90	95
MRC-D3-D	240-71528-7	89	89	86	95
MRC-D3-D DL	240-71528-7 DL	85	88	86	90
MRC-D4-S	240-71528-8	88	92	87	105
MRC-D4-S DL	240-71528-8 DL	93	100	83	93
MRC-D4-I	240-71528-9	87	90	88	93
MRC-D4-I DL	240-71528-9 DL	94	98	88	96
MRC-D4-D	240-71528-10	86	88	89	95
MRC-D4-D DL	240-71528-10 DL	87	92	82	92
	MB 180-193223/8	91	96	97	100
	MB 180-193465/8	90	90	86	93
	MB 180-193502/8	82	86	85	91
	LCS 180-193223/4	85	89	89	97
	LCS 180-193465/4	90	91	83	97
	LCS 180-193502/4	86	89	84	93
	LCSD 180-193223/5	96	97	98	101
	LCSD 180-193465/14	101	107	94	104
	LCSD 180-193502/5	90	88	80	93

	QC LIMITS
DBFM = Dibromofluoromethane (Surr)	77-127
DCA = 1,2-Dichloroethane-d4 (Surr)	72-134
TOL = Toluene-d8 (Surr)	80-120
BFB = 4-Bromofluorobenzene (Surr)	72-120

Column to be used to flag recovery values

FORM II 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110304.D

Lab ID: LCS 180-193223/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.38	94	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.69	87	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	10.0	100	72-123	
1,1,2-Trichloroethane	10.0	9.68	97	77-127	
1,1-Dichloroethane	10.0	9.24	92	76-126	
1,1-Dichloroethene	10.0	8.88	89	71-122	
1,2,4-Trichlorobenzene	10.0	7.41	74	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.26	73	55-139	
1,2-Dichlorobenzene	10.0	9.27	93	80-120	
1,2-Dichloroethane	10.0	9.27	93	72-126	
1,2-Dichloropropane	10.0	9.49	95	78-123	
1,3-Dichlorobenzene	10.0	9.05	90	80-120	
1,4-Dichlorobenzene	10.0	9.21	92	80-120	
2-Butanone (MEK)	20.0	16.0	80	41-150	
2-Hexanone	20.0	16.0	80	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.3	82	49-147	
Acetone	20.0	15.4	77	10-150	
Benzene	10.0	9.70	97	80-121	
Bromoform	10.0	7.16	72	62-138	
Bromomethane	10.0	9.79	98	39-150	
Carbon disulfide	10.0	8.63	86	57-137	
Carbon tetrachloride	10.0	8.54	85	59-145	
Chlorobenzene	10.0	9.65	97	80-120	
Chlorodibromomethane	10.0	8.03	80	71-134	
Chloroethane	10.0	7.73	77	53-148	
Chloroform	10.0	9.43	94	78-122	
Chloromethane	10.0	8.20	82	51-150	
cis-1,2-Dichloroethene	10.0	9.28	93	80-120	
cis-1,3-Dichloropropene	10.0	8.65	86	67-127	
Cyclohexane	10.0	10.6	106	65-132	
Dichlorodifluoromethane	10.0	9.11	91	43-142	
Dichlorobromomethane	10.0	8.00	80	72-124	
Ethylbenzene	10.0	9.80	98	80-123	
Isopropylbenzene	10.0	9.32	93	80-124	
Methyl acetate	50.0	50.8	102	65-144	
Methylcyclohexane	10.0	9.87	99	74-120	
Methyl tert-butyl ether	10.0	10.1	101	68-124	
Methylene Chloride	10.0	9.41	94	71-129	
m-Xylene & p-Xylene	10.0	9.50	95	80-124	
o-Xylene	10.0	9.45	94	80-123	
Styrene	10.0	9.49	95	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110304.D

Lab ID: LCS 180-193223/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	9.83	98	80-122	
Toluene	10.0	10.1	101	80-125	
trans-1,2-Dichloroethene	10.0	9.18	92	80-121	
trans-1,3-Dichloropropene	10.0	9.32	93	63-144	
Trichloroethene	10.0	9.21	92	79-120	
Trichlorofluoromethane	10.0	8.94	89	39-150	
Vinyl chloride	10.0	8.12	81	61-138	
Xylenes, Total	20.0	19.0	95	80-123	
Ethylene Dibromide	10.0	9.94	99	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110604.D

Lab ID: LCS 180-193465/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.46	95	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.40	84	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	9.03	90	72-123	
1,1,2-Trichloroethane	10.0	9.32	93	77-127	
1,1-Dichloroethane	10.0	9.58	96	76-126	
1,1-Dichloroethene	10.0	8.47	85	71-122	
1,2,4-Trichlorobenzene	10.0	8.78	88	51-138	
1,2-Dibromo-3-Chloropropane	10.0	8.79	88	55-139	
1,2-Dichlorobenzene	10.0	8.99	90	80-120	
1,2-Dichloroethane	10.0	9.56	96	72-126	
1,2-Dichloropropane	10.0	9.77	98	78-123	
1,3-Dichlorobenzene	10.0	8.72	87	80-120	
1,4-Dichlorobenzene	10.0	8.75	88	80-120	
2-Butanone (MEK)	20.0	18.8	94	41-150	
2-Hexanone	20.0	17.1	86	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.1	80	49-147	
Acetone	20.0	24.2	121	10-150	
Benzene	10.0	9.47	95	80-121	
Bromoform	10.0	7.73	77	62-138	
Bromomethane	10.0	11.1	111	39-150	
Carbon disulfide	10.0	8.54	85	57-137	
Carbon tetrachloride	10.0	8.50	85	59-145	
Chlorobenzene	10.0	8.98	90	80-120	
Chlorodibromomethane	10.0	8.10	81	71-134	
Chloroethane	10.0	8.21	82	53-148	
Chloroform	10.0	9.43	94	78-122	
Chloromethane	10.0	8.71	87	51-150	
cis-1,2-Dichloroethene	10.0	9.50	95	80-120	
cis-1,3-Dichloropropene	10.0	9.55	95	67-127	
Cyclohexane	10.0	9.24	92	65-132	
Dichlorodifluoromethane	10.0	8.81	88	43-142	
Dichlorobromomethane	10.0	8.58	86	72-124	
Ethylbenzene	10.0	9.22	92	80-123	
Isopropylbenzene	10.0	9.12	91	80-124	
Methyl acetate	50.0	52.6	105	65-144	
Methylcyclohexane	10.0	9.01	90	74-120	
Methyl tert-butyl ether	10.0	10.4	104	68-124	
Methylene Chloride	10.0	9.10	91	71-129	
m-Xylene & p-Xylene	10.0	8.91	89	80-124	
o-Xylene	10.0	9.23	92	80-123	
Styrene	10.0	9.18	92	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110604.D

Lab ID: LCS 180-193465/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	9.18	92	80-122	
Toluene	10.0	9.34	93	80-125	
trans-1,2-Dichloroethene	10.0	9.12	91	80-121	
trans-1,3-Dichloropropene	10.0	9.29	93	63-144	
Trichloroethene	10.0	10.0	100	79-120	
Trichlorofluoromethane	10.0	7.99	80	39-150	
Vinyl chloride	10.0	8.15	82	61-138	
Xylenes, Total	20.0	18.1	91	80-123	
Ethylene Dibromide	10.0	9.61	96	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110704.D

Lab ID: LCS 180-193502/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	9.10	91	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.74	87	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.83	88	72-123	
1,1,2-Trichloroethane	10.0	9.53	95	77-127	
1,1-Dichloroethane	10.0	9.48	95	76-126	
1,1-Dichloroethene	10.0	8.54	85	71-122	
1,2,4-Trichlorobenzene	10.0	8.73	87	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.69	77	55-139	
1,2-Dichlorobenzene	10.0	9.36	94	80-120	
1,2-Dichloroethane	10.0	9.71	97	72-126	
1,2-Dichloropropane	10.0	9.60	96	78-123	
1,3-Dichlorobenzene	10.0	9.21	92	80-120	
1,4-Dichlorobenzene	10.0	8.89	89	80-120	
2-Butanone (MEK)	20.0	20.2	101	41-150	
2-Hexanone	20.0	18.3	91	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.3	82	49-147	
Acetone	20.0	25.0	125	10-150	
Benzene	10.0	9.86	99	80-121	
Bromoform	10.0	7.04	70	62-138	
Bromomethane	10.0	9.73	97	39-150	
Carbon disulfide	10.0	8.55	85	57-137	
Carbon tetrachloride	10.0	8.04	80	59-145	
Chlorobenzene	10.0	9.46	95	80-120	
Chlorodibromomethane	10.0	7.82	78	71-134	
Chloroethane	10.0	8.03	80	53-148	
Chloroform	10.0	9.40	94	78-122	
Chloromethane	10.0	8.43	84	51-150	
cis-1,2-Dichloroethene	10.0	9.30	93	80-120	
cis-1,3-Dichloropropene	10.0	8.96	90	67-127	
Cyclohexane	10.0	9.56	96	65-132	
Dichlorodifluoromethane	10.0	8.71	87	43-142	
Dichlorobromomethane	10.0	8.40	84	72-124	
Ethylbenzene	10.0	9.74	97	80-123	
Isopropylbenzene	10.0	9.38	94	80-124	
Methyl acetate	50.0	50.2	100	65-144	
Methylcyclohexane	10.0	8.77	88	74-120	
Methyl tert-butyl ether	10.0	10.1	101	68-124	
Methylene Chloride	10.0	9.48	95	71-129	
m-Xylene & p-Xylene	10.0	9.32	93	80-124	
o-Xylene	10.0	9.71	97	80-123	
Styrene	10.0	9.70	97	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110704.D

Lab ID: LCS 180-193502/4 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Tetrachloroethene	10.0	9.83	98	80-122	
Toluene	10.0	9.98	100	80-125	
trans-1,2-Dichloroethene	10.0	9.14	91	80-121	
trans-1,3-Dichloropropene	10.0	9.11	91	63-144	
Trichloroethene	10.0	9.25	93	79-120	
Trichlorofluoromethane	10.0	8.12	81	39-150	
Vinyl chloride	10.0	8.16	82	61-138	
Xylenes, Total	20.0	19.0	95	80-123	
Ethylene Dibromide	10.0	9.62	96	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110305.D

Lab ID: LCSD 180-193223/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	11.1	111	17	19	57-128	
1,1,2,2-Tetrachloroethane	10.0	10.1	101	15	16	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	11.8	118	16	20	72-123	
1,1,2-Trichloroethane	10.0	10.9	109	12	17	77-127	
1,1-Dichloroethane	10.0	10.7	107	15	22	76-126	
1,1-Dichloroethene	10.0	10.5	105	17	18	71-122	
1,2,4-Trichlorobenzene	10.0	8.37	84	12	35	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.60	76	5	23	55-139	
1,2-Dichlorobenzene	10.0	10.2	102	9	15	80-120	
1,2-Dichloroethane	10.0	10.9	109	16	15	72-126	*
1,2-Dichloropropane	10.0	11.0	110	15	15	78-123	
1,3-Dichlorobenzene	10.0	9.95	100	10	15	80-120	
1,4-Dichlorobenzene	10.0	10.1	101	9	15	80-120	
2-Butanone (MEK)	20.0	17.2	86	7	35	41-150	
2-Hexanone	20.0	16.6	83	3	35	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	17.0	85	4	21	49-147	
Acetone	20.0	16.2	81	5	35	10-150	
Benzene	10.0	11.2	112	14	15	80-121	
Bromoform	10.0	7.99	80	11	16	62-138	
Bromomethane	10.0	12.2	122	22	35	39-150	
Carbon disulfide	10.0	10.3	103	17	16	57-137	*
Carbon tetrachloride	10.0	10.1	101	16	19	59-145	
Chlorobenzene	10.0	10.8	108	11	15	80-120	
Chlorodibromomethane	10.0	8.83	88	9	17	71-134	
Chloroethane	10.0	8.94	89	15	24	53-148	
Chloroform	10.0	10.6	106	12	15	78-122	
Chloromethane	10.0	9.38	94	13	22	51-150	
cis-1,2-Dichloroethene	10.0	10.9	109	16	17	80-120	
cis-1,3-Dichloropropene	10.0	9.98	100	14	18	67-127	
Cyclohexane	10.0	12.1	121	13	17	65-132	
Dichlorodifluoromethane	10.0	10.6	106	15	19	43-142	
Dichlorobromomethane	10.0	9.46	95	17	16	72-124	*
Ethylbenzene	10.0	10.9	109	11	15	80-123	
Isopropylbenzene	10.0	10.6	106	13	15	80-124	
Methyl acetate	50.0	58.2	116	14	18	65-144	
Methylcyclohexane	10.0	11.8	118	18	20	74-120	
Methyl tert-butyl ether	10.0	11.6	116	14	25	68-124	
Methylene Chloride	10.0	10.7	107	13	19	71-129	
m-Xylene & p-Xylene	10.0	10.5	105	10	17	80-124	
o-Xylene	10.0	10.6	106	11	15	80-123	
Styrene	10.0	10.7	107	12	15	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110305.D

Lab ID: LCSD 180-193223/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	10.0	11.6	116	17	15	80-122	*
Toluene	10.0	11.3	113	11	15	80-125	
trans-1,2-Dichloroethene	10.0	10.8	108	17	18	80-121	
trans-1,3-Dichloropropene	10.0	10.5	105	12	17	63-144	
Trichloroethene	10.0	10.8	108	15	15	79-120	
Trichlorofluoromethane	10.0	10.5	105	16	28	39-150	
Vinyl chloride	10.0	9.74	97	18	16	61-138	*
Xylenes, Total	20.0	21.1	106	11	15	80-123	
Ethylene Dibromide	10.0	10.9	109	9	16	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110614.D

Lab ID: LCSD 180-193465/14 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	8.75	88	8	19	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.92	89	6	16	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	7.57	76	18	20	72-123	
1,1,2-Trichloroethane	10.0	9.83	98	5	17	77-127	
1,1-Dichloroethane	10.0	9.28	93	3	22	76-126	
1,1-Dichloroethene	10.0	7.95	79	6	18	71-122	
1,2,4-Trichlorobenzene	10.0	7.88	79	11	35	51-138	
1,2-Dibromo-3-Chloropropane	10.0	8.33	83	5	23	55-139	
1,2-Dichlorobenzene	10.0	9.27	93	3	15	80-120	
1,2-Dichloroethane	10.0	10.3	103	7	15	72-126	
1,2-Dichloropropane	10.0	10.3	103	5	15	78-123	
1,3-Dichlorobenzene	10.0	8.89	89	2	15	80-120	
1,4-Dichlorobenzene	10.0	8.83	88	1	15	80-120	
2-Butanone (MEK)	20.0	17.3	87	8	35	41-150	
2-Hexanone	20.0	16.0	80	7	35	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.6	83	3	21	49-147	
Acetone	20.0	16.2	81	40	35	10-150	*
Benzene	10.0	9.50	95	0	15	80-121	
Bromoform	10.0	7.28	73	6	16	62-138	
Bromomethane	10.0	9.25	93	18	35	39-150	
Carbon disulfide	10.0	7.91	79	8	16	57-137	
Carbon tetrachloride	10.0	7.43	74	13	19	59-145	
Chlorobenzene	10.0	9.23	92	3	15	80-120	
Chlorodibromomethane	10.0	8.09	81	0	17	71-134	
Chloroethane	10.0	7.80	78	5	24	53-148	
Chloroform	10.0	9.56	96	1	15	78-122	
Chloromethane	10.0	8.40	84	4	22	51-150	
cis-1,2-Dichloroethene	10.0	9.62	96	1	17	80-120	
cis-1,3-Dichloropropene	10.0	9.06	91	5	18	67-127	
Cyclohexane	10.0	8.30	83	11	17	65-132	
Dichlorodifluoromethane	10.0	7.59	76	15	19	43-142	
Dichlorobromomethane	10.0	8.66	87	1	16	72-124	
Ethylbenzene	10.0	9.26	93	0	15	80-123	
Isopropylbenzene	10.0	8.68	87	5	15	80-124	
Methyl acetate	50.0	54.8	110	4	18	65-144	
Methylcyclohexane	10.0	7.42	74	19	20	74-120	
Methyl tert-butyl ether	10.0	10.7	107	3	25	68-124	
Methylene Chloride	10.0	9.79	98	7	19	71-129	
m-Xylene & p-Xylene	10.0	8.85	89	1	17	80-124	
o-Xylene	10.0	9.07	91	2	15	80-123	
Styrene	10.0	9.14	91	0	15	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110614.D

Lab ID: LCSD 180-193465/14 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	10.0	8.71	87	5	15	80-122	
Toluene	10.0	9.36	94	0	15	80-125	
trans-1,2-Dichloroethene	10.0	8.76	88	4	18	80-121	
trans-1,3-Dichloropropene	10.0	8.95	90	4	17	63-144	
Trichloroethene	10.0	9.29	93	8	15	79-120	
Trichlorofluoromethane	10.0	7.00	70	13	28	39-150	
Vinyl chloride	10.0	7.67	77	6	16	61-138	
Xylenes, Total	20.0	17.9	90	1	15	80-123	
Ethylene Dibromide	10.0	9.98	100	4	16	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110705.D

Lab ID: LCSD 180-193502/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
1,1,1-Trichloroethane	10.0	8.93	89	2	19	57-128	
1,1,2,2-Tetrachloroethane	10.0	8.74	87	0	16	78-135	
1,1,2-Trichloro-1,2,2-trifluoroethane	10.0	8.54	85	3	20	72-123	
1,1,2-Trichloroethane	10.0	9.55	95	0	17	77-127	
1,1-Dichloroethane	10.0	9.54	95	1	22	76-126	
1,1-Dichloroethene	10.0	8.47	85	1	18	71-122	
1,2,4-Trichlorobenzene	10.0	8.66	87	1	35	51-138	
1,2-Dibromo-3-Chloropropane	10.0	7.47	75	3	23	55-139	
1,2-Dichlorobenzene	10.0	9.04	90	4	15	80-120	
1,2-Dichloroethane	10.0	9.80	98	1	15	72-126	
1,2-Dichloropropane	10.0	10.2	102	6	15	78-123	
1,3-Dichlorobenzene	10.0	8.99	90	2	15	80-120	
1,4-Dichlorobenzene	10.0	9.07	91	2	15	80-120	
2-Butanone (MEK)	20.0	20.4	102	1	35	41-150	
2-Hexanone	20.0	17.5	88	4	35	40-150	
4-Methyl-2-pentanone (MIBK)	20.0	16.2	81	1	21	49-147	
Acetone	20.0	25.6	128	2	35	10-150	
Benzene	10.0	9.87	99	0	15	80-121	
Bromoform	10.0	7.10	71	1	16	62-138	
Bromomethane	10.0	9.65	97	1	35	39-150	
Carbon disulfide	10.0	8.19	82	4	16	57-137	
Carbon tetrachloride	10.0	7.95	79	1	19	59-145	
Chlorobenzene	10.0	9.32	93	2	15	80-120	
Chlorodibromomethane	10.0	7.52	75	4	17	71-134	
Chloroethane	10.0	7.69	77	4	24	53-148	
Chloroform	10.0	9.44	94	0	15	78-122	
Chloromethane	10.0	8.59	86	2	22	51-150	
cis-1,2-Dichloroethene	10.0	9.41	94	1	17	80-120	
cis-1,3-Dichloropropene	10.0	9.00	90	0	18	67-127	
Cyclohexane	10.0	9.12	91	5	17	65-132	
Dichlorodifluoromethane	10.0	8.76	88	0	19	43-142	
Dichlorobromomethane	10.0	8.34	83	1	16	72-124	
Ethylbenzene	10.0	9.47	95	3	15	80-123	
Isopropylbenzene	10.0	8.94	89	5	15	80-124	
Methyl acetate	50.0	51.7	103	3	18	65-144	
Methylcyclohexane	10.0	8.39	84	4	20	74-120	
Methyl tert-butyl ether	10.0	10.3	103	1	25	68-124	
Methylene Chloride	10.0	9.45	95	0	19	71-129	
m-Xylene & p-Xylene	10.0	8.92	89	4	17	80-124	
o-Xylene	10.0	9.32	93	4	15	80-123	
Styrene	10.0	9.29	93	4	15	80-125	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM III
GC/MS VOA LAB CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Matrix: Water Level: Low Lab File ID: 7110705.D

Lab ID: LCSD 180-193502/5 Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCSD CONCENTRATION (ug/L)	LCSD % REC	% RPD	QC LIMITS RPD	QC LIMITS REC	#
Tetrachloroethene	10.0	9.30	93	6	15	80-122	
Toluene	10.0	9.60	96	4	15	80-125	
trans-1,2-Dichloroethene	10.0	8.98	90	2	18	80-121	
trans-1,3-Dichloropropene	10.0	8.97	90	2	17	63-144	
Trichloroethene	10.0	9.58	96	3	15	79-120	
Trichlorofluoromethane	10.0	8.23	82	1	28	39-150	
Vinyl chloride	10.0	8.10	81	1	16	61-138	
Xylenes, Total	20.0	18.2	91	4	15	80-123	
Ethylene Dibromide	10.0	9.68	97	1	16	79-126	

Column to be used to flag recovery and RPD values

FORM III 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193223/3 Date Analyzed: 11/03/2016 08:32

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110303.D Heated Purge: (Y/N) N

Calibration ID: 32970

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		138900	4.27	139665	7.26	33708	10.36
UPPER LIMIT		277800	4.77	279330	7.76	67416	10.86
LOWER LIMIT		69450	3.77	69833	6.76	16854	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193223/4		134918	4.27	136591	7.26	31411	10.36
LCSD 180-193223/5		121907	4.27	125728	7.26	29737	10.36
MB 180-193223/8		192939	4.26	212813	7.27	47985	10.36
240-71528-4	TB-103116	180553	4.26	214969	7.26	49078	10.36
240-71528-1	MRC-D2-S	160026	4.26	206289	7.27	46109	10.36
240-71528-2	MRC-D2-I	167512	4.26	201571	7.26	46942	10.36
240-71528-3	MRC-D2-D	174592	4.26	202758	7.26	46228	10.36
240-71528-5	MRC-D3-S	156478	4.27	193496	7.27	42375	10.36
240-71528-6	MRC-D3-I	199691	4.26	221472	7.26	50682	10.36
240-71528-7	MRC-D3-D	167493	4.26	204248	7.26	47038	10.36
240-71528-8	MRC-D4-S	142680	4.27	177130	7.27	39832	10.36
240-71528-9	MRC-D4-I	157463	4.26	185826	7.26	42089	10.36
240-71528-10	MRC-D4-D	157740	4.26	190884	7.26	44015	10.36

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193223/3 Date Analyzed: 11/03/2016 08:32

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110303.D Heated Purge: (Y/N) N

Calibration ID: 32970

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		45585	12.71				
UPPER LIMIT		91170	13.21				
LOWER LIMIT		22793	12.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193223/4		42046	12.71				
LCSD 180-193223/5		39822	12.71				
MB 180-193223/8		72640	12.71				
240-71528-4	TB-103116	70933	12.71				
240-71528-1	MRC-D2-S	71133	12.71				
240-71528-2	MRC-D2-I	70261	12.71				
240-71528-3	MRC-D2-D	69510	12.71				
240-71528-5	MRC-D3-S	65289	12.71				
240-71528-6	MRC-D3-I	77117	12.70				
240-71528-7	MRC-D3-D	70284	12.71				
240-71528-8	MRC-D4-S	60770	12.70				
240-71528-9	MRC-D4-I	52037	12.71				
240-71528-10	MRC-D4-D	60373	12.71				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193465/2 Date Analyzed: 11/06/2016 10:07

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110602.D Heated Purge: (Y/N) N

Calibration ID: 32970

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		207646	4.27	185528	7.26	44604	10.36
UPPER LIMIT		415292	4.77	371056	7.76	89208	10.86
LOWER LIMIT		103823	3.77	92764	6.76	22302	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193465/4		199404	4.27	180582	7.25	44041	10.36
MB 180-193465/8		183594	4.26	199628	7.26	46795	10.36
240-71528-2 DL	MRC-D2-I DL	158076	4.25	176770	7.26	40320	10.36
LCSD 180-193465/14		179042	4.28	167527	7.26	40972	10.36
240-71528-5 DL	MRC-D3-S DL	175062	4.27	199815	7.26	46694	10.36
240-71528-1 DL	MRC-D2-S DL	196993	4.26	213186	7.26	47318	10.36
240-71528-5 DL2	MRC-D3-S DL2	194339	4.26	201513	7.26	45632	10.36
240-71528-6 DL	MRC-D3-I DL	176933	4.26	192682	7.26	43893	10.36
240-71528-9 DL	MRC-D4-I DL	176532	4.26	193376	7.26	46364	10.36
240-71528-10 DL	MRC-D4-D DL	173286	4.26	203943	7.26	47771	10.36
240-71528-8 DL	MRC-D4-S DL	177456	4.26	192505	7.26	45848	10.36

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193465/2 Date Analyzed: 11/06/2016 10:07

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110602.D Heated Purge: (Y/N) N

Calibration ID: 32970

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		63622	12.70				
UPPER LIMIT		127244	13.20				
LOWER LIMIT		31811	12.20				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193465/4		59725	12.71				
MB 180-193465/8		68507	12.70				
240-71528-2 DL	MRC-D2-I DL	56866	12.70				
LCSD 180-193465/14		54682	12.70				
240-71528-5 DL	MRC-D3-S DL	68541	12.70				
240-71528-1 DL	MRC-D2-S DL	67613	12.70				
240-71528-5 DL2	MRC-D3-S DL2	67939	12.70				
240-71528-6 DL	MRC-D3-I DL	62933	12.70				
240-71528-9 DL	MRC-D4-I DL	64282	12.70				
240-71528-10 DL	MRC-D4-D DL	66818	12.70				
240-71528-8 DL	MRC-D4-S DL	67574	12.70				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193502/3 Date Analyzed: 11/07/2016 09:44

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110703.D Heated Purge: (Y/N) N

Calibration ID: 32970

		TBAd9		FB		CBNZd5	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		161401	4.27	145899	7.26	33829	10.36
UPPER LIMIT		322802	4.77	291798	7.76	67658	10.86
LOWER LIMIT		80701	3.77	72950	6.76	16915	9.86
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193502/4		159198	4.27	156499	7.26	37177	10.36
LCSD 180-193502/5		155907	4.27	148849	7.26	36269	10.36
MB 180-193502/8		174956	4.26	200654	7.26	45665	10.36
240-71528-3 DL	MRC-D2-D DL	181518	4.25	207795	7.26	47216	10.36
240-71528-7 DL	MRC-D3-D DL	161142	4.26	179393	7.26	40277	10.36

TBAd9 = TBA-d9 (IS)
FB = Fluorobenzene (IS)
CBNZd5 = Chlorobenzene-d5

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

FORM VIII
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Sample No.: CCVIS 180-193502/3 Date Analyzed: 11/07/2016 09:44

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm)

Lab File ID (Standard): 7110703.D Heated Purge: (Y/N) N

Calibration ID: 32970

		DCBd4					
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		46635	12.71				
UPPER LIMIT		93270	13.21				
LOWER LIMIT		23318	12.21				
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 180-193502/4		49866	12.71				
LCSD 180-193502/5		48686	12.71				
MB 180-193502/8		66381	12.71				
240-71528-3 DL	MRC-D2-D DL	68836	12.70				
240-71528-7 DL	MRC-D3-D DL	58379	12.70				

DCBd4 = 1,4-Dichlorobenzene-d4

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 09/26/2016 08:04

Analysis Batch Number: 189143 End Date: 09/28/2016 11:14

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-189143/1		09/26/2016 08:04	1	7092601.D	DB-624 0.18(mm)
IC 180-189143/4		09/26/2016 10:49	1	7092604.D	DB-624 0.18(mm)
IC 180-189143/6		09/26/2016 12:39	1	7092606.D	DB-624 0.18(mm)
IC 180-189143/7		09/26/2016 13:06	1	7092607.D	DB-624 0.18(mm)
IC 180-189143/8		09/26/2016 14:00	1	7092608.D	DB-624 0.18(mm)
IC 180-189143/9		09/26/2016 14:28	1	7092609.D	DB-624 0.18(mm)
IC 180-189143/10		09/26/2016 15:04	1	7092610.D	DB-624 0.18(mm)
IC 180-189143/14		09/26/2016 17:48	1	7092614.D	DB-624 0.18(mm)
ICIS 180-189143/16		09/26/2016 18:43	1	7092616.D	DB-624 0.18(mm)
ICV 180-189143/17		09/26/2016 19:12	1		DB-624 0.18(mm)
ZZZZZ		09/27/2016 11:48	1		DB-624 0.18(mm)
ZZZZZ		09/28/2016 11:14	1		DB-624 0.18(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/03/2016 07:13

Analysis Batch Number: 193223 End Date: 11/03/2016 18:39

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-193223/1		11/03/2016 07:13	1	7110301.D	DB-624 0.18(mm)
CCVIS 180-193223/3		11/03/2016 08:32	1	7110303.D	DB-624 0.18(mm)
LCS 180-193223/4		11/03/2016 08:59	1	7110304.D	DB-624 0.18(mm)
LCSD 180-193223/5		11/03/2016 09:26	1	7110305.D	DB-624 0.18(mm)
ZZZZZ		11/03/2016 09:53	1		DB-624 0.18(mm)
MB 180-193223/8		11/03/2016 10:48	1	7110308.D	DB-624 0.18(mm)
240-71528-4		11/03/2016 14:31	1	7110316.D	DB-624 0.18(mm)
240-71528-1		11/03/2016 14:59	1	7110317.D	DB-624 0.18(mm)
240-71528-2		11/03/2016 15:26	1	7110318.D	DB-624 0.18(mm)
240-71528-3		11/03/2016 15:53	1	7110319.D	DB-624 0.18(mm)
240-71528-5		11/03/2016 16:21	1	7110320.D	DB-624 0.18(mm)
240-71528-6		11/03/2016 16:49	1	7110321.D	DB-624 0.18(mm)
240-71528-7		11/03/2016 17:17	1	7110322.D	DB-624 0.18(mm)
240-71528-8		11/03/2016 17:44	1	7110323.D	DB-624 0.18(mm)
240-71528-9		11/03/2016 18:12	1	7110324.D	DB-624 0.18(mm)
240-71528-10		11/03/2016 18:39	1	7110325.D	DB-624 0.18(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/06/2016 09:27

Analysis Batch Number: 193465 End Date: 11/06/2016 20:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-193465/1		11/06/2016 09:27	1	7110601.D	DB-624 0.18(mm)
CCVIS 180-193465/2		11/06/2016 10:07	1	7110602.D	DB-624 0.18(mm)
LCS 180-193465/4		11/06/2016 10:50	1	7110604.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 11:43	1		DB-624 0.18(mm)
MB 180-193465/8		11/06/2016 12:38	1	7110608.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 13:05	1		DB-624 0.18(mm)
ZZZZZ		11/06/2016 14:01	1		DB-624 0.18(mm)
240-71528-2 DL		11/06/2016 14:29	40	7110612.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 14:57	1		DB-624 0.18(mm)
LCSD 180-193465/14		11/06/2016 15:24	1	7110614.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 15:52	1		DB-624 0.18(mm)
240-71528-5 DL		11/06/2016 16:20	100	7110616.D	DB-624 0.18(mm)
ZZZZZ		11/06/2016 16:48	1		DB-624 0.18(mm)
ZZZZZ		11/06/2016 17:43	1		DB-624 0.18(mm)
240-71528-1 DL		11/06/2016 18:10	200	7110620.D	DB-624 0.18(mm)
240-71528-5 DL2		11/06/2016 18:37	500	7110621.D	DB-624 0.18(mm)
240-71528-6 DL		11/06/2016 19:04	200	7110622.D	DB-624 0.18(mm)
240-71528-9 DL		11/06/2016 19:32	10	7110623.D	DB-624 0.18(mm)
240-71528-10 DL		11/06/2016 19:59	2.5	7110624.D	DB-624 0.18(mm)
240-71528-8 DL		11/06/2016 20:54	500	7110626.D	DB-624 0.18(mm)

8260C

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1

SDG No.:

Instrument ID: CHHP7 Start Date: 11/07/2016 08:22

Analysis Batch Number: 193502 End Date: 11/07/2016 13:52

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 180-193502/1		11/07/2016 08:22	1	7110701.D	DB-624 0.18(mm)
CCVIS 180-193502/3		11/07/2016 09:44	1	7110703.D	DB-624 0.18(mm)
LCS 180-193502/4		11/07/2016 10:11	1	7110704.D	DB-624 0.18(mm)
LCSD 180-193502/5		11/07/2016 10:37	1	7110705.D	DB-624 0.18(mm)
ZZZZZ		11/07/2016 11:05	1		DB-624 0.18(mm)
MB 180-193502/8		11/07/2016 12:01	1	7110708.D	DB-624 0.18(mm)
240-71528-3 DL		11/07/2016 13:24	30	7110711.D	DB-624 0.18(mm)
240-71528-7 DL		11/07/2016 13:52	30	7110712.D	DB-624 0.18(mm)

8260C

SAMPLE IDENTIFICATION	MRC-D2-S	
COMPOUND	Trichloroethene	
COMPOUND AREA	141393	
INTERNAL STANDARD AMOUNT (ug)	50	
INTERNAL STANDARD AREA	213186	
AVERAGE RRF	0.2602	
141393 x 50 / 213186 x 0.2602	127.45	ug/L
VOLUME PURGED	5.00	ml
DILUTION FACTOR	200	
	5098	ug/L

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Pittsburgh | Job No.: 240-71528-1

SDG No.:

Client Sample ID: MRC-D2-S DL | Lab Sample ID: 240-71528-1 DL

Matrix: Water | Lab File ID: 7110620.D

Analysis Method: 8260C | Date Collected: 10/31/2016 09:45

Sample wt/vol: 5(mL) | Date Analyzed: 11/06/2016 18:10

Soil Aliquot Vol: | Dilution Factor: 200

Soil Extract Vol.: | GC Column: DB-624 ID: 0.18(mm)

% Moisture: | Level: (low/med) Low

Analysis Batch No.: 193465 | Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
108-87-2	Methylcyclohexane	200	U	200	37
1634-04-4	Methyl tert-butyl ether	200	U	200	39
75-09-2	Methylene Chloride	200	U	200	190
100-42-5	Styrene	200	U	200	43
127-18-4	Tetrachloroethene	200	U	200	49
108-88-3	Toluene	200	U	200	31
156-60-5	trans-1,2-Dichloroethene	200	U	200	40
10061-02-6	trans-1,3-Dichloropropene	200	U	200	44
79-01-6	Trichloroethene	5100	B	200	40
75-69-4	Trichlorofluoromethane	200	U	200	81
75-01-4	Vinyl chloride	200	U	200	34
1330-20-7	Xylenes, Total	400	U	400	54
106-93-4	Ethylene Dibromide	200	U	200	100

CAS NO.	SURROGATE	%REC	Q	LIMITS
2037-26-5	Toluene-d8 (Surr)	91		80-120
1868-53-7	Dibromofluoromethane (Surr)	90		77-127
460-00-4	4-Bromofluorobenzene (Surr)	98		72-120
17060-07-0	1,2-Dichloroethane-d4 (Surr)	96		72-134

TestAmerica Pittsburgh
Target Compound Quantitation Report

Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20161106-14191.b\7110620.D
Lims ID: 240-71528-B-1
Client ID: MRC-D2-S
Sample Type: Client
Inject. Date: 06-Nov-2016 18:10:30 ALS Bottle#: 30 Worklist Smp#: 20
Purge Vol: 5.000 mL Dil. Factor: 200.0000
Sample Info: 240-71528-B-1 ,x200
Misc. Info.: 180-0014191-020
Operator ID: 034635 Instrument ID: CHHP7

Method: \\ChromNA\Pittsburgh\ChromData\CHHP7\20161106-14191.b\MSVOA_LL_CHHP7.m
Limit Group: VOA 8260C ICAL
Last Update: 06-Nov-2016 19:54:13 Calib Date: 26-Sep-2016 18:43:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20160926-13588.b\7092616.D

Column 1 : DB-624 (0.18 mm) Det: MS SCAN
Process Host: XAWRK011

First Level Reviewer: journetp Date: 06-Nov-2016 19:46:46

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
* 1 TBA-d9 (IS)	65	4.264	4.270	-0.006	95	196993	1000.0	
* 2 Fluorobenzene (IS)	96	7.263	7.257	0.006	99	213186	50.0	
* 3 Chlorobenzene-d5	119	10.360	10.359	0.001	88	47318	50.0	
* 4 1,4-Dichlorobenzene-d4	152	12.702	12.702	0.000	97	67613	50.0	
$ 5 Dibromofluoromethane (Surr	113	6.539	6.533	0.006	93	39992	45.1	
$ 6 1,2-Dichloroethane-d4 (Sur	65	6.910	6.904	0.006	93	62017	47.9	
$ 7 Toluene-d8 (Surr)	98	8.906	8.906	0.000	93	150507	45.6	
$ 8 4-Bromofluorobenzene (Surr	95	11.546	11.546	0.000	90	58362	49.0	
11 Dichlorodifluoromethane	85		1.618				ND	
12 Chloromethane	50		1.764				ND	
13 Vinyl chloride	62		1.916				ND	
15 Bromomethane	94		2.226				ND	
16 Chloroethane	64		2.366				ND	
18 Trichlorofluoromethane	101		2.713				ND	
22 1,1-Dichloroethene	96		3.357				ND	
23 1,1,2-Trichloro-1,2,2-trif	101		3.394				ND	
24 Acetone	43		3.418				ND	
26 Carbon disulfide	76		3.643				ND	
30 Methyl acetate	43		3.911				ND	
31 Methylene Chloride	84		4.142				ND	
34 trans-1,2-Dichloroethene	96		4.532				ND	
35 Methyl tert-butyl ether	73		4.550				ND	
37 1,1-Dichloroethane	63		5.170				ND	
45 cis-1,2-Dichloroethene	96		5.919				ND	
46 2-Butanone (MEK)	43		5.937				ND	
52 Chloroform	83		6.350				ND	
53 1,1,1-Trichloroethane	97		6.509				ND	
54 Cyclohexane	56		6.582				ND	
56 Carbon tetrachloride	117		6.679				ND	
58 Benzene	78		6.910				ND	
59 1,2-Dichloroethane	62		6.989				ND	

Report Date: 06-Nov-2016 20:07:44 Chrom Revision: 2.2 17-Oct-2016 09:27:18
Data File: \\ChromNA\Pittsburgh\ChromData\CHHP7\20161106-14191.b\7110620.D

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng	Flags
64 Trichloroethene	130	7.652	7.646	0.006	98	141393	127.4	
66 Methylcyclohexane	83		7.877				ND	
67 1,2-Dichloropropane	63		7.920				ND	
71 Dichlorobromomethane	83		8.200				ND	
74 cis-1,3-Dichloropropene	75		8.644				ND	
75 4-Methyl-2-pentanone (MIBK	43		8.796				ND	
76 Toluene	91		8.972				ND	
77 trans-1,3-Dichloropropene	75		9.222				ND	
79 1,1,2-Trichloroethane	97		9.417				ND	
80 Tetrachloroethene	164		9.490				ND	
82 2-Hexanone	43		9.629				ND	
84 Chlorodibromomethane	129		9.788				ND	
85 Ethylene Dibromide	107		9.897				ND	
87 Chlorobenzene	112		10.390				ND	
90 Ethylbenzene	106		10.487				ND	
91 m-Xylene & p-Xylene	106		10.621				ND	
92 o-Xylene	106		10.998				ND	
93 Styrene	104		11.023				ND	
94 Bromoform	173		11.205				ND	
97 Isopropylbenzene	105		11.369				ND	
99 1,1,2,2-Tetrachloroethane	83		11.680				ND	
113 1,3-Dichlorobenzene	146		12.623				ND	
115 1,4-Dichlorobenzene	146		12.726				ND	
121 1,2-Dichlorobenzene	146		13.085				ND	
122 1,2-Dibromo-3-Chloropropan	157		13.876				ND	
126 1,2,4-Trichlorobenzene	180		14.697				ND	
S 133 Xylenes, Total	106		1.000				ND	

Reagents:

VOA8260INT_00062	Amount Added: 2.00	Units: uL	Run Reagent
VOA8260SURR_00060	Amount Added: 2.00	Units: uL	Run Reagent

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Pittsburgh Job No.: 240-71528-1 Analy Batch No.: 189143

SDG No.:

Instrument ID: CHHP7 GC Column: DB-624 ID: 0.18(mm) Heated Purge: (Y/N) N

Calibration Start Date: 09/26/2016 10:49 Calibration End Date: 09/26/2016 18:43 Calibration ID: 32970

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4	LVL 5		B	M1	M2								
Benzene	0.8519 0.8869	1.2881 0.9392	1.0876 0.8750	0.9525	0.9293	Ave		0.9763			0.5000	14.9		20.0			
1,2-Dichloroethane	0.2963 0.3563	0.4841 0.3880	0.4278 0.3603	0.3758	0.3534	Ave		0.3803			0.1000	14.7		20.0			
n-Heptane	0.0511 0.1681	0.2154 0.1849	0.1846 0.1906	0.1682	0.1669	Lin1	-0.482	0.1842			0.0100				0.9930		0.9900
Trichloroethene	0.2014 0.2497	0.3308 0.2665	0.2825 0.2643	0.2443	0.2424	Ave		0.2602			0.2000	14.3		20.0			
Methylcyclohexane	0.2438 0.3060	0.3963 0.3365	0.3092 0.3372	0.3076	0.3002	Ave		0.3171			0.1000	13.6		20.0			
1,2-Dichloropropane	0.2169 0.2362	0.3474 0.2510	0.2990 0.2404	0.2514	0.2447	Ave		0.2609			0.1000	16.1		20.0			
1,4-Dioxane	0.0020 0.0030	0.0031 0.0031	0.0031 0.0028	0.0036	0.0034	Ave		0.0030		*	0.0100	15.9		20.0			
Dibromomethane	0.1323 0.1691	0.2289 0.1851	0.2063 0.1736	0.1808	0.1744	Ave		0.1813			0.0100	15.5		20.0			
Dichlorobromomethane	0.2782 0.3609	0.4768 0.3958	0.4304 0.3917	0.3572	0.3617	Ave		0.3816			0.2000	15.3		20.0			
cis-1,3-Dichloropropene	0.3385 0.4467	0.5671 0.4988	0.5002 0.4839	0.4443	0.4379	Ave		0.4647			0.2000	14.2		20.0			
4-Methyl-2-pentanone (MIBK)	1.6126 1.3798	2.2490 1.5915	1.9413 1.3932	1.5617	1.5200	Ave		1.6561			0.1000	17.9		20.0			
Toluene	3.8305 3.6064	5.7820 3.9227	4.7202 3.5596	3.9784	3.8922	Ave		4.1615			0.4000	17.9		20.0			
trans-1,3-Dichloropropene	1.2011 1.5998	2.0335 1.8165	1.7676 1.6710	1.6105	1.5864	Ave		1.6608			0.1000	14.4		20.0			
Ethyl methacrylate	1.3328 1.6159	2.2860 1.8233	2.0513 1.6282	1.7983	1.6913	Ave		1.7784			0.0100	16.3		20.0			
1,1,2-Trichloroethane	0.9148 0.9675	1.4957 1.0751	1.2663 0.9952	1.0856	1.0206	Ave		1.1026			0.1000	17.3		20.0			
Tetrachloroethene	0.6669 0.6914	0.9814 0.7628	0.8037 0.7154	0.7531	0.7358	Ave		0.7638			0.2000	12.8		20.0			
1,3-Dichloropropane	1.6617 1.7212	2.6097 1.9152	2.2145 1.7245	1.8712	1.7929	Ave		1.9389			0.0100	16.6		20.0			
2-Hexanone	1.1486 0.9578	1.5985 1.1140	1.3512 0.9908	1.1176	1.0543	Ave		1.1666			0.1000	18.1		20.0			
Chlorodibromomethane	0.9163 1.0604	1.4978 1.2053	1.3052 1.1406	1.1048	1.0696	Ave		1.1625			0.1000	15.2		20.0			
Ethylene Dibromide	0.8602 1.0575	1.5658 1.2147	1.3738 1.1576	1.1406	1.0786	Ave		1.1811			0.1000	18.0		20.0			

Note: The m1 coefficient is the same as Ave RRF for an Ave curve type.