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February 18, 2020

VIA PRIVATE CARRIER

Brian Dietz
Land Restoration Program
Land and Materials Administration
Maryland Department of the Environment
1800 Washington Boulevard, Suite 625
Baltimore, Maryland 21230

Subject: Transmittal of the Response to MDE Comments on the Groundwater Investigation Blocks E/F
Installation for Deep Soil Boring SB-SEMW-10D Report Revision 1
Lockheed Martin Corporation – Middle River Complex
2323 Eastern Boulevard, Middle River, Baltimore County, Maryland

Dear Mr. Dietz,

For your review please find enclosed two hard copies with a CD of the above-referenced document. This revised report documents the investigation conducted to support remedial design of the trichloroethene-impacted groundwater within Block F at the Lockheed Martin Middle River Complex in Middle River Maryland. Comments were received from MDE in June 2019.

If possible, we respectfully request to receive MDE's document approval by March 27, 2020.

Please let me know if you have any questions. My office phone is (301) 548-2209.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom D. Blackman", with a long horizontal flourish extending to the right.

Thomas D. Blackman
Project Lead, Environmental Remediation

cc: (via email without enclosure)

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**GROUNDWATER INVESTIGATION BLOCKS E/F
INSTALLATION OF DEEP SOIL BORING
SB-SEMW-10D REPORT
LOCKHEED MARTIN MIDDLE RIVER COMPLEX
2323 EASTERN BOULEVARD
MIDDLE RIVER, MARYLAND**

Prepared for:
Lockheed Martin Corporation

Prepared by:
Tetra Tech, Inc.

February 2020

Approved by:
Lockheed Martin, Inc.

Revision: 1



Michael Martin, P.G.
Regional Manager



Christopher Pike
Project Manager

TABLE OF CONTENTS

Section	Page
Table of Contents	i
List of FIGURES	ii
List of TABLES	ii
Appendices	ii
Acronyms	iii
Section 1 Introduction	1-1
1.1 Hydrogeologic Setting and Need for Additional Data	1-2
Section 2 Investigation Approach and Methodology	2-1
2.1 Utility Clearance	2-1
2.2 Soil Boring Installation.....	2-1
2.3 Soil Sampling	2-2
2.4 Monitoring Well Drilling And Installation	2-3
2.5 Surveying	2-3
2.6 Investigation-Derived Waste	2-4
2.7 Laboratory and Data Validation.....	2-4
Section 3 Sampling Results	3-1
3.1 SEMW-10D Soil Sampling	3-1
3.2 Shelby Tube Geotechnical Sampling	3-1
3.3 Waste Characterization Sampling.....	3-2
Section 4 Discussion of Results and Update of Conceptual Site Model	4-1
Section 5 References	5-1

TABLE OF CONTENTS (CONTINUED)

LIST OF FIGURES

Figure 1-1 Site Location Map Blocks E/F
Figure 1-2 Block F SEMW-10D and Cross Section A-A' Location
Figure 1-3 Cross Section A-A' Block E/F Deeper Zone Groundwater Investigation
Figure 2-1 Sand Distribution in "C" Zone, Cross Section A-A'

LIST OF TABLES

Table 3-1 SEMW-10D Soil Sampling Results
Table 3-2 SEMW-10D Shelby Tube Geotechnical Results

APPENDICES

Appendix A—Utility Clearance and Dig Permit Documentation
Appendix B—SEMW-10D Soil Boring Log
Appendix C—Precision Surveying Report
Appendix D—Laboratory Analytical Reports and Data Validation Reports
Appendix E—Shelby Tube Geotechnical Report

ACRONYMS

bgs	below ground surface
<i>cis</i> -1,2-DCE	<i>cis</i> -1,2-dichloroethene
cm/sec	centimeters per second
C	celsius
CSM	conceptual site model
EGIS	environmental geographic information system
ESH	environment, safety and health
EESH	energy, environment, safety and health
ft	feet
HASP	health and safety plan
IDW	investigation-derived waste
LMCPI	LMC Properties, Inc.
Lockheed Martin	Lockheed Martin Corporation
µg/L	micrograms per liter
µg/kg	micrograms per kilogram
mµ	milligrams per kilogram
MRAS	MRA Systems, Inc.
MRC	Middle River Complex
PCB	polychlorinated biphenyl
PID	photoionization detector
PPE	personal protective equipment
PPM	parts per million
PVC	polyvinyl chloride
QA	quality assurance

QC	quality control
TCE	trichloroethene
TCLP	target characteristic leaching procedure
Tetra Tech	Tetra Tech, Inc.
TOC	total organic carbon
3-D	three-dimensional
USCS	Unified Soil Classification System
USDOT	United States Department of Transportation
USEPA	United States Environmental Protection Agency
VOC(s)	volatile organic compounds
WMP	waste management plan

SECTION 1 INTRODUCTION

On behalf of Lockheed Martin Corporation (Lockheed Martin), Tetra Tech Inc. (Tetra Tech) has prepared this report for conducting deep site investigation activities to support remedial design of the trichloroethene (TCE)-contaminated groundwater within Block F at the Middle River Complex (MRC) in Middle River, Maryland (Figure 1-1). The work was conducted in accordance with the approved work plan *Data Gaps Investigation, Groundwater Remedy Blocks E/F, Revision 1* (Tetra Tech, August 2018).

The objectives of this work were the following:

- Install and develop up to two deep groundwater monitoring wells (SEMW-10D1 and - 10D2) in Block E/F waterfront area to delineate trichloroethene concentrations beneath the relatively uniform clay layer in the shallow subsurface
- Collect a soil sample for geotechnical analysis from the clay layer

This report will:

- Document the drilling of the pilot borehole SEMW-10D
- Document that neither of the monitoring wells were installed because no water-bearing units were encountered within the targeted interval
- Discuss the hydrogeological significance of these results
- Discuss the results of the geotechnical analyses from a soil sample collected within the clay layer that overlies the targeted interval

Location identifiers for groundwater monitoring wells installed at the Middle River Complex have typically contained the designations “A,” “B,” or “C,” indicating whether the well is in the upper surficial aquifer “A”, intermediate surficial “B”, or lower surficial “C” aquifer.

The targeted screen intervals for the new deep monitoring wells were the upper and lower intervals of the zone of higher permeability within the lower surficial aquifer, or the “C” zone, that was

projected to extend between a subsurface interval of about 40 to 75 feet. Locally, the higher permeability is developed within silty intervals as well-developed sandy intervals are not present. If the deep boring indicated that the “C” interval was less than 15 feet thick, then only a single deep well would be installed.

1.1 HYDROGEOLOGIC SETTING AND NEED FOR ADDITIONAL DATA

The conceptual site model (CSM) for Blocks E and F indicates that the clay-silt layer vertically located between the “B” and “C” zone wells acts as an aquitard, preventing volatile organic compound (VOC) contamination in the intermediate “B” zone (a sand-prone interval occurring above the clay-silt layer) from migrating downward to the deeper “C” zone.

Figure 1-2 illustrates the locations of Block E and F monitoring wells near the blocks’ eastern boundary, in the area of the trichloroethene groundwater plume. This figure also depicts the location and orientation of cross-section A-A’ (shown on Figure 1-3), which illustrates the vertical relationships of the “A”, “B”, and “C” zones. To date, these designations have been primarily dependent on well depth rather than a hydrogeologic equivalency of units.

The stratigraphic relationships between the zones are currently being evaluated within the context of environmental sequence stratigraphy (ESS). The cross-section indicates the “B” zone represents a dominantly sand-prone interval overlying a prominent sequence boundary that can be correlated throughout the southeastern portion of the blocks. The overlying “A” zone and underlying “C” zone are lithologically less consistent, and consist of combinations of silt, sand, and clay in varying percentages.

Two monitoring wells in this area (MW-37C in Block F and MW-74C in Block E) are screened within the “C” zone and historically have contained relatively low concentrations of trichloroethene and other volatiles (in the range of <100 micrograms per liter [$\mu\text{g/L}$]) that are one or more orders of magnitude less than the concentrations detected in the overlying “B” zone. This suggests that the intervening clay unit functions as an aquitard that is preventing and/or attenuating much of the downward migration of the groundwater plume.

The purpose of the planned new wells (SEMW-10D1 and D2) was to further investigate the presence, nature, and effectiveness of the aquitard within Block F, directly downgradient from the highest trichloroethene concentrations.

SECTION 2

INVESTIGATION APPROACH AND METHODOLOGY

2.1 UTILITY CLEARANCE

The drilling location was screened for subsurface utilities prior to the start of any intrusive field activity. Tetra Tech notified Miss Utility, reviewed the available Middle River Complex (MRC) facility engineering and utility maps, and contracted with a private utility locating service (RETTEW, formerly Enviroscan, Inc. [Enviroscan]) to locate and mark any underground utilities.

Tetra Tech followed the procedures outlined in the Lockheed Martin Corporate Staff Procedure EO-28 Digging Projects (Lockheed Martin, 2008). RETTEW used standard utility-locating equipment representing the best available technology to locate underground targets, which were marked in the field with the appropriate paint color corresponding to each unique utility. Copies of the RETTEW utility clearance report, Miss Utility reports, and the signed MRC dig permit are included in Appendix A.

2.2 SOIL BORING INSTALLATION

The drilling of soil boring SB-SEMW-10D was the initial field investigative task. The location of the soil boring is illustrated on Figure 1-2. The purpose of the boring was to determine the location-specific lithology at a downgradient location along the axis of the trichloroethene (TCE) plume and adjacent to Dark Head Cove. These results were to be used to select the vertical intervals to be screened by the subsequent monitoring wells. The target depth of the boring was 75 feet, which was the expected depth of the base of the water-bearing unit within the “C” zone.

Cascade, Inc., a Maryland-licensed driller, used a low-profile mini-rotosonic drill rig to advance the boring. The rotosonic method used a six-inch diameter drill rod/override-casing setup with a temporary casing that enabled drill advancement while casing off the shallow zone to prevent potential cross-contamination.

Continuous soil samples were obtained from the ground surface to a total depth of 80 feet using a 10-foot core barrel. The cores were examined in the field for lithologic characterization by a site-experienced Tetra Tech field geologist, and were also scanned for staining, discolorations, and odors. All pertinent information, including boring location, soil/lithology descriptions, and photoionization detector (PID) readings were recorded on a soil boring log form. The soil boring log is in Appendix B.

Soil samples were screened for volatile organic compounds (VOCs) immediately following core retrieval using a portable PID and a consistent headspace-screening methodology. The soil core was cut along its long axis, and one side of the core material was immediately placed into a sealable plastic bag.

Starting at the ground surface, an eight-inch diameter casing was drilled to a depth of 30 feet (approximately 2 feet into the confining clay unit) to seat the casing in the top of the clay unit located below the “B” zone and the sequence boundary. Then, six-inch diameter casing was advanced through the clay with the larger casing remaining in place to prevent cross-contamination from the shallow “B” zone above the clay into the deeper “C” zone below.

The target depth for the borehole was the bottom of the “C” zone, which was expected at an approximate depth of 75 feet below ground surface (bgs). The boring was advanced to a total depth of 80 feet bgs. The base of the “C” zone could not be identified in the field due to the consistent clay lithology throughout the entire interval.

2.3 SOIL SAMPLING

Two soil samples were collected from the “B” zone sand for laboratory VOC analysis. The samples were selected where elevated PID responses were observed through this interval. Two soil samples were collected for VOC analysis encompassing the 10-15 foot interval and the 20-28 foot interval. One field duplicate sample was collected from the 10-15 foot interval for quality control purposes. All soil samples were analyzed for VOCs by United States Environmental Protection Agency (USEPA) SW846 Method 8260C.

One sample of the clay aquitard below the “B” zone was obtained by Shelby tube from the subsurface interval of 30 to 32 feet for the following geotechnical analyses:

- ASTM D2216 Water Content
- ASTM D6913 Grain Size
- ASTM D7928/D6913 Grain Size with hydrometer
- ASTM D854 Specific Gravity of soil
- ASTM D2937 Bulk Density
- ASTM D2974 Organic Content (Loss on Ignition)
- ASTM D5084 Hydraulic Conductivity
- ASTM D4318 Atterberg Limits
- SW-846 9060A Total Organic Carbon

2.4 MONITORING WELL DRILLING AND INSTALLATION

Neither of the planned monitoring wells were installed. As noted in the boring log (Appendix B), the top of the “B” zone was encountered at a depth of 10 feet and was characterized by a poorly-graded, fine- to medium-grained loose sand. The base of the “B” zone and top of the clay aquitard (the sequence boundary) was encountered at a depth of 28 feet. The “C” zone aquifer was not present at this location and the entire vertical sequence beneath the sequence boundary was lithologically characterized by a predominantly dry stiff clay with trace amounts of silt and very fine sand. The total depth of the soil boring was 80 feet, which is well below the expected base of the “C” zone as projected in the project cross-section (Figure 1-3). The discontinuous nature of suitable aquifer lithologies within the “C” zone, and their absence at the SB-SEMW-10D boring location, are illustrated in cross-section on Figure 2-1. The hydrogeological significance of this finding is discussed in Section 4 of this report.

2.5 SURVEYING

The soil boring was surveyed by Precision Survey and Mapping LLC, a site-experienced and state-licensed professional land surveying firm. The boring was surveyed for vertical elevation and

horizontal location to the nearest 0.01 foot for vertical elevations in the North American Vertical Datum 1988, and to the nearest 0.1 foot horizontal coordinates in the North American Datum 1983. The results are listed in the survey report included as Appendix C. Soil boring SB-SEMW-10 is Data Point 100, the first data point included in the report.

2.6 INVESTIGATION-DERIVED WASTE

Tetra Tech followed the *Investigation-Derived Waste Management Plan* (WMP) (Tetra Tech, 2018b) conforming to Lockheed Martin Energy, Environment, Safety, and Health (EESH) Remediation Waste Management Procedure No. EROP 03, Revision 4 (effective April 17, 2009). Investigation-derived waste (IDW) consisting of personal protective equipment (PPE) and tubing IDW was placed in trash bags and a facility trash receptacle and disposed as general refuse. Soil cuttings were collected and stored in United States Department of Transportation (USDOT)-approved 55-gallon drums that were appropriately labeled and logged on a drum inventory form in compliance with the WMP (Tetra Tech, 2018b). The drums were relocated to a drum staging area located in Block E/Lot D per direction from Lockheed Martin personnel. An IDW sample was collected and submitted for analysis of VOCs, polychlorinated biphenyls (PCBs), toxicity characteristic leaching procedure (TCLP) metals, and ignitability. Based upon the IDW analytical data, the IDW was classified as non-hazardous waste and will be removed and properly disposed of in accordance with federal, state, and local regulations.

2.7 LABORATORY AND DATA VALIDATION

Tetra Tech subcontracted with TestAmerica (North Canton, Ohio), a laboratory accredited in the State of Maryland, for organic sample analyses. Soil samples collected from SB-SEMW-10D were analyzed for VOCs by SW846 Method 8260C. The analytical data report and data validation reports are provided in Appendix D.

All data provided by TestAmerica was validated for quality assurance (QA)/quality control (QC) parameters including accuracy, precision, completeness, and comparability, in accordance with established USEPA protocols. The review followed the USEPA *National Functional Guidelines for Organic Superfund Methods Data Review* (USEPA, 2017a) *National Functional Guidelines*

for Inorganic Superfund Methods Data Review (USEPA, 2017b) and the specifics of the analytical method used. The methodology, method compliance, and corrective actions were also evaluated.

Tetra Tech subcontracted with Froehling & Robertson, Inc. (Lutherville Timonium, Maryland), for geotechnical sample analyses. A soil sample collected from a depth of 32 – 34 feet from SB-SEMW-10D was analyzed for various geotechnical parameters. Appendix E contains the geotechnical laboratory report. No data validation was performed for the soil geotechnical samples.

SECTION 3 SAMPLING RESULTS

3.1 SEMW-10D SOIL SAMPLING

Two soil samples were collected from the “B” zone sand for laboratory analysis of volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) SW846 Method 8260C. The samples were selected because of the elevated photoionization detector (PID) responses observed through each interval. Specifically, the first soil sample was collected from the 10-15 foot interval due to a PID reading of 35.3 parts per million (ppm), which was the highest PID reading of the boring. Trichloroethene (TCE) was detected at a concentration of 110 micrograms per kilogram ($\mu\text{g}/\text{kg}$), which is consistent with the samples collected from previous borings during the delineation of this plume. *cis*-1,2-Dichloroethene (*cis*-1,2-DCE) was also detected at a concentration of 1.4 $\mu\text{g}/\text{kg}$. The second sample was collected from the sandy 20-28 foot interval which precedes the thick clay confining layer which begins at 28 feet below ground surface. This sample yielded a TCE concentration of 7.3 $\mu\text{g}/\text{kg}$. These samples were included in the sampling program at the judgement of the field team strictly for informational purposes to gain insight on further delineation of the Block E/F TCE plume. The positive detections reported by TestAmerica and validated by Tetra Tech are summarized in the Table 3-1 at the end of this report. The full analytical report with data validation is included as Appendix D.

3.2 SHELBY TUBE GEOTECHNICAL SAMPLING

Per the work plan, one sample of the clay aquitard below the “B” zone was obtained by Shelby tube from the subsurface interval of 30 to 32 feet for various geotechnical analyses to be completed by Froehling & Robertson, Inc. (Lutherville Timonium, Maryland). The geotechnical results are summarized in Table 3-2 at the end of this report, and the full geotechnical report is included as Appendix E.

The clay sample is classified as a Sandy Lean Clay under the Unified Soil Classification System, which is consistent with the field characterization of a stiff to very stiff clay. The vertical hydraulic

conductivity of the clay is a very low 1.56×10^{-7} centimeters per second (cm/sec). The total organic carbon content (TOC) of 2,070 milligrams per kilogram (mg/kg) and the organic content of 2.22% are fairly high but are typical for the fluvial-deltaic overbank and low-energy deposits encountered at the Middle River Complex (MRC).

3.3 WASTE CHARACTERIZATION SAMPLING

Following the completion of field work, a waste characterization sample was collected from the soil IDW generated from SEMW-10D. Soil generated during the project was placed in 55-gallon USDOT approved steel drums and placed on the secondary containment drum pad located in Block E. Soil for this waste characterization sample was collected from each drum generated and then composited to ensure the sample correctly characterized the waste generated from the project. The waste sample was collected on November 7, 2018 with the sample ID of WC-SEMW10D-SOIL and sent to the accredited laboratory TestAmerica located in North Canton, Ohio. The sample was analyzed for VOCs, TCLP metals, PCBs, and ignitability. Results include a detection of trichloroethene of 17 µg/kg with no other detections of note. The drums associated with this project will be removed from the site as non-hazardous waste by Clean Harbors in February 2019.

SECTION 4

DISCUSSION OF RESULTS AND UPDATE OF CONCEPTUAL SITE MODEL

The results of this investigation were intended to assist with the evaluation of groundwater remedies for Blocks E and F. The groundwater volatile organic compound (VOC) concentrations were to be used to determine the degree of plume attenuation at a location immediately prior to potential discharge to the surface waters of Dark Head Cove, and to estimate the mass flux and mass discharge at that interface. The lithologic and geotechnical data were intended to be integrated into and to refine the conceptual site model (CSM) to improve the overall hydrogeologic interpretation of the site, to directly apply this information to the evaluation and potential design of remedial actions, and to identify any additional data gaps that could be filled through additional investigation.

Although the monitoring wells could not be installed to assist in the evaluation of the groundwater plume at this location, the very fact that there was a lack of suitable aquifer materials in the “C” zone interval of interest significantly contributes to the refinement of the conceptual site model. The information gained through this investigation includes the following:

- The “C” zone aquifer (sediments that are sufficiently coarse-grained to function as an aquifer) is not laterally or vertically extensive in the vicinity of the trichloroethene (TCE) plume. This observation is consistent with the environmental sequence-stratigraphic model currently being developed for the Middle River Complex and the interpreted fluvial-deltaic paleoenvironments of deposition of these sediments. Although based on limited data, the sand and silt within the “C” zone, where present, appears to occur within a finer-grained matrix that likely reduces the permeability of the interval and makes the hydraulic interconnection of the isolated sands within this zone unlikely.
- The clay underlying the “B” zone sands is approximately 25 feet thick, laterally extensive, and occurs throughout the area of the trichloroethene plume (see Figures 1-3 and 2-1). The

measured vertical hydraulic conductivity of 1.56×10^{-7} centimeters per second (cm/sec) is indicative of a thick, very low-permeability sequence that likely creates an effective aquitard that hydraulically isolates the “B” zone aquifer from the underlying sediments. The high organic content and total organic carbon (TOC) values also suggest a high affinity for the clay to absorb volatiles migrating with the groundwater through the sediments.

SECTION 5 REFERENCES

Lockheed Martin Corporation (Lockheed Martin), 2008. *Enterprise Operations (EO)-28 and Lockheed Martin Minimum Requirements for Intrusive Fieldwork Work Plans*.

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United States Environmental Protection Agency (USEPA), 2017a. *National Functional Guidelines for Organic Superfund Methods Data Review*. January.

United States Environmental Protection Agency (USEPA), 2017b. *National Functional Guidelines for Inorganic Superfund Methods Data Review*. January.

FIGURES

Figure 1-1 Site Location Map Blocks E/F
Figure 1-2 Block F SEMW-10D and Cross Section A-A' Location
Figure 1-3 Cross Section A-A' Block E/F Deeper Zone Groundwater Investigation
Figure 2-1 Sand Distribution in "C" Zone, Cross Section A-A'



2014 aerial photograph provided by U.S. Geological Survey.

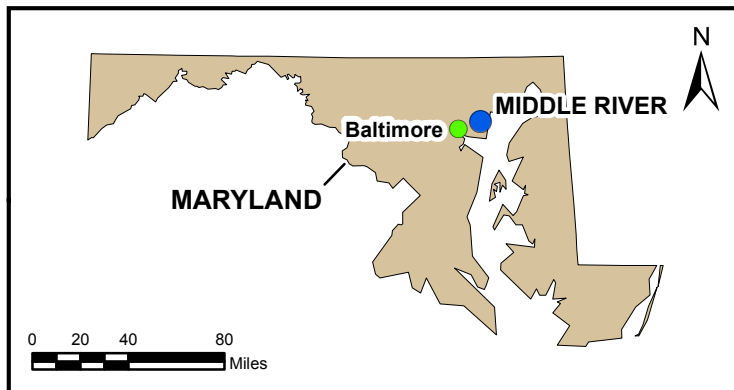


FIGURE 1-1

**SITE LOCATION MAP, BLOCKS E/F
MIDDLE RIVER COMPLEX**

*Lockheed Martin Middle River Complex
Middle River, Maryland*

DATE MODIFIED: 03/13/18

CREATED BY: JEE





FIGURE 1-2
BLOCK F SEMW-10D AND CROSS-SECTION A-A' LOCATION

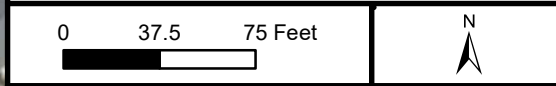
LEGEND

- SEMW-10D LOCATION
- ⊕ EXISTING MONITORING WELL
- ⊕ EXTRACTION WELL
- ⊙ PIEZOMETER
- ↔ CROSS-SECTION LINE

* WELL IWE-22 IS NOT PART OF CROSS-SECTION A-A'.

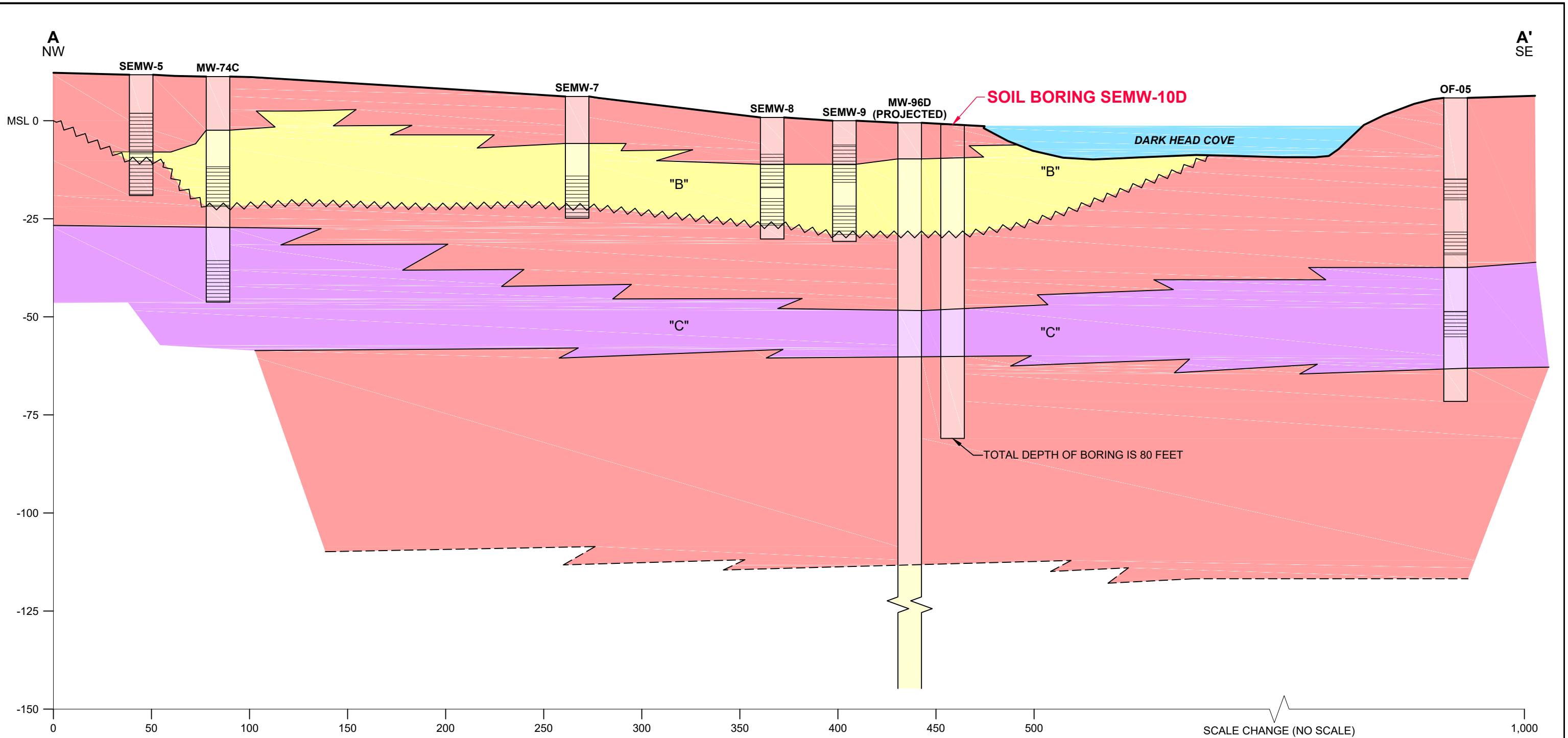
2017 AERIAL PHOTOGRAPH PROVIDED BY THE STATE OF MARYLAND.

Lockheed Martin Middle River Complex
Middle River, Maryland








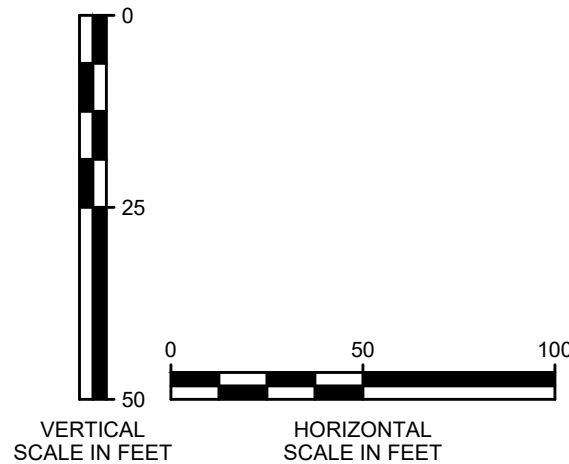
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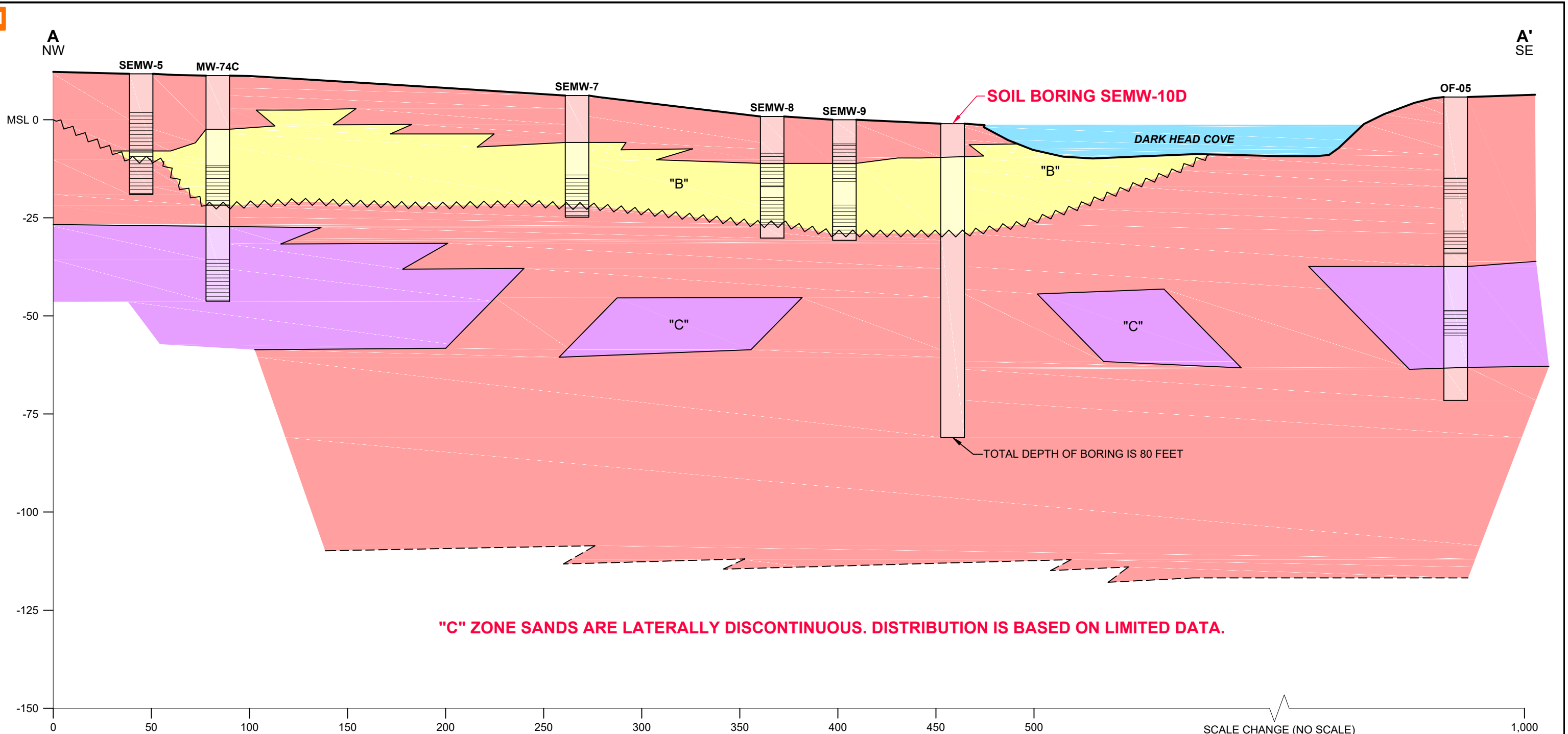
-  SCREEN INTERVAL
-  FINE GRAINED SAND AND SILTY SAND CHANNEL SAND
-  SILTS & SANDS WITH CLAYS
-  CLAY
-  SEQUENCE BOUNDARY WITH COMMON BASAL GRAVEL



CROSS SECTION A-A'
 BLOCKS E/F, DEEPER ZONE GROUNDWATER INVESTIGATION
 LOCKHEED MARTIN MIDDLE RIVER COMPLEX
 MIDDLE RIVER, MARYLAND

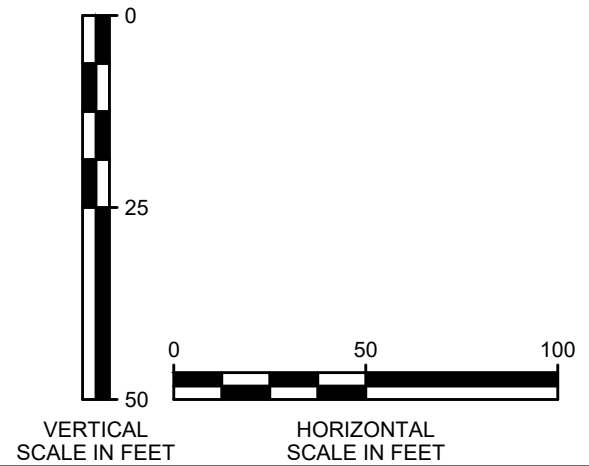
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FIGURE NUMBER FIGURE 1-3	

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"C" ZONE SANDS ARE LATERALLY DISCONTINUOUS. DISTRIBUTION IS BASED ON LIMITED DATA.

- LEGEND**
- SCREEN INTERVAL
 - FINE GRAINED SAND AND SILTY SAND CHANNEL SAND
 - SILTS & SANDS WITH CLAYS
 - CLAY
 - SEQUENCE BOUNDARY WITH COMMON BASAL GRAVEL



SAND DISTRIBUTION IN "C" ZONE
 CROSS SECTION A-A'
 BLOCKS E/F, DEEPER ZONE GROUNDWATER INVESTIGATION
 LOCKHEED MARTIN MIDDLE RIVER COMPLEX
 MIDDLE RIVER, MARYLAND

SCALE AS NOTED	
FILE 112IC08597CS01	
REV 0	DATE 7/2/19
FIGURE NUMBER FIGURE 2-1	

TABLES

Table 3-1 SEMW-10D Soil Sampling Results
Table 3-2 SEMW-10D Shelby Tube Geotechnical Results

Table 3-1

**SEMW-10D Soil Sampling Results
Lockheed Martin Corporation
Middle River Complex, Middle River, Maryland**

SAMPLE ID	SB-SEMW-10D-10-15	SB-SEMW-10D-20-28	SB-SEMW-10D-DUP
SAMPLE DATE	10/29/2018	10/29/2018	10/29/2018
Volatile organic compounds (µg/kg)			
<i>cis</i> -1,2-Dichloroethene	1.4 J	0.78 U	0.78 U
Trichloroethene	110 J	7.3	49 J

µg/kg - micrograms per kilogram
 J - estimated
 U - nondetect

Table 3-2**SEMW-10D Shelby Tube Geotechnical Results**

SAMPLE LOCATION:	SB-SEMW-10D
SAMPLE DEPTH:	30 – 32 FEET
LABORATORY TEST	RESULT
Natural Moisture	21.70%
USCS Classification	Sandy Lean CLAY (CL)
USDA Classification	Clayey Loam
Atterberg Limits	LL=30 PL=20 PI=10
Organic Content	2.22%
Specific Gravity	2.76
Bulk Density	163.96 pcf
Vertical Hydraulic Conductivity (at 20 ⁰ C)	1.56X10 ⁻⁷ cm/sec
Total Organic Carbon	2,070 mg/kg

APPENDICES

-
- Appendix A—Utility Clearance and Dig Permit Documentation**
- Appendix B—SEMW-10D Soil Boring Log**
- Appendix C—Precision Surveying Report**
- Appendix D—Laboratory Analytical Reports and Data Validation Reports**
- Appendix E—Shelby Tube Geotechnical Report**

APPENDIX A—UTILITY CLEARANCE AND DIG PERMIT DOCUMENTATION

Dig Permit

See Enterprise Operations Procedure EO-28, Digging Projects, for instructions

Date August 23, 2018	Project Manager Tom Blackman (Lockheed Martin EESH) Mike Martin (Tetra Tech)
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Building/Location

Block F – grassy areas south of Block E

Purpose of work

1. Complete hydraulic profiling and soil borings to maximum depths of 40 feet in the grassy portions of Block F, south of Block E via direct-push technology drilling.
2. Drill and install 6 monitoring wells to maximum depths of 40 feet in the same grassy area of Block F via rotosonic technology
3. Drill and install one monitoring well to maximum depth of 75 feet in eastern Block F via rotosonic technology
4. Work associated with additional delineation of 1,2,4-trichlorobenzene in soils.

Company/LM organization performing dig

Tetra Tech overseeing Ground Zero (direct push technology contractor) and Cascade (rotosonic technology contractor)

Planned dig date September 6, 2018	Duration Three Weeks	Start time 0700
Expected depth Approximately 40 feet below grade maximum	Width 2-inch diameter boreholes for DPT, 6-8-inch diameter boreholes for rotosonic	Length NA

Underground utilities identified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Overhead utilities? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Electrical lines? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Gas lines? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Sewer? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Water? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Telecommunications? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Other? Specify Storm Drain <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Site-specific or customer utility locating requirements completed?

Yes No N/A



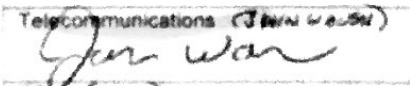
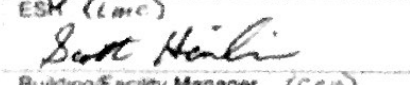


Sketch of dig project (or attach drawing)

See Attached

A private utility locating contractor (Retnew) was used to mark subsurface utilities. Confirmation letter is attached.

Miss Utility Ticket will be called one week prior to work and documentation will be provided when available.

The locations of the proposed work are presented in the enclosed maps, Figure 2-3 for the deep monitoring well and Figure 3-1 for the HPT, DPT, and remaining rotosonic wells.

Project Manager Michael Martin 	Date August 23, 2018	Customer (SECURITY) 	Date 8/31/18
Telecommunications (JAWN WADSW) 	Date 8/30/18	Customer (RMS) N/A	Date —
ESH (Linc) 	Date 8/30/18	Customer (MRAO) N/A	Date —
Building/Facility Manager (CPG) 	Date 8/30/18		Date 8/30/18

Risk Handling Checklist

Project Manager Use this checklist to develop risk handling plans before the dig starts. You must also review Enterprise Operations Procedure EO-28, Digging Projects.

General Questions	<input checked="" type="checkbox"/> What Lockheed Martin processes could be affected by the dig? No Lockheed Martin processes or operations are expected to be impacted as all work will be conducted inside the secured area within F (east of old sea plane ramp). Tetra Tech will work with Lockheed Martin and their tenants to minimize potential impacts.
	<input checked="" type="checkbox"/> What are the safety hazards? Utilities, slips/trips/falls, vehicle traffic, drill rig safety, pinch points
	<input checked="" type="checkbox"/> What could fail? Direct-Push and roto sonic drill rig components
	<input checked="" type="checkbox"/> How could it fail? A component of the mechanical equipment could potentially fail. An inspection of the equipment will be conducted daily to ensure proper working condition.
	<input checked="" type="checkbox"/> Does the area need to be returned to its normal state when the work is complete? Yes, boreholes will be backfilled with bentonite upon completion.
	<input type="checkbox"/> How could the dig affect operations/test/production? No operations will be affected
	<input type="checkbox"/> Have potential risks been addressed with area management? No risks identified
	<input checked="" type="checkbox"/> Am I comfortable with any risk handling plans, understanding the potential impact? Yes
Traffic Control	<input checked="" type="checkbox"/> Ensure proper signage and communication. Proper signage, safety cones, and lines of communication will be utilized during work
	<input checked="" type="checkbox"/> Coordinate road or access closures through Industrial Security before starting the dig. LMCPI, Security, EMCOR and the site tenant leads will be notified of the field schedule.
	<input checked="" type="checkbox"/> Ensure the work area is isolated from foot traffic by placing barriers and warning lights as required by EO-28.
	<input checked="" type="checkbox"/> Ensure that vehicle traffic will be safe. Use of traffic cones, barriers and/or caution tape
	<input type="checkbox"/> Ensure that product transport will be safe. N/A
Excavation	<input checked="" type="checkbox"/> Review facility drawings to identify utilities. Research old drawings as necessary. Available site engineering and utility maps were reviewed
	<input type="checkbox"/> Discuss the project with Facility Engineering/Maintenance staff that may have unique knowledge about the construction area not documented in facility drawings.
	<input checked="" type="checkbox"/> Process form EO-28-1, Dig Permit. Use this opportunity to explain the process and relate expectations to the contractor/LM organization that will perform the dig.
	<input checked="" type="checkbox"/> Have LM Telecommunications and the local utility identification service locate and mark utilities/underground obstacles.
	<input checked="" type="checkbox"/> Coordinate with other ongoing projects in the affected area. Will coordinate with any utility work in the area if present.
	<input type="checkbox"/> Make every effort not to excavate around live utilities in service. Schedule an outage in advance or have Maintenance temporarily shut down and isolate the utilities while excavating. Underground utilities marked by Miss Utility and private utility locating service, storm drain line runs near one boring, location has been re-located.
	<input type="checkbox"/> If live utilities cannot be shut down while excavating, know where to isolate or shut them down if they are damaged while excavating N/A
	<input type="checkbox"/> Have a spotter(s) work with the equipment operator. Hand dig when necessary. N/A
	<input type="checkbox"/> Excavate along the side of the utility, not on top. N/A
	<input type="checkbox"/> Weather may affect the dig. Ensure water pipes are protected during freezing weather, especially if the trench will be left open over night. Rain may cause the side of the trench to slough, which can undermine and break pipes/conduit. N/A
	<input type="checkbox"/> Ensure care when moving trench boxes in and out of trenches so pipes/conduit aren't damaged by the boxes. N/A
	<input checked="" type="checkbox"/> Ensure surface drainage is controlled so that water doesn't get into the excavation and undermine soil supporting utilities.
	<input checked="" type="checkbox"/> Ensure stocked material is kept far enough back (minimum 2 feet) so that material and rocks don't fall on utilities in the open hole. Soil removed from boreholes will be put in drums for characterization and disposal.
	<input checked="" type="checkbox"/> Ensure backfilling is done carefully. Re-bed utilities with proper material, filling all voids below. Keep inappropriate material from falling on or being placed in the trench. Be careful when compacting backfill in the two feet directly above the utility. Boreholes will backfilled with bentonite clay pellets
	<input checked="" type="checkbox"/> Keeps the as-built utility drawing in the field while the excavation site is open. Take pictures if possible (horizontal alignment and elevations), if known utilities deviate from facility drawings or if utilities are found that are not on facility drawings. Give the modified as-built drawings to the Building/Facility Manager, who will update the drawing database. Field geologist will maintain site maps onsite and photographs will be taken to document all phases of the project
<input checked="" type="checkbox"/> Ensure that the equipment operator digs slowly and remains in control. Drill rig will be operated by and experienced person.	
On a	<input type="checkbox"/> Ensure that trenching and shoring methods comply with the applicable OSHA regulations and are overseen by a "Competent Person," as defined in those regulations. N/A

Regularly inspect methods to prevent violations.

Ensure LM employees do not dig or enter any excavation that is more than four feet deep. *N/A*

Project Manager signature indicating completion of checklist review

Date

August 23, 2018

Michael Martin



GEOPHYSICS JOB COMPLETION REPORT



TO: Mike Martin – Tetra Tech

FROM: Max Griffiths, RETTEW Associates, Inc. (RAI)

CC: Felicia Bechtel (RAI)

DATE: 08/06/2018

CLIENT: Tetra Tech

PROJECT NO: 019872007

PROJECT NAME: Middle River

TECHNICIAN: Max Griffiths

PROJECT LOCATION: Blocks E & F
Middle River, MD.

UTILITIES LOCATED:

- **Electric Lines**
- **Storm Lines**
- **Water Lines**
- **Unknown Utilities**

EQUIPMENT:

- EM Locator (RD8000/Metrotech)
- Ground Penetrating Radar (GPR)
- Fisher TW-6 (metal detector)
- C.A.T. Passive Locator
- Acoustic Leak Detector
- Magnetometer
- Integrity Assessment Camera
- Traceable Rodder
- Concrete GPR

SCOPE OF WORK

RETTEW completed a subsurface utility survey to mark-out utilities, underground storage tanks, and other structures within two client-designated areas located in Blocks E and F of the Middle River Complex (**Figure 1**).

METHODOLOGIES

RETTEW first performed a visual scan of each area to identify existing utilities and USTs and associated piping (vent and fill pipes). RETTEW then scanned each survey area with a GSSI ground penetrating radar (GPR) system and dual-frequency 300/800 megaHertz scanning antenna, a Fisher TW-6 metal detector, and a C.A.T. passive utility locator to detect such targets.

RESULTS/CONCLUSIONS

On July 31, 2018, Max Griffiths arrived on-site, was shown the two survey locations, and performed a visual scan for surface features possibly related to utilities or USTs. The proposed boring locations were then marked with semi-permanent paint and pin flags where necessary.

Water (storm and fire) and electric lines were located with the C.A.T. passive utility locator and confirmed with the GPR. GPR scanning also detected an unknown utility near Boring CPP-SB-1864. RETTEW then scanned each area with a TW-6 metal detector in a rough grid pattern to detect anomalous responses indicative of buried metallic objects; however, none were detected.

RESULTS/CONCLUSIONS CONT.

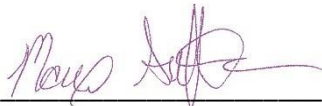
The work was completed on July 31, 2018 and RETTEW photo-documented the survey locations and findings before demobilizing from the site.

ATTACHMENTS: **Figure 1** – Boring Location Survey Results, Blocks E and F

RETTEW, strives to provide quality and accurate locating services to all of its customers, but due to the nature of underground facilities, RETTEW will not be held liable for any damaged facilities. All customers are advised that they are required to follow their state's One-Call-Law before beginning excavation. The marks placed during this investigation are temporary markings for utility mapping purposes. The marks are not intended, nor should they be used for construction; legal and/or recommended construction tolerance zones associated with the identified utilities were not marked by RETTEW. Prior to construction activities, RETTEW should be contacted for remarking of the utilities and construction tolerance zones.

RETTEW, will not guarantee the longevity of utility markings, due to activities on site that may destroy, or otherwise alter, the markings that were placed on the ground by RETTEW, if the marks have been altered or destroyed, the customer is advised to contact RETTEW for remarkings. Any electronically determined depths provided to the client are estimates only and due to limitations equipment cannot be guaranteed. Client acknowledges that due to the limitations of the equipment used, safe exposure and measurements are the only methods which can precisely determine location and depth of structures marked.

PREPARED BY:
Maxwell (Max) Griffiths – Geophysicist III



(Name and Title)

RECEIVED BY:

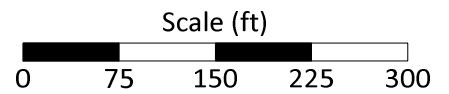


(Name and Title)






FIGURES





Notes: The information depicted in this drawing represents survey results from the date surveyed and can only be considered indicative of the general conditions existing on that survey date



Coordinates in Maryland State Plane (feet) NAD-83 Datum.

	Electric Line
	Fire Water Line
	Storm Water Line
	Unknown Utility
	Boring Location

Title: Boring Location Survey Results Blocks E & F		Location: Middle River Complex Middle River, MD	
 		Project Number: 019872007	
Scale: 1' = 150'		Revision Date: 08/06/2018	

Miss Utility

Ticket No: 18684788
STANDARD [Update](#)
Update of:
Update Counter: 1
Original Call Date: 10/10/18 01:13 pm
Op / Rev Op: IVR / IVR
Response Due By: 10/12/18 11:59 pm
Release Time: 10/10/18 01:13 pm
Expiration Date: 10/26/18 23:59 pm

CALLER INFORMATION

Company Name: TETRA TECH, INC
Fax Phone:
Contact Name: JOSHUA MULLIS
Phone: 410-279-2700
Caller Address: 20251 CENTURY BLVD SUITE 200 GERMANTOWN,MD 20874
Email Address: josh.mullis@tetratech.com
Job Site Contact: JOSH MULLIS
Phone: 410-279-2700

DIG SITE INFORMATION

Type of Work: SOIL BORINGS TO DEPTH OF 40 FEET IN GRASSY AREA INSIDE FENCE
Work Being Done For: LOCKHEED MARTIN
Explosives: N
Permit:
MDOT Permit:
Job Number:

DIG SITE LOCATION

State: MD
County: BALTIMORE
Place: MIDDLE RIVER
Subdivision:
Address: 501

Street: MARTIN BLVD
Intersecting Street: CHESAPEAKE PARK PLAZA
Extent of Work: LOCATE/MARK: AREA INSIDE FENCE ON WATER SIDE OF MARTIN BLVD. ONLY ONE SANITARY LINE IS PRESENT IN THIS AREA. SEE POLYGON AND ATTACHED FIGURE. CALL 410-279-2700 FOR MORE QUESTIONS. SOIL BORINGS WILL BE COMPLETED IN GRASS TO 40 FEET IN VARIOUS AREAS IN POLYGON.
Remarks: REFERENCE LOCATION 474 MARTIN BLVD. SITE IS ON LOCKHEED MARTIN PROPERTY NEAR WATER
Map Coord NW Lat: 39.3276927
Lon: -76.4296488
SE Lat: 39.3259333
Lon: -76.4264301

MEMBERS NOTIFIED

District	Company Name	Marking Concerns	Damage	Customer Service	Status
BGEBA	BGE ELECTRIC-USIC	800-778-9140	800-685-0123	800-685-0123	Clear/No conflict
BGEBAG	BGE GAS-USIC	800-778-9140	800-685-0123	800-685-0123	Clear/No conflict
CBW04	BALTIMORE CITY DPW - Pro Comm	443-456-6686			Clear/No conflict
CWMD2	COMCAST/UTILIQUEST	410-536-0070	877-359-1821	888-739-1379	Clear/No conflict (Response by Utiliquest)
MAA02	MD AVIATION ADMIN/OCCLS	410-712-0202			Clear/No conflict
TDEX01	TERRADEX	650-227-3254	650-227-3254	650-227-3254	Clear/No conflict

Legend:  Locate Polygon

Lat/Lon



APPENDIX B—SEMW-10D SOIL BORING LOG



Tetra Tech Inc

BORING NUMBER SB-SEMW-10D

PAGE 1 OF 2

CLIENT Lockheed Martin Corporation **PROJECT NAME** BLOCK F DRILLING TCE/TCB
PROJECT NUMBER 112IC08667 **PROJECT LOCATION** MIDDLE RIVER, MARYLAND
DATE STARTED 10/29/18 **COMPLETED** 10/29/18 **GROUND ELEVATION** 5.59 **HOLE SIZE** 8 inches
DRILLING CONTRACTOR Cascade **DRILLING METHOD** Rotosonic
NOTES Shelby tube collected at 30-32 ft bgs. **LOGGED BY** J. Mullis
NORTHING 605065.1070 **EASTING** 1474305.800 **DATUM:** MD STATE NAD 1983

TT SOIL BORING E - GINT STD US LAB.GDT - 10/30/18 08:49 - C:\USERS\JOSH.MULLIS\DESKTOP\PI\PRACTICE 022618.GPJ

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
0					
		OL		1.0 brown soft silty OM, rootlets, moist	PID = 0.3
		SC		light tan low plastic clayey SAND, fine sand, sl moist	PID = 0
				2.8	
		CL		red w/white mottled stiff silty CLAY, v sl moist	
5				6.0	
		SC		red w/white/yellow mottled stiff to friable sandy CLAY, fine sand, v sl moist	PID = 0.2
10				10.0	
	10-15(ft)	SP		red w/brown/purple loose SAND w/some silt, poorly graded, fine, moist to very moist	PID = 35.3
15					
		SP		light purple loose SAND w/some silt, poorly graded, medium sand, moist to very moist	PID = 4.3
20				20.0	
	20-28(ft)	SP			
25				28.0	
		CL		red w/purple/yellow/tan mottled very stiff CLAY w/trace sand, concretions/nodules at 29', v sl moist	PID = 7
30				30.0	
	30-32(ft)	TUBE		SHELBY TUBE COLLECTED 30-32' FOR GEOTECHNICAL ANALYSIS.	PID = 4.5
				32.0	
		CL		red w/tan/gray/purple mottled very stiff CLAY w/trace fine sand, dry	PID = 3.4
35					
		CL			
40				40.0	

(Continued Next Page)



Tetra Tech Inc

BORING NUMBER SB-SEMW-10D

CLIENT Lockheed Martin Corporation

PROJECT NAME BLOCK F DRILLING TCE/TCB

PROJECT NUMBER 112IC08667

PROJECT LOCATION MIDDLE RIVER, MARYLAND

TT SOIL BORING E - GINT STD US LAB.GDT - 10/30/18 08:49 - C:\USERS\JOSH.MULLIS\DESKTOP\IPRACTICE 022618.GPJ

DEPTH (ft)	LABORATORY SAMPLE INTERVAL	U.S.C.S.	GRAPHIC LOG	MATERIAL DESCRIPTION	ENVIRONMENTAL DATA
40				tan to brown 40-46', gray w/white 46-50', CLAY w/trace very fine sand, dry	PID = 1.7
45		CL			PID = 0.4
50			50.0	reddish purple w/brown/gray mottled CLAY w/trace very fine sand, dry. White mottling @ 58-60'	PID = 0.6
55		CL			PID = 0.5
60			60.0	brown/purple very stiff silty CLAY, dry, friable	PID = 0.5
65		CL			PID = 0.3
70			68.0	gray to grayish blue very stiff silty CLAY, dry, friable	PID = 0.3
75			72.0	reddish purple to gray/purple friable silty CLAY, dry	PID = 0
80		CL			PID = 0
			80.0	Bottom of borehole at 80.0 feet.	

APPENDIX C—PRECISION SURVEYING REPORT



Date: December 21, 2018

Tetra Tech
20251 Century Boulevard, Suite 200,
Germantown, MD 20874-7114

Re: MRC Well Monitoring Report

Attn: Mr. Michael Martin

Dear Mr. Martin,

In accordance with your request, I am providing this letter and attachment which represents the measurements associated with the MRC Monitoring Well Locations performed in November 2018.

The datum used for the measurements are based on the Maryland Coordinate System NAD83/2011 epoch 2011 for horizontal position and NAVD88 for vertical position.

Feel free to give me a call if you have any questions or require additional information regarding the effort.

Thank you,

A handwritten signature in blue ink that reads 'C. Ruzicka'.

Charles S. Ruzicka, L.S., President
Professional Land Surveyor MD/DE/DC
Office: 410-459-2124
Cell: 410-925-0080
chuck@precisionsurveys.us



MRC Well Locations Nov 2018						
Point	Northing	Easting	Elev.	Monitor Well Designation	Measurement to:	Code
100	605065.1070	1474305.8000	5.59	SB-SEMW-10D		DHF
101	604930.0730	1474035.1200	7.06	MRC-MW136B	Top of Casing	MW
102	604930.2130	1474035.0200	6.83	MRC-MW136B	Top of PVC	MW
103	605021.9770	1473989.8430	8.89	MRC-MW135A	Top of Casing	MW
104	605021.9460	1473989.7420	8.62	MRC-MW135A	Top of PVC	MW
105	605022.1490	1473989.8320	8.62	MRC-MW135B	Top of PVC	MW
106	604848.5570	1473685.9680	9.97	MRC-MW134A	Top of Casing	MW
107	604848.4450	1473685.8960	9.70	MRC-MW134A	Top of PVC	MW
108	604848.7670	1473685.8920	9.71	MRC-MW134A	Top of PVC	MW
109	605758.8970	1471431.7750	8.92	MRC-MW133B	Top of Casing	MW
110	605816.6630	1471406.1820	9.40	MRC-MW132C	Top of Casing	MW
111	605816.6800	1471406.3050	9.18	MRC-MW132C	Top of PVCCAP	MW
112	605758.8980	1471431.7940	8.64	MRC-MW133B	Top of PVC	MW
113	605012.4440	1472354.2980	12.34	MRC-MW11A	Top of Casing	MW
114	605012.5230	1472354.3200	12.11	MRC-MW11A	Top of PVC	MW
115	605136.5760	1472605.9800	16.77	MRC-SWMW-1I	Top of Casing	MW
116	605136.6810	1472606.0720	16.49	MRC-SWMW-1I	Top of PVC	MW
117	605121.4390	1472588.5280	15.78	MRC-SWMW-2I	Top of Casing	MW
118	605121.4730	1472588.5970	15.46	MRC-SWMW-2I	Top of PVC	MW
119	605077.3620	1472536.7000	13.99	MRC-SWMW-3I	Top of Casing	MW
120	605077.2190	1472536.6770	13.66	MRC-SWMW-3I	Top of PVC CAP	MW
121	604923.4130	1472453.1620	10.74	MRC-MW-107BC	Top of CasingCAP	MW
122	604923.4710	1472453.2420	10.49	MRC-MW-107BC	Top of PVC	MW
123	605457.8410	1474106.2540	11.10	IWE-1	Top of Casing	MW
124	605457.8860	1474106.2900	10.68	IWE-1	Top of PVC	MW
125	605468.1510	1474135.5520	10.35	IWE-2	Top of Bolt	MW
126	605468.5180	1474136.2380	11.00	IWE-2	Top of Casing	MW
127	605481.0730	1474164.6300	11.05	IWE-3	Top of Casing	MW
128	605480.5750	1474163.9630	10.24	IWE-3	Top of Bolt	MW
129	605484.1220	1474178.1010	10.89	MRC-SEMW 1I	Top of Casing	MW
130	605484.1680	1474178.0660	10.63	MRC-SEMW 1I	Top of PVC	MW
131	605482.9510	1474194.0010	10.96	MRC-SEMW 2I	Top of Casing	MW
132	605483.0530	1474193.8800	10.64	MRC-SEMW 2I	Top of PVC	MW
133	605473.6880	1474197.6770	10.99	MRC-SEMW 3I	Top of Casing	MW
134	605473.8190	1474197.6100	10.66	MRC-SEMW 3I	Top of PVC	MW
135	605490.6870	1474191.8080	10.97	IWE 4	Top of Casing	MW
136	605491.2450	1474191.4910	10.57	IWE 4	Top of Bolt	MW
137	605502.5740	1474219.5270	10.18	IWE 5	Top of Bolt	MW
138	605501.8450	1474219.8140	10.99	IWE 5	Top of Casing	MW
139	605512.1940	1474247.6240	11.22	IWE 6	Top of Casing	MW
140	605512.9990	1474247.2350	10.83	IWE 6	Top of Bolt	MW
141	605443.6040	1474260.1140	10.69	IWE 12	Top of Casing	MW
142	605444.0670	1474259.6130	9.93	IWE 12	Top of Bolt	MW
143	605430.7890	1474234.3190	10.34	IWE 11	Top of Bolt	MW
144	605430.1190	1474234.5510	10.89	IWE 11	Top of Casing	MW
145	605421.6200	1474210.2220	11.05	IWE 10	Top of Casing	MW
146	605422.3750	1474210.1710	10.44	IWE 10	Top of Bolt	MW
147	605412.2710	1474180.3150	10.48	IWE 9	Top of Bolt	MW
148	605411.5750	1474180.6190	11.04	IWE 9	Top of Casing	MW
149	605399.8980	1474150.1360	11.37	IWE 8	Top of Casing	MW
150	605400.6220	1474149.8180	10.66	IWE 8	Top of Bolt	MW

151	605388.3820	1474122.9830	11.09	IWE 7	Top of Casing	MW
152	605388.3860	1474122.8130	10.13	IWE 7	Top of Bolt	MW
153	605404.1880	1474169.8600	11.16	IWE 25	Top of Casing	MW
154	605404.8020	1474169.5970	10.51	IWE 25	Top of Bolt	MW
155	605400.9890	1474160.4880	10.47	IWE 26	Top of Bolt	MW
156	605400.2040	1474160.9180	11.18	IWE 26	Top of Casing	MW
157	605378.5410	1474172.3200	11.76	IWE 27	Top of Casing	MW
158	605377.9370	1474172.5980	11.09	IWE 27	Top of Bolt	MW
159	605356.3410	1474181.2570	10.97	IWE 28	Top of PVC	MW
160	605357.2530	1474180.9790	11.96	IWE 28	Top of Casing	MW
161	605380.6010	1474165.5340	11.51	MRC-SEMW 7C	Top of Casing	MW
162	605380.7050	1474165.5450	11.27	MRC-SEMW 7C	Top of PVC	MW
163	605340.2120	1474134.2530	11.76	IWE 13	Top of Casing	MW
164	605339.6190	1474134.7060	11.04	IWE 13	Top of Bolt	MW
165	605350.6260	1474162.8240	11.62	IWE 14	Top of Bolt	MW
166	605349.8890	1474162.9040	11.93	IWE 14	Top of Casing	MW
167	605360.8940	1474190.7620	11.96	IWE 15	Top of Casing	MW
168	605361.5180	1474190.5620	11.54	IWE 15	Top of Bolt	MW
169	605372.5770	1474218.6880	11.76	IWE 16	Top of Bolt	MW
170	605373.3350	1474218.3980	11.90	IWE 16	Top of Casing	MW
171	605384.2770	1474246.6420	11.71	IWE 17	Top of Casing	MW
172	605383.4750	1474246.6940	11.60	IWE 17	Top of Bolt	MW
173	605315.4190	1474240.9170	12.29	IWE 21	Top of Bolt	MW
174	605315.4870	1474240.2670	12.04	IWE 21	Top of Casing	MW
175	605304.4220	1474214.3970	11.77	IWE 20	Top of Casing	MW
176	605305.1620	1474213.9240	11.42	IWE 20	Top of Bolt	MW
177	605294.1740	1474185.7490	11.28	IWE 19	Top of Bolt	MW
178	605294.5640	1474185.6960	11.72	IWE 19	Top of Casing	MW
179	605283.8560	1474157.7940	11.58	IWE 18	Top of Casing	MW
180	605283.1550	1474157.9300	11.26	IWE 18	Top of Bolt	MW
181	605245.7940	1474214.1810	9.86	IWE 22	Top of Bolt	MW
182	605246.6160	1474214.0050	10.04	IWE 22	Top of Casing	MW
183	605257.4910	1474241.9320	9.58	IWE 23	Top of Casing	MW
184	605256.8990	1474242.3040	9.18	IWE 23	Top of Bolt	MW
185	605267.7340	1474269.7420	8.84	IWE 24	Top of Bolt	MW
186	605268.4520	1474269.5470	9.44	IWE 24	Top of Casing	MW
187	605246.3580	1474247.5730	8.45	MRC-SEMW 6I	Top of Casing	MW
188	605246.4810	1474247.5760	8.13	MRC-SEMW 6I	Top of PVC	MW
189	605923.6810	1473298.1040	27.19	MRC-NMW 1I	Top of Casing	MW
190	605923.7130	1473298.1280	26.87	MRC-NMW 1I	Top of PVC CAP	MW
191	605915.5810	1473275.3540	27.19	MRC-NMW 2S/I	Top of Casing	MW
192	605915.4430	1473274.7630	26.94	MRC-NMW 2S	Top of PVC CAP	MW
193	605915.4640	1473274.7560	26.94	MRC-NMW 2I	Top of PVC CAP	MW
194	605879.1720	1473305.5220	24.49	MRC-NMW 3I	Top of Casing	MW
195	605879.1670	1473305.5620	24.21	MRC-NMW 3I	Top of PVC	MW
196	605373.5510	1478653.2990	13.18	MSA-MW 35S	Top of Casing	MW
197	605373.6800	1478653.2510	12.86	MSA-MW 35S	Top of PVC	MW
198	605339.8360	1478894.4080	8.67	MSA-MW 34S/I	Top of Casing	MW
199	605339.7740	1478894.4790	8.33	MSA-MW 34S	Top of PVC	MW
200	605339.8690	1478894.1820	8.36	MSA-MW 34I	Top of PVC	MW

APPENDIX D—LABORATORY ANALYTICAL REPORTS AND DATA VALIDATION REPORTS



TO: S. BRENNER **DATE:** JANUARY 24, 2019

FROM: MICHELLE L. WOEBER **COPIES:** DV FILE

SUBJECT: ORGANIC DATA VALIDATION – VOC
LOCKHEED MARTIN CORPORATION (LMC) – MIDDLE RIVER COMPLEX (MRC)
BLOCK F
SAMPLE DELIVERY GROUPS (SDGs) 240-103610-1 & 240-103714-1

SAMPLES: SDG 240-103610-1
3/Soil/VOC
SB-SEMW-10D-10-15 SB-SEMW-10D-20-28 SB-SEMW-10D-DUP

1/Aqueous/VOC
TB-102918
SDG 240-103714-1
4/Soil/VOC
SB-MW135A-2-5.5 SB-MW135B-12.5-18 SB-MW136A-1.2-2
SB-MW136B-15.8-18.5

1/Aqueous/VOC
TB-103018

Overview

The sample set for LMC-MRC Block F, SDGs 240-103610-1 & 240-103714-1 consisted of seven (7) aqueous environmental samples and two (2) trip blanks. All seven (7) soil samples and the two (2) trip blanks were analyzed for Volatile Organic Compounds (VOC). One field duplicate sample pair was included in SDG 240-103610-1: SB-SEMW-10D-DUP/SB-SEMW-10D-10-15.

The samples were collected by Tetra Tech, Inc. on October 29-31, 2018 and analyzed by TestAmerica, Inc. All analyses were conducted in accordance with SW-846 Methods 8260B analytical and reporting protocols.

The data contained in these SDGs were validated with regard to the following parameters: data completeness, holding times and sample preservation, initial/continuing calibrations, laboratory method blank and trip blank results, surrogate spike recoveries, laboratory control sample results, matrix spike/matrix spike duplicate results, internal standard areas, field duplicate precision, chromatographic resolution, compound identification, compound quantitation, and detection limits. Areas of concern are listed below.

Major

- As stated in the laboratory case narratives, 2-chloroethyl vinyl ether cannot be reliably recovered in an acid preserved samples. The non-detected results reported for this compound in the acid preserved trip blanks were qualified as rejected, (UR).

- A TIC identified as column bleed was detected in sample SB-MW135A-2-5.5. This TIC was qualified as rejected, (R).

Minor

- The continuing calibrations performed on instrument A3UX11 on 11/09/2018 @ 09:45 and 10:29 had Percent Differences for dichlorodifluoromethane, chloroethane, 1,1,2-trichlorotrifluoroethane, 2-butanone, bromochloromethane, 1,1,1-trichloroethane, carbon tetrachloride, 2-chloroethyl vinyl ether, 4-methyl-2-pentanone, tetrachloroethane, 2-hexanone, bromoform, n-propylbenzene, tert-butylbenzene, sec-butylbenzene, n-butylbenzene, naphthalene, tert-amyl methyl ether, and 1,2,3-trimethylbenzene and a Percent Drift (%Drift) for tert-butyl alcohol above the 20% quality control criteria. The detected and non-detected results reported for these compounds in the affected sample, TB-102918, were qualified as estimated, (J) and (UJ), respectively.
- The continuing calibration performed on instrument A3UX8 on 11/07/2018 @ 05:19 had a %D for naphthalene which exceeded the 20% quality control limit. Samples SB-SEMW-10D-10-15, SB-SEMW-10D-20-28, and SB-SEMW-10D-DUP were affected. The non-detected results reported for naphthalene in the affected samples were qualified as estimated, (UJ).
- The continuing calibration performed on instrument A3UX13 on 11/10/2018 @ 10:36 had %Ds for trichlorofluoromethane, 1,2-dibromo-3-chloropropane, 1,2,4-trichlorobenzene, hexachlorobutadiene, naphthalene, and 1,2,3-trichlorobenzene. Sample TB-103018 was affected. The non-detected results reported for these compounds in the trip blank were qualified as estimated, (UJ).
- The continuing calibrations performed on instrument A3UX8 on 11/13/2018 @ 22:52 and 23:15 had %Ds for ethyl tert-butyl ether, dichlorodifluoromethane, and chloromethane which exceeded the 20% quality control limit. Samples SB-MW135A-2-5.5, SB-MW135B-12.5-18, SB-MW136A-1.2-2, and SB-MW136B-15.8-18.5 were affected. The non-detected results, not rejected due to missed holding times, reported for these compounds in the affected samples were qualified as estimated, (UJ).
- Samples SB-MW135A-2-5.5 and SB-MW135B-12.5-18 were analyzed several hours outside the 14-day holding time but during the 14th day. This was due to instrument malfunction according to the laboratory's case narrative. The detected and non-detected results reported for the target compounds in these samples were qualified as estimated, (J) and (UJ), respectively.
- For SDG 240-103714-1, 1,2,3-trichlorobenzene and 1,2,4-trichlorobenzene were detected below the Reporting Limit (RL) in the soil laboratory method blank. The detected results reported below the RL for these compounds in the affected soil samples were qualified as non-detected, (U). The detected result for 1,2,4-trichlorobenzene which was greater than the RL was qualified as estimated, (J) because of its presence in the method blank.
- The Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses of sample SB-SEMW-10D-DUP had Percent Recoveries (%Rs) for trichloroethene above the upper quality control limit. The detected results reported for trichloroethene in the parent sample (field duplicate) and the sample associated with this field duplicate were qualified as estimated, (J).
- The Relative Percent Difference (RPD) for trichloroethene exceeded 50% for the field duplicate pair, SB-SEMW-10D-DUP/SB-SEMW-10D-10-15. The detected results reported for this compound in the field duplicate pair were qualified as estimated, (J).

TO: S. BRENNER
SDGs: 240-103610-1 & 240-103714-1

PAGE 3

- Tentatively Identified Compounds (TICs) were detected in the soil samples. The detected compounds were not included in the calibration. The TICs were qualified as presumptively present, (NJ).
- Detected results reported below the RL but above the Method Detection Limit (MDL) were qualified as estimated, (J).

Notes

Acetone and tert-butyl alcohol were detected in the trip blanks, TB-102918 and TB-103018. No action was taken because these compounds were not detected in the associated samples.

1,2,3-Trichlorobenzene was detected in the soil laboratory method blank below the RL in SDG 240-103610-1. No action was taken because this compound was not detected in the associated samples.

The aqueous Laboratory Control Sample (LCS) in SDG 240-103610-1 had a %R for bromochloromethane above the upper quality control limit. No action was taken because this compound was not detected in the associated trip blank.

Non-detected results were reported to the MDL.

Executive Summary

Laboratory Performance: Holding times were missed for two soil samples. Continuing calibration %Ds and %Drifts exceeded 20% for several compounds. Contaminants were detected the laboratory method blanks.

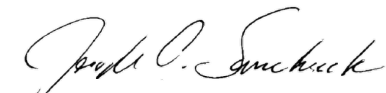
Other Factors Affecting Data Quality: The MS/MSD had high %Rs for trichloroethene. Field duplicate imprecision was noted for one compound. Results below the RL were estimated.

The data for these analyses were reviewed with reference to the "National Functional Guidelines for Organic Review" (January 2017). The text of this report has been formulated to address only those areas affecting data quality.



Tetra Tech, Inc.
Michelle L. Woeber
Chemist/Data Validator

for



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

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 detection limit.
J	The result is an estimated quantity. 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.
NJ	The analyte has been "tentatively identified" or "presumptively" as present and the associated numerical value is the estimated concentration in the sample.
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.
X	The sample results (including non-detects) were affected by serious deficiencies in the ability to analyze the sample and meet published method and project quality control criteria. The presence or absence of the analyte cannot be substantiated by the data provided. Acceptance or rejection of the data should be decided by the project team, but exclusion of the data is recommended.

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 ($< 2 \times$ 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: 08667 SDG: 240-103610-1 FRACTION: OV MEDIA: SOIL	NSAMPLE	SB-SEMW-10D-10-15			SB-SEMW-10D-20-28			SB-SEMW-10D-DUP		
	LAB_ID	240-103610-2			240-103610-3			240-103610-4		
	SAMP_DATE	10/29/2018			10/29/2018			10/29/2018		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF							SB-SEMW-10D-10-15		
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
1,1,1,2-TETRACHLOROETHANE	3.4 U			3.6 U			3.5 U			
1,1,1-TRICHLOROETHANE	0.93 U			0.98 U			0.96 U			
1,1,2,2-TETRACHLOROETHANE	1.6 U			1.7 U			1.7 U			
1,1,2-TRICHLOROTRIFLUOROETHANE	1.5 U			1.5 U			1.5 U			
1,1-DICHLOROETHANE	0.79 U			0.83 U			0.81 U			
1,1-DICHLOROETHENE	1 U			1.1 U			1.1 U			
1,1-DICHLOROPROPENE	1.1 U			1.2 U			1.2 U			
1,2,3-TRICHLOROBENZENE	0.65 U			0.68 U			0.67 U			
1,2,3-TRICHLOROPROPANE	1.8 U			1.9 U			1.8 U			
1,2,3-TRIMETHYLBENZENE	2.1 U			2.2 U			2.1 U			
1,2,4-TRICHLOROBENZENE	0.65 U			0.68 U			0.67 U			
1,2,4-TRIMETHYLBENZENE	1.1 U			1.2 U			1.2 U			
1,2-DIBROMO-3-CHLOROPROPANE	4.1 U			4.3 U			4.2 U			
1,2-DIBROMOETHANE	0.87 U			0.92 U			0.9 U			
1,2-DICHLOROBENZENE	1.3 U			1.3 U			1.3 U			
1,2-DICHLOROETHANE	0.88 U			0.92 U			0.9 U			
1,2-DICHLOROPROPANE	0.97 U			1 U			0.99 U			
1,3-DICHLOROBENZENE	0.93 U			0.97 U			0.95 U			
1,3-DICHLOROPROPANE	1.1 U			1.2 U			1.2 U			
1,4-DICHLOROBENZENE	1 U			1.1 U			1 U			
2,2-DICHLOROPROPANE	1.4 U			1.4 U			1.4 U			
2-BUTANONE	4 U			4.2 U			4.2 U			
2-CHLOROETHYL VINYL ETHER	10 U			11 U			10 U			
2-CHLOROTOLUENE	1.1 U			1.1 U			1.1 U			
2-HEXANONE	4.6 U			4.9 U			4.8 U			
4-CHLOROTOLUENE	0.98 U			1 U			1 U			
4-ISOPROPYLTOLUENE	3.3 U			3.5 U			3.4 U			
4-METHYL-2-PENTANONE	4.2 U			4.4 U			4.3 U			
ACETONE	24 U			25 U			25 U			
BENZENE	0.79 U			0.83 U			0.82 U			
BROMOBENZENE	1.3 U			1.4 U			1.4 U			
BROMOCHLOROMETHANE	0.67 U			0.71 U			0.69 U			
BROMODICHLOROMETHANE	0.77 U			0.81 U			0.79 U			
BROMOFORM	2.7 U			2.9 U			2.8 U			
BROMOMETHANE	1.1 U			1.2 U			1.2 U			

PROJ_NO: 08667 SDG: 240-103610-1 FRACTION: OV MEDIA: SOIL	NSAMPLE	SB-SEMW-10D-10-15			SB-SEMW-10D-20-28			SB-SEMW-10D-DUP		
	LAB_ID	240-103610-2			240-103610-3			240-103610-4		
	SAMP_DATE	10/29/2018			10/29/2018			10/29/2018		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF							SB-SEMW-10D-10-15		
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
CARBON DISULFIDE	1.3	U		1.4	U		1.4	U		
CARBON TETRACHLORIDE	3.7	U		3.9	U		3.8	U		
CHLOROENZENE	1	U		1.1	U		1.1	U		
CHLORODIBROMOMETHANE	3.2	U		3.3	U		3.2	U		
CHLOROETHANE	1.4	U		1.5	U		1.4	U		
CHLOROFORM	0.89	U		0.94	U		0.92	U		
CHLOROMETHANE	1.2	U		1.2	U		1.2	U		
CIS-1,2-DICHLOROETHENE	1.4	J	P	0.78	U		0.76	U		
CIS-1,3-DICHLOROPROPENE	1.6	U		1.7	U		1.7	U		
DIBROMOMETHANE	0.76	U		0.8	U		0.78	U		
DICHLORODIFLUOROMETHANE	1.1	U		1.1	U		1.1	U		
DIISOPROPYL ETHER	0.86	U		0.9	U		0.88	U		
ETHYL TERT-BUTYL ETHER	2.6	U		2.7	U		2.6	U		
ETHYLBENZENE	1.2	U		1.3	U		1.2	U		
HEXACHLOROBUTADIENE	4.2	U		4.5	U		4.4	U		
ISOPROPYLBENZENE	0.94	U		0.99	U		0.97	U		
M+P-XYLENES	0.89	U		0.94	U		0.91	U		
METHYL TERT-BUTYL ETHER	0.93	U		0.98	U		0.96	U		
METHYLENE CHLORIDE	14	U		14	U		14	U		
NAPHTHALENE	3.1	UJ	C	3.2	UJ	C	3.2	UJ	C	
N-BUTYLBENZENE	3.9	U		4.1	U		4.1	U		
N-PROPYLBENZENE	0.83	U		0.87	U		0.86	U		
O-XYLENE	0.98	U		1	U		1	U		
SEC-BUTYLBENZENE	0.98	U		1	U		1	U		
STYRENE	1.3	U		1.4	U		1.4	U		
TERT-AMYL METHYL ETHER	2.6	U		2.7	U		2.6	U		
TERT-BUTYLBENZENE	1	U		1.1	U		1.1	U		
TERTIARY-BUTYL ALCOHOL	19	U		20	U		19	U		
TETRACHLOROETHENE	0.83	U		0.87	U		0.85	U		
TOLUENE	0.88	U		0.92	U		0.9	U		
TOTAL XYLENES	1.8	U		1.9	U		1.9	U		
TRANS-1,2-DICHLOROETHENE	0.53	U		0.56	U		0.54	U		
TRANS-1,3-DICHLOROPROPENE	1.2	U		1.2	U		1.2	U		
TRICHLOROETHENE	110	J	DG	7.3			49	J	DG	
TRICHLOROFLUOROMETHANE	1.2	U		1.3	U		1.3	U		

PROJ_NO: 08667 SDG: 240-103610-1 FRACTION: OV MEDIA: SOIL	NSAMPLE	SB-SEMW-10D-10-15			SB-SEMW-10D-20-28			SB-SEMW-10D-DUP		
	LAB_ID	240-103610-2			240-103610-3			240-103610-4		
	SAMP_DATE	10/29/2018			10/29/2018			10/29/2018		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF							SB-SEMW-10D-10-15		
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
VINYL ACETATE	2.4	U		2.5	U		2.5	U		
VINYL CHLORIDE	0.95	U		1	U		0.98	U		

PROJ_NO: 08667 SDG: 240-103610-1 FRACTION: OV MEDIA: WATER	NSAMPLE	TB-102918		
	LAB_ID	240-103610-1		
	SAMP_DATE	10/29/2018		
	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
1,1,1,2-TETRACHLOROETHANE	0.14	U		
1,1,1-TRICHLOROETHANE	0.24	UJ	C	
1,1,2,2-TETRACHLOROETHANE	0.13	U		
1,1,2-TRICHLOROTRIFLUOROETHANE	0.41	UJ	C	
1,1-DICHLOROETHANE	0.17	U		
1,1-DICHLOROETHENE	0.19	U		
1,1-DICHLOROPROPENE	0.14	U		
1,2,3-TRICHLOROBENZENE	0.54	U		
1,2,3-TRICHLOROPROPANE	0.24	U		
1,2,3-TRIMETHYLBENZENE	0.14	UJ	C	
1,2,4-TRICHLOROBENZENE	0.26	U		
1,2,4-TRIMETHYLBENZENE	0.07	U		
1,2-DIBROMO-3-CHLOROPROPANE	0.91	U		
1,2-DIBROMOETHANE	0.12	U		
1,2-DICHLOROBENZENE	0.15	U		
1,2-DICHLOROETHANE	0.21	U		
1,2-DICHLOROPROPANE	0.15	U		
1,3-DICHLOROBENZENE	0.15	U		
1,3-DICHLOROPROPANE	0.21	U		
1,4-DICHLOROBENZENE	0.16	U		
2,2-DICHLOROPROPANE	0.31	U		
2-BUTANONE	1.2	UJ	C	
2-CHLOROETHYL VINYL ETHER	0.26	UR	CM	
2-CHLOROTOLUENE	0.15	U		
2-HEXANONE	0.54	UJ	C	
4-CHLOROTOLUENE	0.09	U		
4-ISOPROPYLTOLUENE	0.13	U		
4-METHYL-2-PENTANONE	0.42	UJ	C	
ACETONE	20			
BENZENE	0.13	U		
BROMOBENZENE	0.12	U		
BROMOCHLOROMETHANE	0.14	UJ	C	
BROMODICHLOROMETHANE	0.17	U		
BROMOFORM	0.76	UJ	C	
BROMOMETHANE	0.42	U		

PROJ_NO: 08667 SDG: 240-103610-1 FRACTION: OV MEDIA: WATER	NSAMPLE	TB-102918		
	LAB_ID	240-103610-1		
	SAMP_DATE	10/29/2018		
	QC_TYPE	NM		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
CARBON DISULFIDE	0.28	U		
CARBON TETRACHLORIDE	0.26	UJ	C	
CHLOROENZENE	0.14	U		
CHLORODIBROMOMETHANE	0.39	U		
CHLOROETHANE	0.83	UJ	C	
CHLOROFORM	0.13	U		
CHLOROMETHANE	0.2	U		
CIS-1,2-DICHLOROETHENE	0.16	U		
CIS-1,3-DICHLOROPROPENE	0.61	U		
DIBROMOMETHANE	0.09	U		
DICHLORODIFLUOROMETHANE	0.35	UJ	C	
DIISOPROPYL ETHER	0.17	U		
ETHYL TERT-BUTYL ETHER	0.15	U		
ETHYLBENZENE	0.11	U		
HEXACHLOROBUTADIENE	0.83	U		
ISOPROPYLBENZENE	0.09	U		
METHYL TERT-BUTYL ETHER	0.07	U		
METHYLENE CHLORIDE	2.6	U		
NAPHTHALENE	0.32	UJ	C	
N-BUTYLBENZENE	0.14	UJ	C	
N-PROPYLBENZENE	0.15	UJ	C	
SEC-BUTYLBENZENE	0.13	UJ	C	
STYRENE	0.1	U		
TERT-AMYL METHYL ETHER	0.11	UJ	C	
TERT-BUTYLBENZENE	0.14	UJ	C	
TERTIARY-BUTYL ALCOHOL	38	J	CP	
TETRACHLOROETHENE	0.15	UJ	C	
TOLUENE	0.14	U		
TOTAL XYLENES	0.15	U		
TRANS-1,2-DICHLOROETHENE	0.19	U		
TRANS-1,3-DICHLOROPROPENE	0.67	U		
TRICHLOROETHENE	0.1	U		
TRICHLOROFLUOROMETHANE	0.45	U		
VINYL ACETATE	0.19	U		
VINYL CHLORIDE	0.2	U		

PROJ_NO: 08667 SDG: 240-103610-1 FRACTION: TICOV MEDIA: SOIL	NSAMPLE	SB-SEMW-10D-10-15			SB-SEMW-10D-20-28			SB-SEMW-10D-DUP		
	LAB_ID	240-103610-2			240-103610-3			240-103610-4		
	SAMP_DATE	10/29/2018			10/29/2018			10/29/2018		
	QC_TYPE	NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	0.0			0.0			0.0		
	DUP_OF							SB-SEMW-10D-10-15		
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
UNKNOWN [3.31]				19	NJ	Z1				
UNKNOWN [3.32]		17	NJ	Z1			18	NJ	Z1	
UNKNOWN [4.23]				21	NJ	Z1				

PROJ_NO: 08667 SDG: 240-103714-1 FRACTION: OV MEDIA: WATER	NSAMPLE	TB-103018		
	LAB_ID	240-103714-1		
	SAMP_DATE	10/30/2018		
	QC_TYPE	TB		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
1,1,1,2-TETRACHLOROETHANE	0.14	U		
1,1,1-TRICHLOROETHANE	0.24	U		
1,1,2,2-TETRACHLOROETHANE	0.13	U		
1,1,2-TRICHLOROTRIFLUOROETHANE	0.41	U		
1,1-DICHLOROETHANE	0.17	U		
1,1-DICHLOROETHENE	0.19	U		
1,1-DICHLOROPROPENE	0.14	U		
1,2,3-TRICHLOROBENZENE	0.54	U		
1,2,3-TRICHLOROPROPANE	0.24	U		
1,2,3-TRIMETHYLBENZENE	0.14	UJ	C	
1,2,4-TRICHLOROBENZENE	0.26	UJ	C	
1,2,4-TRIMETHYLBENZENE	0.07	U		
1,2-DIBROMO-3-CHLOROPROPANE	0.91	UJ	C	
1,2-DIBROMOETHANE	0.12	U		
1,2-DICHLOROBENZENE	0.15	U		
1,2-DICHLOROETHANE	0.21	U		
1,2-DICHLOROPROPANE	0.15	U		
1,3-DICHLOROBENZENE	0.15	U		
1,3-DICHLOROPROPANE	0.21	U		
1,4-DICHLOROBENZENE	0.16	U		
2,2-DICHLOROPROPANE	0.31	U		
2-BUTANONE	1.2	U		
2-CHLOROETHYL VINYL ETHER	0.26	UR	M	
2-CHLOROTOLUENE	0.15	U		
2-HEXANONE	0.54	U		
4-CHLOROTOLUENE	0.09	U		
4-ISOPROPYLTOLUENE	0.13	U		
4-METHYL-2-PENTANONE	0.42	U		
ACETONE	5.7	J	P	
BENZENE	0.13	U		
BROMOBENZENE	0.12	U		
BROMOCHLOROMETHANE	0.14	U		
BROMODICHLOROMETHANE	0.17	U		
BROMOFORM	0.76	U		
BROMOMETHANE	0.42	U		

PROJ_NO: 08667 SDG: 240-103714-1 FRACTION: OV MEDIA: WATER	NSAMPLE	TB-103018		
	LAB_ID	240-103714-1		
	SAMP_DATE	10/30/2018		
	QC_TYPE	TB		
	UNITS	UG/L		
	PCT_SOLIDS	0.0		
	DUP_OF			
PARAMETER	RESULT	VQL	QLCD	
CARBON DISULFIDE	0.28	U		
CARBON TETRACHLORIDE	0.26	U		
CHLOROENZENE	0.14	U		
CHLORODIBROMOMETHANE	0.39	U		
CHLOROETHANE	0.83	U		
CHLOROFORM	0.13	U		
CHLOROMETHANE	0.2	U		
CIS-1,2-DICHLOROETHENE	0.16	U		
CIS-1,3-DICHLOROPROPENE	0.61	U		
DIBROMOMETHANE	0.09	U		
DICHLORODIFLUOROMETHANE	0.35	U		
DIISOPROPYL ETHER	0.17	U		
ETHYL TERT-BUTYL ETHER	0.15	U		
ETHYLBENZENE	0.11	U		
HEXACHLOROBUTADIENE	0.83	UJ	C	
ISOPROPYLBENZENE	0.09	U		
METHYL TERT-BUTYL ETHER	0.07	U		
METHYLENE CHLORIDE	2.6	U		
NAPHTHALENE	0.32	UJ	C	
N-BUTYLBENZENE	0.14	U		
N-PROPYLBENZENE	0.15	U		
SEC-BUTYLBENZENE	0.13	U		
STYRENE	0.1	U		
TERT-AMYL METHYL ETHER	0.11	U		
TERT-BUTYLBENZENE	0.14	U		
TERTIARY-BUTYL ALCOHOL	12	J	P	
TETRACHLOROETHENE	0.15	U		
TOLUENE	0.14	U		
TOTAL XYLENES	0.15	U		
TRANS-1,2-DICHLOROETHENE	0.19	U		
TRANS-1,3-DICHLOROPROPENE	0.67	U		
TRICHLOROETHENE	0.1	U		
TRICHLOROFLUOROMETHANE	0.45	U		
VINYL ACETATE	0.19	U		
VINYL CHLORIDE	0.2	U		

PROJ_NO: 08667 SDG: 240-103714-1 FRACTION: OV MEDIA: SOIL	NSAMPLE	SB-MW135A-2-5.5			SB-MW135B-12.5-18			SB-MW136A-1.2-2			SB-MW136B-15.8-18.5		
	LAB_ID	240-103714-2			240-103714-3			240-103714-4			240-103714-5		
	SAMP_DATE	10/30/2018			10/30/2018			10/31/2018			10/31/2018		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.0			83.1			87.0			84.8		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
1,1,1,2-TETRACHLOROETHANE	3.3	UJ	H	3.5	UJ	H	3.4	U		3.4	U		
1,1,1-TRICHLOROETHANE	0.92	UJ	H	0.96	UJ	H	0.94	U		0.93	U		
1,1,2,2-TETRACHLOROETHANE	1.6	UJ	H	1.7	UJ	H	1.6	U		1.6	U		
1,1,2-TRICHLOROTRIFLUOROETHANE	1.4	UJ	H	1.5	UJ	H	1.5	U		1.4	U		
1,1-DICHLOROETHANE	0.78	UJ	H	0.81	UJ	H	0.8	U		0.78	U		
1,1-DICHLOROETHENE	1	UJ	H	1.1	UJ	H	1	U		1	U		
1,1-DICHLOROPROPENE	1.1	UJ	H	1.2	UJ	H	1.1	U		1.1	U		
1,2,3-TRICHLOROBENZENE	0.64	UJ	H	4	U	A	0.66	U		0.65	U		
1,2,3-TRICHLOROPROPANE	1.8	UJ	H	1.8	UJ	H	1.8	U		1.8	U		
1,2,3-TRIMETHYLBENZENE	2	UJ	H	2.1	UJ	H	2.1	U		2.1	U		
1,2,4-TRICHLOROBENZENE	0.64	UJ	H	17	J	AH	0.66	U		0.65	U		
1,2,4-TRIMETHYLBENZENE	1.1	UJ	H	1.2	UJ	H	1.2	U		1.1	U		
1,2-DIBROMO-3-CHLOROPROPANE	4	UJ	H	4.2	UJ	H	4.1	U		4.1	U		
1,2-DIBROMOETHANE	0.86	UJ	H	0.9	UJ	H	0.88	U		0.87	U		
1,2-DICHLOROBENZENE	1.2	UJ	H	1.3	UJ	H	1.3	U		1.3	U		
1,2-DICHLOROETHANE	0.86	UJ	H	0.9	UJ	H	0.89	U		0.87	U		
1,2-DICHLOROPROPANE	0.95	UJ	H	0.99	UJ	H	0.98	U		0.96	U		
1,3-DICHLOROBENZENE	0.91	UJ	H	0.95	UJ	H	0.94	U		0.92	U		
1,3-DICHLOROPROPANE	1.1	UJ	H	1.2	UJ	H	1.1	U		1.1	U		
1,4-DICHLOROBENZENE	0.99	UJ	H	1	UJ	H	1	U		1	U		
2,2-DICHLOROPROPANE	1.3	UJ	H	1.4	UJ	H	1.4	U		1.3	U		
2-BUTANONE	4	UJ	H	4.2	UJ	H	4.1	U		4	U		
2-CHLOROETHYL VINYL ETHER	10	UJ	H	10	UJ	H	10	U		10	U		
2-CHLOROTOLUENE	1.1	UJ	H	1.1	UJ	H	1.1	U		1.1	U		
2-HEXANONE	4.6	UJ	H	4.8	UJ	H	4.7	U		4.6	U		
4-CHLOROTOLUENE	0.97	UJ	H	1	UJ	H	0.99	U		0.97	U		
4-ISOPROPYLTOLUENE	3.3	UJ	H	3.4	UJ	H	3.4	U		3.3	U		
4-METHYL-2-PENTANONE	4.2	UJ	H	4.3	UJ	H	4.3	U		4.2	U		
ACETONE	24	UJ	H	25	UJ	H	24	U		24	U		
BENZENE	0.78	UJ	H	0.82	UJ	H	0.8	U		0.79	U		
BROMOBENZENE	1.3	UJ	H	1.4	UJ	H	1.3	U		1.3	U		
BROMOCHLOROMETHANE	0.67	UJ	H	0.69	UJ	H	0.68	U		0.67	U		
BROMODICHLOROMETHANE	0.76	UJ	H	0.79	UJ	H	0.78	U		0.77	U		
BROMOFORM	2.7	UJ	H	2.8	UJ	H	2.8	U		2.7	U		
BROMOMETHANE	1.1	UJ	H	1.2	UJ	H	1.1	U		1.1	U		

PROJ_NO: 08667 SDG: 240-103714-1 FRACTION: OV MEDIA: SOIL	NSAMPLE	SB-MW135A-2-5.5			SB-MW135B-12.5-18			SB-MW136A-1.2-2			SB-MW136B-15.8-18.5		
	LAB_ID	240-103714-2			240-103714-3			240-103714-4			240-103714-5		
	SAMP_DATE	10/30/2018			10/30/2018			10/31/2018			10/31/2018		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.0			83.1			87.0			84.8		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
CARBON DISULFIDE	1.3	UJ	H	1.4	UJ	H	1.3	U		1.3	U		
CARBON TETRACHLORIDE	3.6	UJ	H	3.8	UJ	H	3.7	U		3.7	U		
CHLOROBENZENE	1	UJ	H	1.1	UJ	H	1.1	U		1	U		
CHLORODIBROMOMETHANE	3.1	UJ	H	3.3	UJ	H	3.2	U		3.1	U		
CHLOROETHANE	1.4	UJ	H	1.4	UJ	H	1.4	U		1.4	U		
CHLOROFORM	0.88	UJ	H	0.92	UJ	H	0.91	U		0.89	U		
CHLOROMETHANE	1.2	UJ	H	1.2	UJ	H	1.2	UJ	C	1.2	UJ	C	
CIS-1,2-DICHLOROETHENE	0.73	UJ	H	0.76	UJ	H	0.75	U		0.74	U		
CIS-1,3-DICHLOROPROPENE	1.6	UJ	H	1.7	UJ	H	1.7	U		1.6	U		
DIBROMOMETHANE	0.75	UJ	H	0.78	UJ	H	0.77	U		0.76	U		
DICHLORODIFLUOROMETHANE	1.1	UJ	H	1.1	UJ	H	1.1	UJ	C	1.1	UJ	C	
DIISOPROPYL ETHER	0.85	UJ	H	0.88	UJ	H	0.87	U		0.86	U		
ETHYL TERT-BUTYL ETHER	2.5	UJ	H	2.6	UJ	H	2.6	UJ	C	2.5	UJ	C	
ETHYLBENZENE	1.2	UJ	H	1.2	UJ	H	1.2	U		1.2	U		
HEXACHLOROBUTADIENE	4.2	UJ	H	4.4	UJ	H	4.3	U		4.2	U		
ISOPROPYLBENZENE	0.93	UJ	H	0.97	UJ	H	0.96	U		0.94	U		
M+P-XYLENES	0.88	UJ	H	0.91	UJ	H	0.9	U		0.88	U		
METHYL TERT-BUTYL ETHER	0.92	UJ	H	0.96	UJ	H	0.94	U		0.93	U		
METHYLENE CHLORIDE	13	UJ	H	14	UJ	H	14	U		14	U		
NAPHTHALENE	3	UJ	H	3.2	UJ	H	3.1	U		3	U		
N-BUTYLBENZENE	3.9	UJ	H	4.1	UJ	H	4	U		3.9	U		
N-PROPYLBENZENE	0.82	UJ	H	0.86	UJ	H	0.84	U		0.83	U		
O-XYLENE	0.96	UJ	H	1	UJ	H	0.99	U		0.97	U		
SEC-BUTYLBENZENE	0.97	UJ	H	1	UJ	H	0.99	U		0.98	U		
STYRENE	1.3	UJ	H	1.4	UJ	H	1.3	U		1.3	U		
TERT-AMYL METHYL ETHER	2.5	UJ	H	2.6	UJ	H	2.6	U		2.5	U		
TERT-BUTYLBENZENE	1	UJ	H	1.1	UJ	H	1	U		1	U		
TERTIARY-BUTYL ALCOHOL	18	UJ	H	19	UJ	H	19	U		19	U		
TETRACHLOROETHENE	0.82	UJ	H	0.85	UJ	H	0.84	U		0.82	U		
TOLUENE	0.87	UJ	H	0.9	UJ	H	0.89	U		0.87	U		
TOTAL XYLENES	1.8	UJ	H	1.9	UJ	H	1.8	U		1.8	U		
TRANS-1,2-DICHLOROETHENE	0.52	UJ	H	0.54	UJ	H	0.53	U		0.53	U		
TRANS-1,3-DICHLOROPROPENE	1.2	UJ	H	1.2	UJ	H	1.2	U		1.2	U		
TRICHLOROETHENE	0.71	UJ	H	0.74	UJ	H	0.73	U		0.72	U		
TRICHLOROFUOROMETHANE	1.2	UJ	H	1.3	UJ	H	1.2	U		1.2	U		

PROJ_NO: 08667 SDG: 240-103714-1 FRACTION: OV MEDIA: SOIL	NSAMPLE	SB-MW135A-2-5.5			SB-MW135B-12.5-18			SB-MW136A-1.2-2			SB-MW136B-15.8-18.5		
	LAB_ID	240-103714-2			240-103714-3			240-103714-4			240-103714-5		
	SAMP_DATE	10/30/2018			10/30/2018			10/31/2018			10/31/2018		
	QC_TYPE	NM			NM			NM			NM		
	UNITS	UG/KG			UG/KG			UG/KG			UG/KG		
	PCT_SOLIDS	85.0			83.1			87.0			84.8		
	DUP_OF												
PARAMETER	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	RESULT	VQL	QLCD	
VINYL ACETATE	2.4	UJ	H	2.5	UJ	H	2.4	U		2.4	U		
VINYL CHLORIDE	0.94	UJ	H	0.98	UJ	H	0.96	U		0.95	U		

Appendix B

Results as Reported by the Laboratory

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: TB-102918 Lab Sample ID: 240-103610-1
 Matrix: Water Lab File ID: UXJ6226.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 17:52
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	20		10	5.4
630-20-6	1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14
71-43-2	Benzene	0.13	U	1.0	0.13
75-27-4	Bromodichloromethane	0.17	U	1.0	0.17
75-25-2	Bromoform	0.76	U	1.0	0.76
74-83-9	Bromomethane	0.42	U	1.0	0.42
78-93-3	2-Butanone (MEK)	1.2	U	10	1.2
75-15-0	Carbon disulfide	0.28	U	1.0	0.28
56-23-5	Carbon tetrachloride	0.26	U	1.0	0.26
108-90-7	Chlorobenzene	0.14	U	1.0	0.14
75-00-3	Chloroethane	0.83	U	1.0	0.83
67-66-3	Chloroform	0.13	U	1.0	0.13
563-58-6	1,1-Dichloropropene	0.14	U	1.0	0.14
74-87-3	Chloromethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17
87-61-6	1,2,3-Trichlorobenzene	0.54	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	0.24	U	1.0	0.24
107-06-2	1,2-Dichloroethane	0.21	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19
526-73-8	1,2,3-Trimethylbenzene	0.14	U	5.0	0.14
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.070	U	1.0	0.070
10061-01-5	cis-1,3-Dichloropropene	0.61	U	1.0	0.61
10061-02-6	trans-1,3-Dichloropropene	0.67	U	1.0	0.67
100-41-4	Ethylbenzene	0.11	U	1.0	0.11
591-78-6	2-Hexanone	0.54	U	10	0.54
75-09-2	Methylene Chloride	2.6	U	5.0	2.6
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42
100-42-5	Styrene	0.10	U	1.0	0.10
79-34-5	1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13
127-18-4	Tetrachloroethene	0.15	U	1.0	0.15
108-88-3	Toluene	0.14	U	1.0	0.14
79-01-6	Trichloroethene	0.10	U	1.0	0.10
75-01-4	Vinyl chloride	0.20	U	1.0	0.20
1330-20-7	Xylenes, Total	0.15	U	2.0	0.15
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: TB-102918 Lab Sample ID: 240-103610-1
 Matrix: Water Lab File ID: UXJ6226.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 17:52
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
142-28-9	1,3-Dichloropropane	0.21	U	1.0	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12
75-71-8	Dichlorodifluoromethane	0.35	U	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	0.16	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	0.19	U	1.0	0.19
98-82-8	Isopropylbenzene	0.090	U	1.0	0.090
1634-04-4	Methyl tert-butyl ether	0.070	U	1.0	0.070
76-13-1	1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	0.26	U	1.0	0.26
594-20-7	2,2-Dichloropropane	0.31	U	1.0	0.31
95-50-1	1,2-Dichlorobenzene	0.15	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	0.15	U	1.0	0.15
106-46-7	1,4-Dichlorobenzene	0.16	U	1.0	0.16
110-75-8	2-Chloroethyl vinyl ether	0.26	U	10	0.26
75-69-4	Trichlorofluoromethane	0.45	U	1.0	0.45
95-49-8	2-Chlorotoluene	0.15	U	1.0	0.15
124-48-1	Chlorodibromomethane	0.39	U	1.0	0.39
108-86-1	Bromobenzene	0.12	U	1.0	0.12
74-97-5	Bromochloromethane	0.14	U *	1.0	0.14
106-43-4	4-Chlorotoluene	0.090	U	1.0	0.090
99-87-6	4-Isopropyltoluene	0.13	U	1.0	0.13
87-68-3	Hexachlorobutadiene	0.83	U	1.0	0.83
74-95-3	Dibromomethane	0.090	U	1.0	0.090
108-20-3	Diisopropyl ether	0.17	U	10	0.17
91-20-3	Naphthalene	0.32	U	1.0	0.32
104-51-8	n-Butylbenzene	0.14	U	1.0	0.14
103-65-1	N-Propylbenzene	0.15	U	1.0	0.15
135-98-8	sec-Butylbenzene	0.13	U	1.0	0.13
994-05-8	Tert-amyl methyl ether	0.11	U	5.0	0.11
637-92-3	Ethyl tert-butyl ether	0.15	U	5.0	0.15
98-06-6	tert-Butylbenzene	0.14	U	1.0	0.14
108-05-4	Vinyl acetate	0.19	U	2.0	0.19
75-65-0	tert-Butyl alcohol	38	J	50	1.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: TB-102918 Lab Sample ID: 240-103610-1
 Matrix: Water Lab File ID: UXJ6226.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 17:52
 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.: 354546 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-121
460-00-4	4-Bromofluorobenzene (Surr)	79		59-120
2037-26-5	Toluene-d8 (Surr)	77		70-123
1868-53-7	Dibromofluoromethane (Surr)	123		75-128

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.4	U	5.7	3.4
71-55-6	1,1,1-Trichloroethane	0.93	U	5.7	0.93
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.7	1.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	5.7	1.5
75-34-3	1,1-Dichloroethane	0.79	U	5.7	0.79
75-35-4	1,1-Dichloroethene	1.0	U	5.7	1.0
563-58-6	1,1-Dichloropropene	1.1	U	5.7	1.1
87-61-6	1,2,3-Trichlorobenzene	0.65	U	5.7	0.65
96-18-4	1,2,3-Trichloropropane	1.8	U	5.7	1.8
526-73-8	1,2,3-Trimethylbenzene	2.1	U	5.7	2.1
120-82-1	1,2,4-Trichlorobenzene	0.65	U	5.7	0.65
95-63-6	1,2,4-Trimethylbenzene	1.1	U	5.7	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	4.1	U	11	4.1
95-50-1	1,2-Dichlorobenzene	1.3	U	5.7	1.3
107-06-2	1,2-Dichloroethane	0.88	U	5.7	0.88
78-87-5	1,2-Dichloropropane	0.97	U	5.7	0.97
541-73-1	1,3-Dichlorobenzene	0.93	U	5.7	0.93
142-28-9	1,3-Dichloropropane	1.1	U	5.7	1.1
106-46-7	1,4-Dichlorobenzene	1.0	U	5.7	1.0
594-20-7	2,2-Dichloropropane	1.4	U	5.7	1.4
110-75-8	2-Chloroethyl vinyl ether	10	U	57	10
95-49-8	2-Chlorotoluene	1.1	U	5.7	1.1
591-78-6	2-Hexanone	4.6	U	23	4.6
108-86-1	Bromobenzene	1.3	U	5.7	1.3
74-97-5	Bromochloromethane	0.67	U	5.7	0.67
106-43-4	4-Chlorotoluene	0.98	U	5.7	0.98
99-87-6	p-Isopropyltoluene	3.3	U	5.7	3.3
67-64-1	Acetone	24	U	28	24
71-43-2	Benzene	0.79	U	5.7	0.79
75-25-2	Bromoform	2.7	U	5.7	2.7
74-83-9	Bromomethane	1.1	U	5.7	1.1
75-15-0	Carbon disulfide	1.3	U	5.7	1.3
56-23-5	Carbon tetrachloride	3.7	U	5.7	3.7
108-90-7	Chlorobenzene	1.0	U	5.7	1.0
75-00-3	Chloroethane	1.4	U	5.7	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.89	U	5.7	0.89
74-87-3	Chloromethane	1.2	U	5.7	1.2
156-59-2	cis-1,2-Dichloroethene	1.4	J	5.7	0.74
10061-01-5	cis-1,3-Dichloropropene	1.6	U	5.7	1.6
87-68-3	Hexachlorobutadiene	4.2	U	5.7	4.2
74-95-3	Dibromomethane	0.76	U	5.7	0.76
75-27-4	Bromodichloromethane	0.77	U	5.7	0.77
75-71-8	Dichlorodifluoromethane	1.1	U	5.7	1.1
100-41-4	Ethylbenzene	1.2	U	5.7	1.2
106-93-4	1,2-Dibromoethane	0.87	U	5.7	0.87
108-20-3	Diisopropyl ether	0.86	U	11	0.86
91-20-3	Naphthalene	3.1	U	5.7	3.1
179601-23-1	m-Xylene & p-Xylene	0.89	U	11	0.89
104-51-8	n-Butylbenzene	3.9	U	5.7	3.9
98-82-8	Isopropylbenzene	0.94	U	5.7	0.94
103-65-1	N-Propylbenzene	0.83	U	5.7	0.83
78-93-3	2-Butanone (MEK)	4.0	U	23	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	4.2	U	23	4.2
135-98-8	sec-Butylbenzene	0.98	U	5.7	0.98
1634-04-4	Methyl tert-butyl ether	0.93	U	5.7	0.93
994-05-8	Tert-amyl methyl ether	2.6	U	5.7	2.6
75-09-2	Methylene Chloride	14	U	28	14
95-47-6	o-Xylene	0.98	U	5.7	0.98
100-42-5	Styrene	1.3	U	5.7	1.3
637-92-3	Ethyl tert-butyl ether	2.6	U	5.7	2.6
98-06-6	tert-Butylbenzene	1.0	U	5.7	1.0
127-18-4	Tetrachloroethene	0.83	U	5.7	0.83
108-88-3	Toluene	0.88	U	5.7	0.88
156-60-5	trans-1,2-Dichloroethene	0.53	U	5.7	0.53
10061-02-6	trans-1,3-Dichloropropene	1.2	U	5.7	1.2
79-01-6	Trichloroethene	110		5.7	0.72
75-69-4	Trichlorofluoromethane	1.2	U	5.7	1.2
108-05-4	Vinyl acetate	2.4	U	11	2.4
75-01-4	Vinyl chloride	0.95	U	5.7	0.95
75-65-0	tert-Butyl alcohol	19	U	230	19
1330-20-7	Xylenes, Total	1.8	U	11	1.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.2	U	5.7	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		48-123
460-00-4	4-Bromofluorobenzene (Surr)	75		49-141
2037-26-5	Toluene-d8 (Surr)	88		62-135
1868-53-7	Dibromofluoromethane (Surr)	84		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg
 Number TICs Found: 1 TIC Result Total: 17

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.32	17	T J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.6	U	6.0	3.6
71-55-6	1,1,1-Trichloroethane	0.98	U	6.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	6.0	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	6.0	1.5
75-34-3	1,1-Dichloroethane	0.83	U	6.0	0.83
75-35-4	1,1-Dichloroethene	1.1	U	6.0	1.1
563-58-6	1,1-Dichloropropene	1.2	U	6.0	1.2
87-61-6	1,2,3-Trichlorobenzene	0.68	U	6.0	0.68
96-18-4	1,2,3-Trichloropropane	1.9	U	6.0	1.9
526-73-8	1,2,3-Trimethylbenzene	2.2	U	6.0	2.2
120-82-1	1,2,4-Trichlorobenzene	0.68	U	6.0	0.68
95-63-6	1,2,4-Trimethylbenzene	1.2	U	6.0	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	4.3	U	12	4.3
95-50-1	1,2-Dichlorobenzene	1.3	U	6.0	1.3
107-06-2	1,2-Dichloroethane	0.92	U	6.0	0.92
78-87-5	1,2-Dichloropropane	1.0	U	6.0	1.0
541-73-1	1,3-Dichlorobenzene	0.97	U	6.0	0.97
142-28-9	1,3-Dichloropropane	1.2	U	6.0	1.2
106-46-7	1,4-Dichlorobenzene	1.1	U	6.0	1.1
594-20-7	2,2-Dichloropropane	1.4	U	6.0	1.4
110-75-8	2-Chloroethyl vinyl ether	11	U	60	11
95-49-8	2-Chlorotoluene	1.1	U	6.0	1.1
591-78-6	2-Hexanone	4.9	U	24	4.9
108-86-1	Bromobenzene	1.4	U	6.0	1.4
74-97-5	Bromochloromethane	0.71	U	6.0	0.71
106-43-4	4-Chlorotoluene	1.0	U	6.0	1.0
99-87-6	p-Isopropyltoluene	3.5	U	6.0	3.5
67-64-1	Acetone	25	U	30	25
71-43-2	Benzene	0.83	U	6.0	0.83
75-25-2	Bromoform	2.9	U	6.0	2.9
74-83-9	Bromomethane	1.2	U	6.0	1.2
75-15-0	Carbon disulfide	1.4	U	6.0	1.4
56-23-5	Carbon tetrachloride	3.9	U	6.0	3.9
108-90-7	Chlorobenzene	1.1	U	6.0	1.1
75-00-3	Chloroethane	1.5	U	6.0	1.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.94	U	6.0	0.94
74-87-3	Chloromethane	1.2	U	6.0	1.2
156-59-2	cis-1,2-Dichloroethene	0.78	U	6.0	0.78
10061-01-5	cis-1,3-Dichloropropene	1.7	U	6.0	1.7
87-68-3	Hexachlorobutadiene	4.5	U	6.0	4.5
74-95-3	Dibromomethane	0.80	U	6.0	0.80
75-27-4	Bromodichloromethane	0.81	U	6.0	0.81
75-71-8	Dichlorodifluoromethane	1.1	U	6.0	1.1
100-41-4	Ethylbenzene	1.3	U	6.0	1.3
106-93-4	1,2-Dibromoethane	0.92	U	6.0	0.92
108-20-3	Diisopropyl ether	0.90	U	12	0.90
91-20-3	Naphthalene	3.2	U	6.0	3.2
179601-23-1	m-Xylene & p-Xylene	0.94	U	12	0.94
104-51-8	n-Butylbenzene	4.1	U	6.0	4.1
98-82-8	Isopropylbenzene	0.99	U	6.0	0.99
103-65-1	N-Propylbenzene	0.87	U	6.0	0.87
78-93-3	2-Butanone (MEK)	4.2	U	24	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	4.4	U	24	4.4
135-98-8	sec-Butylbenzene	1.0	U	6.0	1.0
1634-04-4	Methyl tert-butyl ether	0.98	U	6.0	0.98
994-05-8	Tert-amyl methyl ether	2.7	U	6.0	2.7
75-09-2	Methylene Chloride	14	U	30	14
95-47-6	o-Xylene	1.0	U	6.0	1.0
100-42-5	Styrene	1.4	U	6.0	1.4
637-92-3	Ethyl tert-butyl ether	2.7	U	6.0	2.7
98-06-6	tert-Butylbenzene	1.1	U	6.0	1.1
127-18-4	Tetrachloroethene	0.87	U	6.0	0.87
108-88-3	Toluene	0.92	U	6.0	0.92
156-60-5	trans-1,2-Dichloroethene	0.56	U	6.0	0.56
10061-02-6	trans-1,3-Dichloropropene	1.2	U	6.0	1.2
79-01-6	Trichloroethene	7.3		6.0	0.76
75-69-4	Trichlorofluoromethane	1.3	U	6.0	1.3
108-05-4	Vinyl acetate	2.5	U	12	2.5
75-01-4	Vinyl chloride	1.0	U	6.0	1.0
75-65-0	tert-Butyl alcohol	20	U	240	20
1330-20-7	Xylenes, Total	1.9	U	12	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.3	U	6.0	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		48-123
460-00-4	4-Bromofluorobenzene (Surr)	80		49-141
2037-26-5	Toluene-d8 (Surr)	89		62-135
1868-53-7	Dibromofluoromethane (Surr)	86		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg
 Number TICs Found: 2 TIC Result Total: 40

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.31	19	T J	
	Unknown	4.23	21	T J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.5	U	5.8	3.5
71-55-6	1,1,1-Trichloroethane	0.96	U	5.8	0.96
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	5.8	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	5.8	1.5
75-34-3	1,1-Dichloroethane	0.81	U	5.8	0.81
75-35-4	1,1-Dichloroethene	1.1	U	5.8	1.1
563-58-6	1,1-Dichloropropene	1.2	U	5.8	1.2
87-61-6	1,2,3-Trichlorobenzene	0.67	U	5.8	0.67
96-18-4	1,2,3-Trichloropropane	1.8	U	5.8	1.8
526-73-8	1,2,3-Trimethylbenzene	2.1	U	5.8	2.1
120-82-1	1,2,4-Trichlorobenzene	0.67	U	5.8	0.67
95-63-6	1,2,4-Trimethylbenzene	1.2	U	5.8	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	4.2	U	12	4.2
95-50-1	1,2-Dichlorobenzene	1.3	U	5.8	1.3
107-06-2	1,2-Dichloroethane	0.90	U	5.8	0.90
78-87-5	1,2-Dichloropropane	0.99	U	5.8	0.99
541-73-1	1,3-Dichlorobenzene	0.95	U	5.8	0.95
142-28-9	1,3-Dichloropropane	1.2	U	5.8	1.2
106-46-7	1,4-Dichlorobenzene	1.0	U	5.8	1.0
594-20-7	2,2-Dichloropropane	1.4	U	5.8	1.4
110-75-8	2-Chloroethyl vinyl ether	10	U	58	10
95-49-8	2-Chlorotoluene	1.1	U	5.8	1.1
591-78-6	2-Hexanone	4.8	U	23	4.8
108-86-1	Bromobenzene	1.4	U	5.8	1.4
74-97-5	Bromochloromethane	0.69	U	5.8	0.69
106-43-4	4-Chlorotoluene	1.0	U	5.8	1.0
99-87-6	p-Isopropyltoluene	3.4	U	5.8	3.4
67-64-1	Acetone	25	U	29	25
71-43-2	Benzene	0.82	U	5.8	0.82
75-25-2	Bromoform	2.8	U	5.8	2.8
74-83-9	Bromomethane	1.2	U	5.8	1.2
75-15-0	Carbon disulfide	1.4	U	5.8	1.4
56-23-5	Carbon tetrachloride	3.8	U	5.8	3.8
108-90-7	Chlorobenzene	1.1	U	5.8	1.1
75-00-3	Chloroethane	1.4	U	5.8	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.92	U	5.8	0.92
74-87-3	Chloromethane	1.2	U	5.8	1.2
156-59-2	cis-1,2-Dichloroethene	0.76	U	5.8	0.76
10061-01-5	cis-1,3-Dichloropropene	1.7	U	5.8	1.7
87-68-3	Hexachlorobutadiene	4.4	U	5.8	4.4
74-95-3	Dibromomethane	0.78	U	5.8	0.78
75-27-4	Bromodichloromethane	0.79	U	5.8	0.79
75-71-8	Dichlorodifluoromethane	1.1	U	5.8	1.1
100-41-4	Ethylbenzene	1.2	U	5.8	1.2
106-93-4	1,2-Dibromoethane	0.90	U	5.8	0.90
108-20-3	Diisopropyl ether	0.88	U	12	0.88
91-20-3	Naphthalene	3.2	U	5.8	3.2
179601-23-1	m-Xylene & p-Xylene	0.91	U	12	0.91
104-51-8	n-Butylbenzene	4.1	U	5.8	4.1
98-82-8	Isopropylbenzene	0.97	U	5.8	0.97
103-65-1	N-Propylbenzene	0.86	U	5.8	0.86
78-93-3	2-Butanone (MEK)	4.2	U	23	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	4.3	U	23	4.3
135-98-8	sec-Butylbenzene	1.0	U	5.8	1.0
1634-04-4	Methyl tert-butyl ether	0.96	U	5.8	0.96
994-05-8	Tert-amyl methyl ether	2.6	U	5.8	2.6
75-09-2	Methylene Chloride	14	U	29	14
95-47-6	o-Xylene	1.0	U	5.8	1.0
100-42-5	Styrene	1.4	U	5.8	1.4
637-92-3	Ethyl tert-butyl ether	2.6	U	5.8	2.6
98-06-6	tert-Butylbenzene	1.1	U	5.8	1.1
127-18-4	Tetrachloroethene	0.85	U	5.8	0.85
108-88-3	Toluene	0.90	U	5.8	0.90
156-60-5	trans-1,2-Dichloroethene	0.54	U	5.8	0.54
10061-02-6	trans-1,3-Dichloropropene	1.2	U	5.8	1.2
79-01-6	Trichloroethene	49	F1	5.8	0.74
75-69-4	Trichlorofluoromethane	1.3	U	5.8	1.3
108-05-4	Vinyl acetate	2.5	U	12	2.5
75-01-4	Vinyl chloride	0.98	U	5.8	0.98
75-65-0	tert-Butyl alcohol	19	U	230	19
1330-20-7	Xylenes, Total	1.9	U	12	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.2	U	5.8	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		48-123
460-00-4	4-Bromofluorobenzene (Surr)	78		49-141
2037-26-5	Toluene-d8 (Surr)	87		62-135
1868-53-7	Dibromofluoromethane (Surr)	85		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg
 Number TICs Found: 1 TIC Result Total: 18

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.32	18	T J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: TB-103018 Lab Sample ID: 240-103714-1
 Matrix: Water Lab File ID: UXM15513.D
 Analysis Method: 8260B Date Collected: 10/30/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/10/2018 19:46
 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.: 354712 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	5.7	J	10	5.4
630-20-6	1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14
71-43-2	Benzene	0.13	U	1.0	0.13
75-27-4	Bromodichloromethane	0.17	U	1.0	0.17
75-25-2	Bromoform	0.76	U	1.0	0.76
74-83-9	Bromomethane	0.42	U	1.0	0.42
78-93-3	2-Butanone (MEK)	1.2	U	10	1.2
75-15-0	Carbon disulfide	0.28	U	1.0	0.28
56-23-5	Carbon tetrachloride	0.26	U	1.0	0.26
108-90-7	Chlorobenzene	0.14	U	1.0	0.14
75-00-3	Chloroethane	0.83	U	1.0	0.83
67-66-3	Chloroform	0.13	U	1.0	0.13
563-58-6	1,1-Dichloropropene	0.14	U	1.0	0.14
74-87-3	Chloromethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17
87-61-6	1,2,3-Trichlorobenzene	0.54	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	0.24	U	1.0	0.24
107-06-2	1,2-Dichloroethane	0.21	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19
526-73-8	1,2,3-Trimethylbenzene	0.14	U	5.0	0.14
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.070	U	1.0	0.070
10061-01-5	cis-1,3-Dichloropropene	0.61	U	1.0	0.61
10061-02-6	trans-1,3-Dichloropropene	0.67	U	1.0	0.67
100-41-4	Ethylbenzene	0.11	U	1.0	0.11
591-78-6	2-Hexanone	0.54	U	10	0.54
75-09-2	Methylene Chloride	2.6	U	5.0	2.6
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42
100-42-5	Styrene	0.10	U	1.0	0.10
79-34-5	1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13
127-18-4	Tetrachloroethene	0.15	U	1.0	0.15
108-88-3	Toluene	0.14	U	1.0	0.14
79-01-6	Trichloroethene	0.10	U	1.0	0.10
75-01-4	Vinyl chloride	0.20	U	1.0	0.20
1330-20-7	Xylenes, Total	0.15	U	2.0	0.15
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: TB-103018 Lab Sample ID: 240-103714-1
 Matrix: Water Lab File ID: UXM15513.D
 Analysis Method: 8260B Date Collected: 10/30/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/10/2018 19:46
 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.: 354712 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
142-28-9	1,3-Dichloropropane	0.21	U	1.0	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12
75-71-8	Dichlorodifluoromethane	0.35	U	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	0.16	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	0.19	U	1.0	0.19
98-82-8	Isopropylbenzene	0.090	U	1.0	0.090
1634-04-4	Methyl tert-butyl ether	0.070	U	1.0	0.070
76-13-1	1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	0.26	U	1.0	0.26
594-20-7	2,2-Dichloropropane	0.31	U	1.0	0.31
95-50-1	1,2-Dichlorobenzene	0.15	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	0.15	U	1.0	0.15
106-46-7	1,4-Dichlorobenzene	0.16	U	1.0	0.16
110-75-8	2-Chloroethyl vinyl ether	0.26	U	10	0.26
75-69-4	Trichlorofluoromethane	0.45	U	1.0	0.45
95-49-8	2-Chlorotoluene	0.15	U	1.0	0.15
124-48-1	Chlorodibromomethane	0.39	U	1.0	0.39
108-86-1	Bromobenzene	0.12	U	1.0	0.12
74-97-5	Bromochloromethane	0.14	U	1.0	0.14
106-43-4	4-Chlorotoluene	0.090	U	1.0	0.090
99-87-6	4-Isopropyltoluene	0.13	U	1.0	0.13
87-68-3	Hexachlorobutadiene	0.83	U	1.0	0.83
74-95-3	Dibromomethane	0.090	U	1.0	0.090
108-20-3	Diisopropyl ether	0.17	U	10	0.17
91-20-3	Naphthalene	0.32	U	1.0	0.32
104-51-8	n-Butylbenzene	0.14	U	1.0	0.14
103-65-1	N-Propylbenzene	0.15	U	1.0	0.15
135-98-8	sec-Butylbenzene	0.13	U	1.0	0.13
994-05-8	Tert-amyl methyl ether	0.11	U	5.0	0.11
637-92-3	Ethyl tert-butyl ether	0.15	U	5.0	0.15
98-06-6	tert-Butylbenzene	0.14	U	1.0	0.14
108-05-4	Vinyl acetate	0.19	U	2.0	0.19
75-65-0	tert-Butyl alcohol	12	J	50	1.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: TB-103018 Lab Sample ID: 240-103714-1
 Matrix: Water Lab File ID: UXM15513.D
 Analysis Method: 8260B Date Collected: 10/30/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/10/2018 19:46
 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.: 354712 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	94		70-121
460-00-4	4-Bromofluorobenzene (Surr)	85		59-120
2037-26-5	Toluene-d8 (Surr)	87		70-123
1868-53-7	Dibromofluoromethane (Surr)	93		75-128

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135A-2-5.5 Lab Sample ID: 240-103714-2
 Matrix: Solid Lab File ID: UX80903.D
 Analysis Method: 8260B Date Collected: 10/30/2018 15:30
 Sample wt/vol: 5.25(g) Date Analyzed: 11/14/2018 00:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.3	U H	5.6	3.3
71-55-6	1,1,1-Trichloroethane	0.92	U H	5.6	0.92
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U H	5.6	1.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.4	U H	5.6	1.4
75-34-3	1,1-Dichloroethane	0.78	U H	5.6	0.78
75-35-4	1,1-Dichloroethene	1.0	U H	5.6	1.0
563-58-6	1,1-Dichloropropene	1.1	U H	5.6	1.1
87-61-6	1,2,3-Trichlorobenzene	0.64	U H	5.6	0.64
96-18-4	1,2,3-Trichloropropane	1.8	U H	5.6	1.8
526-73-8	1,2,3-Trimethylbenzene	2.0	U H	5.6	2.0
120-82-1	1,2,4-Trichlorobenzene	0.64	U H	5.6	0.64
95-63-6	1,2,4-Trimethylbenzene	1.1	U H	5.6	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	4.0	U H	11	4.0
95-50-1	1,2-Dichlorobenzene	1.2	U H	5.6	1.2
107-06-2	1,2-Dichloroethane	0.86	U H	5.6	0.86
78-87-5	1,2-Dichloropropane	0.95	U H	5.6	0.95
541-73-1	1,3-Dichlorobenzene	0.91	U H	5.6	0.91
142-28-9	1,3-Dichloropropane	1.1	U H	5.6	1.1
106-46-7	1,4-Dichlorobenzene	0.99	U H	5.6	0.99
594-20-7	2,2-Dichloropropane	1.3	U H	5.6	1.3
110-75-8	2-Chloroethyl vinyl ether	10	U H	56	10
95-49-8	2-Chlorotoluene	1.1	U H	5.6	1.1
591-78-6	2-Hexanone	4.6	U H	22	4.6
108-86-1	Bromobenzene	1.3	U H	5.6	1.3
74-97-5	Bromochloromethane	0.67	U H	5.6	0.67
106-43-4	4-Chlorotoluene	0.97	U H	5.6	0.97
99-87-6	p-Isopropyltoluene	3.3	U H	5.6	3.3
67-64-1	Acetone	24	U H	28	24
71-43-2	Benzene	0.78	U H	5.6	0.78
75-25-2	Bromoform	2.7	U H	5.6	2.7
74-83-9	Bromomethane	1.1	U H	5.6	1.1
75-15-0	Carbon disulfide	1.3	U H	5.6	1.3
56-23-5	Carbon tetrachloride	3.6	U H	5.6	3.6
108-90-7	Chlorobenzene	1.0	U H	5.6	1.0
75-00-3	Chloroethane	1.4	U H	5.6	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135A-2-5.5 Lab Sample ID: 240-103714-2
 Matrix: Solid Lab File ID: UX80903.D
 Analysis Method: 8260B Date Collected: 10/30/2018 15:30
 Sample wt/vol: 5.25(g) Date Analyzed: 11/14/2018 00:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.88	U H	5.6	0.88
74-87-3	Chloromethane	1.2	U H	5.6	1.2
156-59-2	cis-1,2-Dichloroethene	0.73	U H	5.6	0.73
10061-01-5	cis-1,3-Dichloropropene	1.6	U H	5.6	1.6
87-68-3	Hexachlorobutadiene	4.2	U H	5.6	4.2
74-95-3	Dibromomethane	0.75	U H	5.6	0.75
75-27-4	Bromodichloromethane	0.76	U H	5.6	0.76
75-71-8	Dichlorodifluoromethane	1.1	U H	5.6	1.1
100-41-4	Ethylbenzene	1.2	U H	5.6	1.2
106-93-4	1,2-Dibromoethane	0.86	U H	5.6	0.86
108-20-3	Diisopropyl ether	0.85	U H	11	0.85
91-20-3	Naphthalene	3.0	U H	5.6	3.0
179601-23-1	m-Xylene & p-Xylene	0.88	U H	11	0.88
104-51-8	n-Butylbenzene	3.9	U H	5.6	3.9
98-82-8	Isopropylbenzene	0.93	U H	5.6	0.93
103-65-1	N-Propylbenzene	0.82	U H	5.6	0.82
78-93-3	2-Butanone (MEK)	4.0	U H	22	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	4.2	U H	22	4.2
135-98-8	sec-Butylbenzene	0.97	U H	5.6	0.97
1634-04-4	Methyl tert-butyl ether	0.92	U H	5.6	0.92
994-05-8	Tert-amyl methyl ether	2.5	U H	5.6	2.5
75-09-2	Methylene Chloride	13	U H	28	13
95-47-6	o-Xylene	0.96	U H	5.6	0.96
100-42-5	Styrene	1.3	U H	5.6	1.3
637-92-3	Ethyl tert-butyl ether	2.5	U H	5.6	2.5
98-06-6	tert-Butylbenzene	1.0	U H	5.6	1.0
127-18-4	Tetrachloroethene	0.82	U H	5.6	0.82
108-88-3	Toluene	0.87	U H	5.6	0.87
156-60-5	trans-1,2-Dichloroethene	0.52	U H	5.6	0.52
10061-02-6	trans-1,3-Dichloropropene	1.2	U H	5.6	1.2
79-01-6	Trichloroethene	0.71	U H	5.6	0.71
75-69-4	Trichlorofluoromethane	1.2	U H	5.6	1.2
108-05-4	Vinyl acetate	2.4	U H	11	2.4
75-01-4	Vinyl chloride	0.94	U H	5.6	0.94
75-65-0	tert-Butyl alcohol	18	U H	220	18
1330-20-7	Xylenes, Total	1.8	U H	11	1.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135A-2-5.5 Lab Sample ID: 240-103714-2
 Matrix: Solid Lab File ID: UX80903.D
 Analysis Method: 8260B Date Collected: 10/30/2018 15:30
 Sample wt/vol: 5.25(g) Date Analyzed: 11/14/2018 00:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.1	U H	5.6	3.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	86		48-123
460-00-4	4-Bromofluorobenzene (Surr)	81		49-141
2037-26-5	Toluene-d8 (Surr)	85		62-135
1868-53-7	Dibromofluoromethane (Surr)	85		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135A-2-5.5 Lab Sample ID: 240-103714-2
 Matrix: Solid Lab File ID: UX80903.D
 Analysis Method: 8260B Date Collected: 10/30/2018 15:30
 Sample wt/vol: 5.25(g) Date Analyzed: 11/14/2018 00:50
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg
 Number TICs Found: 3 TIC Result Total: 39.7

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.32	16	T H J	
	Unknown	4.24	17	T H J	
27750-45-4	Benzenepropanoic acid, .alpha.- [(trimethylsilyl)oxy]-, trime	12.58	6.7	T H J N	32%

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135B-12.5-18 Lab Sample ID: 240-103714-3
 Matrix: Solid Lab File ID: UX80904.D
 Analysis Method: 8260B Date Collected: 10/30/2018 16:00
 Sample wt/vol: 5.15(g) Date Analyzed: 11/14/2018 01:13
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 16.9 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.5	U H	5.8	3.5
71-55-6	1,1,1-Trichloroethane	0.96	U H	5.8	0.96
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U H	5.8	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U H	5.8	1.5
75-34-3	1,1-Dichloroethane	0.81	U H	5.8	0.81
75-35-4	1,1-Dichloroethene	1.1	U H	5.8	1.1
563-58-6	1,1-Dichloropropene	1.2	U H	5.8	1.2
87-61-6	1,2,3-Trichlorobenzene	4.0	J H B	5.8	0.67
96-18-4	1,2,3-Trichloropropane	1.8	U H	5.8	1.8
526-73-8	1,2,3-Trimethylbenzene	2.1	U H	5.8	2.1
120-82-1	1,2,4-Trichlorobenzene	17	H B	5.8	0.67
95-63-6	1,2,4-Trimethylbenzene	1.2	U H	5.8	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	4.2	U H	12	4.2
95-50-1	1,2-Dichlorobenzene	1.3	U H	5.8	1.3
107-06-2	1,2-Dichloroethane	0.90	U H	5.8	0.90
78-87-5	1,2-Dichloropropane	0.99	U H	5.8	0.99
541-73-1	1,3-Dichlorobenzene	0.95	U H	5.8	0.95
142-28-9	1,3-Dichloropropane	1.2	U H	5.8	1.2
106-46-7	1,4-Dichlorobenzene	1.0	U H	5.8	1.0
594-20-7	2,2-Dichloropropane	1.4	U H	5.8	1.4
110-75-8	2-Chloroethyl vinyl ether	10	U H	58	10
95-49-8	2-Chlorotoluene	1.1	U H	5.8	1.1
591-78-6	2-Hexanone	4.8	U H	23	4.8
108-86-1	Bromobenzene	1.4	U H	5.8	1.4
74-97-5	Bromochloromethane	0.69	U H	5.8	0.69
106-43-4	4-Chlorotoluene	1.0	U H	5.8	1.0
99-87-6	p-Isopropyltoluene	3.4	U H	5.8	3.4
67-64-1	Acetone	25	U H	29	25
71-43-2	Benzene	0.82	U H	5.8	0.82
75-25-2	Bromoform	2.8	U H	5.8	2.8
74-83-9	Bromomethane	1.2	U H	5.8	1.2
75-15-0	Carbon disulfide	1.4	U H	5.8	1.4
56-23-5	Carbon tetrachloride	3.8	U H	5.8	3.8
108-90-7	Chlorobenzene	1.1	U H	5.8	1.1
75-00-3	Chloroethane	1.4	U H	5.8	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135B-12.5-18 Lab Sample ID: 240-103714-3
 Matrix: Solid Lab File ID: UX80904.D
 Analysis Method: 8260B Date Collected: 10/30/2018 16:00
 Sample wt/vol: 5.15(g) Date Analyzed: 11/14/2018 01:13
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 16.9 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.92	U H	5.8	0.92
74-87-3	Chloromethane	1.2	U H	5.8	1.2
156-59-2	cis-1,2-Dichloroethene	0.76	U H	5.8	0.76
10061-01-5	cis-1,3-Dichloropropene	1.7	U H	5.8	1.7
87-68-3	Hexachlorobutadiene	4.4	U H	5.8	4.4
74-95-3	Dibromomethane	0.78	U H	5.8	0.78
75-27-4	Bromodichloromethane	0.79	U H	5.8	0.79
75-71-8	Dichlorodifluoromethane	1.1	U H	5.8	1.1
100-41-4	Ethylbenzene	1.2	U H	5.8	1.2
106-93-4	1,2-Dibromoethane	0.90	U H	5.8	0.90
108-20-3	Diisopropyl ether	0.88	U H	12	0.88
91-20-3	Naphthalene	3.2	U H	5.8	3.2
179601-23-1	m-Xylene & p-Xylene	0.91	U H	12	0.91
104-51-8	n-Butylbenzene	4.1	U H	5.8	4.1
98-82-8	Isopropylbenzene	0.97	U H	5.8	0.97
103-65-1	N-Propylbenzene	0.86	U H	5.8	0.86
78-93-3	2-Butanone (MEK)	4.2	U H	23	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	4.3	U H	23	4.3
135-98-8	sec-Butylbenzene	1.0	U H	5.8	1.0
1634-04-4	Methyl tert-butyl ether	0.96	U H	5.8	0.96
994-05-8	Tert-amyl methyl ether	2.6	U H	5.8	2.6
75-09-2	Methylene Chloride	14	U H	29	14
95-47-6	o-Xylene	1.0	U H	5.8	1.0
100-42-5	Styrene	1.4	U H	5.8	1.4
637-92-3	Ethyl tert-butyl ether	2.6	U H	5.8	2.6
98-06-6	tert-Butylbenzene	1.1	U H	5.8	1.1
127-18-4	Tetrachloroethene	0.85	U H	5.8	0.85
108-88-3	Toluene	0.90	U H	5.8	0.90
156-60-5	trans-1,2-Dichloroethene	0.54	U H	5.8	0.54
10061-02-6	trans-1,3-Dichloropropene	1.2	U H	5.8	1.2
79-01-6	Trichloroethene	0.74	U H	5.8	0.74
75-69-4	Trichlorofluoromethane	1.3	U H	5.8	1.3
108-05-4	Vinyl acetate	2.5	U H	12	2.5
75-01-4	Vinyl chloride	0.98	U H	5.8	0.98
75-65-0	tert-Butyl alcohol	19	U H	230	19
1330-20-7	Xylenes, Total	1.9	U H	12	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135B-12.5-18 Lab Sample ID: 240-103714-3
 Matrix: Solid Lab File ID: UX80904.D
 Analysis Method: 8260B Date Collected: 10/30/2018 16:00
 Sample wt/vol: 5.15(g) Date Analyzed: 11/14/2018 01:13
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 16.9 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.3	U H	5.8	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		48-123
460-00-4	4-Bromofluorobenzene (Surr)	80		49-141
2037-26-5	Toluene-d8 (Surr)	83		62-135
1868-53-7	Dibromofluoromethane (Surr)	84		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW135B-12.5-18 Lab Sample ID: 240-103714-3
 Matrix: Solid Lab File ID: UX80904.D
 Analysis Method: 8260B Date Collected: 10/30/2018 16:00
 Sample wt/vol: 5.15(g) Date Analyzed: 11/14/2018 01:13
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 16.9 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg
 Number TICs Found: 2 TIC Result Total: 36

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.33	18	T H J	
	Unknown	4.24	18	T H J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136A-1.2-2 Lab Sample ID: 240-103714-4
 Matrix: Solid Lab File ID: UX80905.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:20
 Sample wt/vol: 5.00(g) Date Analyzed: 11/14/2018 01:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 13.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.4	U	5.7	3.4
71-55-6	1,1,1-Trichloroethane	0.94	U	5.7	0.94
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.7	1.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	5.7	1.5
75-34-3	1,1-Dichloroethane	0.80	U	5.7	0.80
75-35-4	1,1-Dichloroethene	1.0	U	5.7	1.0
563-58-6	1,1-Dichloropropene	1.1	U	5.7	1.1
87-61-6	1,2,3-Trichlorobenzene	0.66	U	5.7	0.66
96-18-4	1,2,3-Trichloropropane	1.8	U	5.7	1.8
526-73-8	1,2,3-Trimethylbenzene	2.1	U	5.7	2.1
120-82-1	1,2,4-Trichlorobenzene	0.66	U	5.7	0.66
95-63-6	1,2,4-Trimethylbenzene	1.2	U	5.7	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	4.1	U	11	4.1
95-50-1	1,2-Dichlorobenzene	1.3	U	5.7	1.3
107-06-2	1,2-Dichloroethane	0.89	U	5.7	0.89
78-87-5	1,2-Dichloropropane	0.98	U	5.7	0.98
541-73-1	1,3-Dichlorobenzene	0.94	U	5.7	0.94
142-28-9	1,3-Dichloropropane	1.1	U	5.7	1.1
106-46-7	1,4-Dichlorobenzene	1.0	U	5.7	1.0
594-20-7	2,2-Dichloropropane	1.4	U	5.7	1.4
110-75-8	2-Chloroethyl vinyl ether	10	U	57	10
95-49-8	2-Chlorotoluene	1.1	U	5.7	1.1
591-78-6	2-Hexanone	4.7	U	23	4.7
108-86-1	Bromobenzene	1.3	U	5.7	1.3
74-97-5	Bromochloromethane	0.68	U	5.7	0.68
106-43-4	4-Chlorotoluene	0.99	U	5.7	0.99
99-87-6	p-Isopropyltoluene	3.4	U	5.7	3.4
67-64-1	Acetone	24	U	29	24
71-43-2	Benzene	0.80	U	5.7	0.80
75-25-2	Bromoform	2.8	U	5.7	2.8
74-83-9	Bromomethane	1.1	U	5.7	1.1
75-15-0	Carbon disulfide	1.3	U	5.7	1.3
56-23-5	Carbon tetrachloride	3.7	U	5.7	3.7
108-90-7	Chlorobenzene	1.1	U	5.7	1.1
75-00-3	Chloroethane	1.4	U	5.7	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136A-1.2-2 Lab Sample ID: 240-103714-4
 Matrix: Solid Lab File ID: UX80905.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:20
 Sample wt/vol: 5.00(g) Date Analyzed: 11/14/2018 01:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 13.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.91	U	5.7	0.91
74-87-3	Chloromethane	1.2	U	5.7	1.2
156-59-2	cis-1,2-Dichloroethene	0.75	U	5.7	0.75
10061-01-5	cis-1,3-Dichloropropene	1.7	U	5.7	1.7
87-68-3	Hexachlorobutadiene	4.3	U	5.7	4.3
74-95-3	Dibromomethane	0.77	U	5.7	0.77
75-27-4	Bromodichloromethane	0.78	U	5.7	0.78
75-71-8	Dichlorodifluoromethane	1.1	U	5.7	1.1
100-41-4	Ethylbenzene	1.2	U	5.7	1.2
106-93-4	1,2-Dibromoethane	0.88	U	5.7	0.88
108-20-3	Diisopropyl ether	0.87	U	11	0.87
91-20-3	Naphthalene	3.1	U	5.7	3.1
179601-23-1	m-Xylene & p-Xylene	0.90	U	11	0.90
104-51-8	n-Butylbenzene	4.0	U	5.7	4.0
98-82-8	Isopropylbenzene	0.96	U	5.7	0.96
103-65-1	N-Propylbenzene	0.84	U	5.7	0.84
78-93-3	2-Butanone (MEK)	4.1	U	23	4.1
108-10-1	4-Methyl-2-pentanone (MIBK)	4.3	U	23	4.3
135-98-8	sec-Butylbenzene	0.99	U	5.7	0.99
1634-04-4	Methyl tert-butyl ether	0.94	U	5.7	0.94
994-05-8	Tert-amyl methyl ether	2.6	U	5.7	2.6
75-09-2	Methylene Chloride	14	U	29	14
95-47-6	o-Xylene	0.99	U	5.7	0.99
100-42-5	Styrene	1.3	U	5.7	1.3
637-92-3	Ethyl tert-butyl ether	2.6	U	5.7	2.6
98-06-6	tert-Butylbenzene	1.0	U	5.7	1.0
127-18-4	Tetrachloroethene	0.84	U	5.7	0.84
108-88-3	Toluene	0.89	U	5.7	0.89
156-60-5	trans-1,2-Dichloroethene	0.53	U	5.7	0.53
10061-02-6	trans-1,3-Dichloropropene	1.2	U	5.7	1.2
79-01-6	Trichloroethene	0.73	U	5.7	0.73
75-69-4	Trichlorofluoromethane	1.2	U	5.7	1.2
108-05-4	Vinyl acetate	2.4	U	11	2.4
75-01-4	Vinyl chloride	0.96	U	5.7	0.96
75-65-0	tert-Butyl alcohol	19	U	230	19
1330-20-7	Xylenes, Total	1.8	U	11	1.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136A-1.2-2 Lab Sample ID: 240-103714-4
 Matrix: Solid Lab File ID: UX80905.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:20
 Sample wt/vol: 5.00(g) Date Analyzed: 11/14/2018 01:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 13.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.2	U	5.7	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	85		48-123
460-00-4	4-Bromofluorobenzene (Surr)	81		49-141
2037-26-5	Toluene-d8 (Surr)	85		62-135
1868-53-7	Dibromofluoromethane (Surr)	84		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136A-1.2-2 Lab Sample ID: 240-103714-4
 Matrix: Solid Lab File ID: UX80905.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:20
 Sample wt/vol: 5.00(g) Date Analyzed: 11/14/2018 01:35
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 13.0 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg
 Number TICs Found: 2 TIC Result Total: 35

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.33	18	T J	
	Unknown	4.24	17	T J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136B-15.8-18.5 Lab Sample ID: 240-103714-5
 Matrix: Solid Lab File ID: UX80906.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:40
 Sample wt/vol: 5.22(g) Date Analyzed: 11/14/2018 01:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.2 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.4	U	5.6	3.4
71-55-6	1,1,1-Trichloroethane	0.93	U	5.6	0.93
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.6	1.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.4	U	5.6	1.4
75-34-3	1,1-Dichloroethane	0.78	U	5.6	0.78
75-35-4	1,1-Dichloroethene	1.0	U	5.6	1.0
563-58-6	1,1-Dichloropropene	1.1	U	5.6	1.1
87-61-6	1,2,3-Trichlorobenzene	0.65	U	5.6	0.65
96-18-4	1,2,3-Trichloropropane	1.8	U	5.6	1.8
526-73-8	1,2,3-Trimethylbenzene	2.1	U	5.6	2.1
120-82-1	1,2,4-Trichlorobenzene	0.65	U	5.6	0.65
95-63-6	1,2,4-Trimethylbenzene	1.1	U	5.6	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	4.1	U	11	4.1
95-50-1	1,2-Dichlorobenzene	1.3	U	5.6	1.3
107-06-2	1,2-Dichloroethane	0.87	U	5.6	0.87
78-87-5	1,2-Dichloropropane	0.96	U	5.6	0.96
541-73-1	1,3-Dichlorobenzene	0.92	U	5.6	0.92
142-28-9	1,3-Dichloropropane	1.1	U	5.6	1.1
106-46-7	1,4-Dichlorobenzene	1.0	U	5.6	1.0
594-20-7	2,2-Dichloropropane	1.3	U	5.6	1.3
110-75-8	2-Chloroethyl vinyl ether	10	U	56	10
95-49-8	2-Chlorotoluene	1.1	U	5.6	1.1
591-78-6	2-Hexanone	4.6	U	23	4.6
108-86-1	Bromobenzene	1.3	U	5.6	1.3
74-97-5	Bromochloromethane	0.67	U	5.6	0.67
106-43-4	4-Chlorotoluene	0.97	U	5.6	0.97
99-87-6	p-Isopropyltoluene	3.3	U	5.6	3.3
67-64-1	Acetone	24	U	28	24
71-43-2	Benzene	0.79	U	5.6	0.79
75-25-2	Bromoform	2.7	U	5.6	2.7
74-83-9	Bromomethane	1.1	U	5.6	1.1
75-15-0	Carbon disulfide	1.3	U	5.6	1.3
56-23-5	Carbon tetrachloride	3.7	U	5.6	3.7
108-90-7	Chlorobenzene	1.0	U	5.6	1.0
75-00-3	Chloroethane	1.4	U	5.6	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136B-15.8-18.5 Lab Sample ID: 240-103714-5
 Matrix: Solid Lab File ID: UX80906.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:40
 Sample wt/vol: 5.22(g) Date Analyzed: 11/14/2018 01:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.2 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.89	U	5.6	0.89
74-87-3	Chloromethane	1.2	U	5.6	1.2
156-59-2	cis-1,2-Dichloroethene	0.74	U	5.6	0.74
10061-01-5	cis-1,3-Dichloropropene	1.6	U	5.6	1.6
87-68-3	Hexachlorobutadiene	4.2	U	5.6	4.2
74-95-3	Dibromomethane	0.76	U	5.6	0.76
75-27-4	Bromodichloromethane	0.77	U	5.6	0.77
75-71-8	Dichlorodifluoromethane	1.1	U	5.6	1.1
100-41-4	Ethylbenzene	1.2	U	5.6	1.2
106-93-4	1,2-Dibromoethane	0.87	U	5.6	0.87
108-20-3	Diisopropyl ether	0.86	U	11	0.86
91-20-3	Naphthalene	3.0	U	5.6	3.0
179601-23-1	m-Xylene & p-Xylene	0.88	U	11	0.88
104-51-8	n-Butylbenzene	3.9	U	5.6	3.9
98-82-8	Isopropylbenzene	0.94	U	5.6	0.94
103-65-1	N-Propylbenzene	0.83	U	5.6	0.83
78-93-3	2-Butanone (MEK)	4.0	U	23	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	4.2	U	23	4.2
135-98-8	sec-Butylbenzene	0.98	U	5.6	0.98
1634-04-4	Methyl tert-butyl ether	0.93	U	5.6	0.93
994-05-8	Tert-amyl methyl ether	2.5	U	5.6	2.5
75-09-2	Methylene Chloride	14	U	28	14
95-47-6	o-Xylene	0.97	U	5.6	0.97
100-42-5	Styrene	1.3	U	5.6	1.3
637-92-3	Ethyl tert-butyl ether	2.5	U	5.6	2.5
98-06-6	tert-Butylbenzene	1.0	U	5.6	1.0
127-18-4	Tetrachloroethene	0.82	U	5.6	0.82
108-88-3	Toluene	0.87	U	5.6	0.87
156-60-5	trans-1,2-Dichloroethene	0.53	U	5.6	0.53
10061-02-6	trans-1,3-Dichloropropene	1.2	U	5.6	1.2
79-01-6	Trichloroethene	0.72	U	5.6	0.72
75-69-4	Trichlorofluoromethane	1.2	U	5.6	1.2
108-05-4	Vinyl acetate	2.4	U	11	2.4
75-01-4	Vinyl chloride	0.95	U	5.6	0.95
75-65-0	tert-Butyl alcohol	19	U	230	19
1330-20-7	Xylenes, Total	1.8	U	11	1.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136B-15.8-18.5 Lab Sample ID: 240-103714-5
 Matrix: Solid Lab File ID: UX80906.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:40
 Sample wt/vol: 5.22(g) Date Analyzed: 11/14/2018 01:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.2 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.1	U	5.6	3.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		48-123
460-00-4	4-Bromofluorobenzene (Surr)	80		49-141
2037-26-5	Toluene-d8 (Surr)	87		62-135
1868-53-7	Dibromofluoromethane (Surr)	84		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: SB-MW136B-15.8-18.5 Lab Sample ID: 240-103714-5
 Matrix: Solid Lab File ID: UX80906.D
 Analysis Method: 8260B Date Collected: 10/31/2018 10:40
 Sample wt/vol: 5.22(g) Date Analyzed: 11/14/2018 01:57
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 15.2 Level: (low/med) Low
 Analysis Batch No.: 355270 Units: ug/Kg
 Number TICs Found: 2 TIC Result Total: 35

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.33	18	T J	
	Unknown	4.23	17	T J	

Appendix C

Support Documentation

ANALYTE	ORIGINAL	DUPLICATE	RL	RPD	RPD > 30%
CIS-1,2-DICHLOROETHENE	1.4	0.76	5.7	59.26	TRUE
TRICHLOROETHENE	110	49	5.7	76.73	TRUE

ORIGINAL SAMPLE CONC >2xRL	DUPLICATE SAMPLE CONC >2xRL	DIFFERENCE >2xRL
FALSE	FALSE	FALSE
TRUE	TRUE	TRUE

SDG 240-103610-1

SB-SEMW-10D-DUP/SB-SEMW-10D-10-15

LMC - BLOCK F
SDG 240-103610-1

SAMPLE IDENTIFICATION

SB-SEMW-10D-10-15

COMPOUND

TRICHLOROETHENE

COMPOUND AREA	602288
INTERNAL STANDARD AMOUNT (ng)	250
DILUTION FACTOR	1
INTERNAL STANDARD AREA	938949
AVERAGE RRF	0.328
% SOLIDS	0.827
WEIGHT OF SAMPLE (g)	5.33
ng to µg	1000
g to Kg	1000

CONCENTRATION = 110.92 ng/g OR µg/Kg

$602288 \times 250\text{ng} \times 1\mu\text{g} \times 1000\text{g} \times 1 / (938949 \times 0.328 \times 5.33\text{g} \times 0.827 \times 1000\text{ng})$

TestAmerica Canton
Target Compound Quantitation Report

Data File: \\ChromNA\Canton\ChromData\A3UX8\20181107-81653.b\UX80652.D
 Lims ID: 240-103610-B-2-A
 Client ID: SB-SEMW-10D-10-15
 Sample Type: Client
 Inject. Date: 07-Nov-2018 15:12:30 ALS Bottle#: 29 Worklist Smp#: 31
 Purge Vol: 5.000 mL Dil. Factor: 1.0000
 Sample Info: 240-0081653-031
 Operator ID: 402279 Instrument ID: A3UX8
 Method: \\ChromNA\Canton\ChromData\A3UX8\20181107-81653.b\8260_8.m
 Limit Group: MSV 8260B ICAL
 Last Update: 08-Nov-2018 03:43:30 Calib Date: 06-Nov-2018 09:45:30
 Integrator: RTE ID Type: Deconvolution ID
 Quant Method: Internal Standard Quant By: Initial Calibration
 Last ICal File: \\ChromNA\Canton\ChromData\A3UX8\20181106-81611.b\UX80603.D
 Column 1 : DB-624 (0.18 mm) Det: MS SCAN
 Process Host: XAWRK007

First Level Reviewer: latat

Date: 08-Nov-2018 03:33:50

Compound	Sig	RT (min.)	Exp RT (min.)	Diff RT (min.)	Q	Response	OnCol Amt ug/l	Flags
* 1 Fluorobenzene	96	5.157	5.158	-0.001	98	938949	50.0	
* 2 Chlorobenzene-d5	117	7.689	7.690	-0.001	96	684823	50.0	
* 3 1,4-Dichlorobenzene-d4	152	9.879	9.879	0.000	93	299825	50.0	
\$ 4 Dibromofluoromethane (Surr	113	4.625	4.637	-0.012	93	195196	42.0	
\$ 5 1,2-Dichloroethane-d4 (Sur	65	4.897	4.897	0.000	91	263867	40.8	
\$ 6 Toluene-d8 (Surr)	98	6.435	6.436	-0.001	96	865254	44.2	
\$ 7 4-Bromofluorobenzene (Surr	95	8.766	8.767	-0.001	83	277981	37.7	
9 Dichlorodifluoromethane	85		1.596				ND	
10 Chloromethane	50		1.773				ND	
11 Vinyl chloride	62		1.880				ND	
13 Bromomethane	94		2.188				ND	
14 Chloroethane	64		2.282				ND	
16 Trichlorofluoromethane	101		2.507				ND	
19 1,1-Dichloroethene	96		2.933				ND	
20 1,1,2-Trichloro-1,2,2-trif	151		2.945				ND	
21 Acetone	43	2.956	2.969	-0.013	98	12811	1.64	
24 Carbon disulfide	76		3.122				ND	
28 Methylene Chloride	84		3.312				ND	
29 2-Methyl-2-propanol	59		3.383				ND	
31 trans-1,2-Dichloroethene	96		3.525				ND	
32 Methyl tert-butyl ether	73		3.525				ND	
34 1,1-Dichloroethane	63		3.844				ND	
35 Vinyl acetate	43		3.868				ND	
36 Isopropyl ether	87		3.891				ND	
38 Tert-butyl ethyl ether	59		4.163				ND	
39 cis-1,2-Dichloroethene	96	4.282	4.282	0.000	87	8164	1.21	
40 2-Butanone (MEK)	43		4.282				ND	
41 2,2-Dichloropropane	77		4.282				ND	
45 Chlorobromomethane	128		4.460				ND	
47 Chloroform	83		4.507				ND	
48 1,1,1-Trichloroethane	97		4.673				ND	
50 1,1-Dichloropropene	75		4.791				ND	

Compound	Sig	RT (min.)	Exp RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ug/l	Flags
51 Carbon tetrachloride	117		4.803				ND	
53 1,2-Dichloroethane	62		4.957				ND	
54 Benzene	78		4.957				ND	
55 Tert-amyl methyl ether	73		5.027				ND	
58 Trichloroethene	130	5.453	5.453	0.000	95	602288	97.8	
61 1,2-Dichloropropane	63		5.619				ND	
63 Dibromomethane	93		5.714				ND	
65 Dichlorobromomethane	83		5.832				ND	
67 2-Chloroethyl vinyl ether	63		6.057				ND	
68 cis-1,3-Dichloropropene	75		6.199				ND	
69 4-Methyl-2-pentanone (MIBK)	43		6.305				ND	
70 Toluene	91		6.495				ND	
71 trans-1,3-Dichloropropene	75		6.649				ND	
74 1,3-Dichloropropane	76		6.968				ND	
75 Tetrachloroethene	164		6.968				ND	
76 2-Hexanone	43		7.015				ND	
78 Chlorodibromomethane	129		7.169				ND	
80 Ethylene Dibromide	107		7.276				ND	
82 Chlorobenzene	112		7.714				ND	
83 1,1,1,2-Tetrachloroethane	131		7.785				ND	
84 Ethylbenzene	106		7.808				ND	
85 m-Xylene & p-Xylene	106		7.915				ND	
87 Styrene	104		8.282				ND	
86 o-Xylene	106		8.282				ND	
88 Bromoform	173		8.459				ND	
89 Isopropylbenzene	105		8.625				ND	
92 1,1,2,2-Tetrachloroethane	83		8.873				ND	
93 Bromobenzene	156		8.920				ND	
94 1,2,3-Trichloropropane	110		8.932				ND	
96 N-Propylbenzene	120		9.015				ND	
97 2-Chlorotoluene	126		9.098				ND	
99 4-Chlorotoluene	126		9.204				ND	
100 tert-Butylbenzene	119		9.488				ND	
102 1,2,4-Trimethylbenzene	105		9.536				ND	
103 sec-Butylbenzene	105		9.701				ND	
104 1,3-Dichlorobenzene	146		9.820				ND	
105 4-Isopropyltoluene	119		9.843				ND	
106 1,4-Dichlorobenzene	146		9.903				ND	
107 1,2,3-Trimethylbenzene	105		9.949				ND	
109 n-Butylbenzene	91		10.246				ND	
110 1,2-Dichlorobenzene	146		10.269				ND	
111 1,2-Dibromo-3-Chloropropan	157		11.027				ND	
113 1,2,4-Trichlorobenzene	180		11.867				ND	
114 Hexachlorobutadiene	225		12.033				ND	
115 Naphthalene	128		12.115				ND	
116 1,2,3-Trichlorobenzene	180		12.364				ND	
S 128 Xylenes, Total	106		16.530				ND	

1.2/2.1

Chain of Custody Record

000439

Regulatory Program: DW NPDES RCRA Other:

Client Contact		Project Manager: <i>Mike Martin</i>		Site Contact: <i>J. Mullis</i>		Date: <i>10/29/18</i>		COC No:	
Company Name: <i>Tetra Tech Inc</i>		Tel/Fax: <i>301-528-3021</i>		Lab Contact: <i>J. Metcalfe</i>		Carrier: <i>Tetra</i>		of <i>1</i> COCs	
Address: <i>10251 Century Blvd. Ste. 200</i>		Analysis Turnaround Time							
City/State/Zip: <i>Calverton MD, 20874</i>		<input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS							
Phone: <i>301-528-3021</i>		TAT if different from Below							
Fax:		<input type="checkbox"/> 2 weeks <i>STANDARD</i>							
Project Name: <i>MAL Block F Deepwell</i>		<input type="checkbox"/> 1 week							
Site: <i>MAL SEMW-10D</i>		<input type="checkbox"/> 2 days							
P O #: <i>112 ILO 8667</i>		<input type="checkbox"/> 1 day							

SAMPLE 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)	Sample Specific Notes:
<i>TB-102918</i>	<i>10/29/18</i>	<i>0000</i>	<i>G</i>	<i>Ag</i>	<i>2</i>	<i></i>	<i></i>	
<i>SB-SEMW-10D-10-15</i>	<i>↓</i>	<i>1120</i>	<i>↓</i>	<i>Soil</i>	<i>1</i>	<i></i>	<i></i>	
<i>SB-SEMW-10D-20-28</i>	<i>↓</i>	<i>1230</i>	<i>↓</i>	<i>↓</i>	<i>1</i>	<i></i>	<i></i>	
<i>SB-SEMW-10D-DVP</i>	<i>↓</i>	<i>0000</i>	<i>↓</i>	<i>↓</i>	<i>1</i>	<i></i>	<i></i>	



Page 191 of 192

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-Hazardous
 Flammable
 Skin Irritant
 Poison B
 Unknown

Return to Client
 Disposal by Lab
 Archive for _____ Months


Special Instructions/QC Requirements & Comments: *Soil samples from SB-SEMW-10D possible well installation*

Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd: _____		Therm ID No.:	
Relinquished by: <i>[Signature]</i>	Company: <i>Tetra Tech Inc</i>	Date/Time: <i>10/30/18 1350</i>	Received by: <i>[Signature]</i>	Company: _____	Date/Time: <i>10/30/18 17:50</i>		
Relinquished by: <i>[Signature]</i>	Company: <i>Tetra Tech Inc</i>	Date/Time: <i>10/30/18</i>	Received by: <i>[Signature]</i>	Company: <i>TA</i>	Date/Time: <i>10-31-18 1000</i>		
Relinquished by: _____	Company: _____	Date/Time: _____	Received in Laboratory by: _____	Company: _____	Date/Time: _____		

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility


Login # : 103610

Client Tetra Tech Site Name _____
 Cooler Received on 10-31-18 Opened on 10-31-18
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Cooler unpacked by:


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 +0.9 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 2.1 °C
 IR GUN #36 (CF +0.6 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
 -Were tamper/custody seals intact and uncompromised? Yes No NA
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 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC849161
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials?  ← Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:
NS

18. 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)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC Block F Deepwell

Report Number: 240-103610-1

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.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

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

RECEIPT

The samples were received on 10/31/2018 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SB-SEMW-10D-10-15 (240-103610-2), SB-SEMW-10D-20-28 (240-103610-3) and SB-SEMW-10D-DUP (240-103610-4) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared and analyzed on 11/07/2018.

1,2,3-Trichlorobenzene was detected in method blank MB 240-354032/7 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.

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

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TB-102918 (240-103610-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 11/09/2018.

The laboratory control sample (LCS) for 354546 recovered outside control limits for the following analytes: Chlorobromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. TB-102918 (240-103610-1) and (LCS 240-354546/4)

2-Chloroethyl vinyl ether cannot be reliably recovered in an acid preserved sample. The following sample was received in hydrochloric preserved vials: TB-102918 (240-103610-1)

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

PERCENT SOLIDS

Samples SB-SEMW-10D-10-15 (240-103610-2), SB-SEMW-10D-20-28 (240-103610-3) and SB-SEMW-10D-DUP (240-103610-4) were analyzed for percent solids in accordance with ASTM Method D2216-80. The samples were analyzed on 11/01/2018.

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

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS VOA TICs

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

Glossary

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-103610-1	TB-102918	Water	10/29/18 00:00	10/31/18 10:00
240-103610-2	SB-SEMW-10D-10-15	Solid	10/29/18 11:20	10/31/18 10:00
240-103610-3	SB-SEMW-10D-20-28	Solid	10/29/18 12:30	10/31/18 10:00
240-103610-4	SB-SEMW-10D-DUP	Solid	10/29/18 00:00	10/31/18 10:00

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Matrix: Solid Level: Low
 GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB-SEMW-10D-10-15	240-103610-2	84	82	88	75
SB-SEMW-10D-20-28	240-103610-3	86	84	89	80
SB-SEMW-10D-DUP	240-103610-4	85	83	87	78
	MB 240-354032/7	89	87	86	80
	LCS 240-354032/6	91	82	88	82
SB-SEMW-10D-DUP MS	240-103610-4 MS	83	79	88	83
SB-SEMW-10D-DUP MSD	240-103610-4 MSD	88	81	87	83

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

QC LIMITS
 49-132
 48-123
 62-135
 49-141

Column to be used to flag recovery values

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 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-102918	240-103610-1	123	108	77	79
	MB 240-354546/6	120	111	79	78
	LCS 240-354546/4	113	98	84	89

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

QC LIMITS
 75-128
 70-121
 70-123
 59-120

Column to be used to flag recovery values

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: STD8260 240-339715/4 Date Analyzed: 08/07/2018 11:03
 Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXJ3442.D Heated Purge: (Y/N) N
 Calibration ID: 46381

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	1108911	4.66	694915	7.31	334003	9.52	
UPPER LIMIT	2217822	5.16	1389830	7.81	668006	10.02	
LOWER LIMIT	554456	4.16	347458	6.81	167002	9.02	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-339715/14		1156749	4.66	715134	7.31	341994	9.52
ICV 240-339715/15		1010902	4.66	619828	7.31	295366	9.52
CCVIS 240-354546/2		1258794	4.66	905486	7.31	484931	9.52

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: CCVIS 240-354546/2 Date Analyzed: 11/09/2018 09:45
 Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXJ6204.D Heated Purge: (Y/N) N
 Calibration ID: 46387

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	1258794	4.66	905486	7.31	484931	9.52	
UPPER LIMIT	2517588	5.16	1810972	7.81	969862	10.02	
LOWER LIMIT	629397	4.16	452743	6.81	242466	9.02	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-354546/4		1142627	4.66	773686	7.31	437831	9.52
CCV 240-354546/3		1166212	4.65	783553	7.31	381641	9.52
MB 240-354546/6		1017945	4.66	774169	7.31	383985	9.52
240-103610-1	TB-102918	966019	4.66	675826	7.31	350352	9.52

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: ICIS 240-353820/7 Date Analyzed: 11/06/2018 08:18
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UX80599.D Heated Purge: (Y/N) Y
 Calibration ID: 47798

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	897987	5.16	657341	7.69	317330	9.88
UPPER LIMIT	1795974	5.66	1314682	8.19	634660	10.38
LOWER LIMIT	448994	4.66	328671	7.19	158665	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 240-353820/13	976104	5.16	701529	7.69	328898	9.88
CCVIS 240-354032/4	997625	5.16	660321	7.69	324155	9.88

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: CCVIS 240-354032/4 Date Analyzed: 11/07/2018 05:19
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UX80625.D Heated Purge: (Y/N) Y
 Calibration ID: 47798

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	997625	5.16	660321	7.69	324155	9.88	
UPPER LIMIT	1995250	5.66	1320642	8.19	648310	10.38	
LOWER LIMIT	498813	4.66	330161	7.19	162078	9.38	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-354032/5	928987	5.16	659366	7.69	312615	9.88	
LCS 240-354032/6	939438	5.16	686648	7.69	325317	9.88	
MB 240-354032/7	917081	5.16	690483	7.69	310846	9.88	
240-103610-2	SB-SEMW-10D-10-15	938949	5.16	684823	7.69	299825	9.88
240-103610-3	SB-SEMW-10D-20-28	806309	5.16	583771	7.69	270882	9.88
240-103610-4	SB-SEMW-10D-DUP	917001	5.16	674708	7.69	291158	9.88
240-103610-4 MS	SB-SEMW-10D-DUP MS	1007292	5.16	725258	7.69	335879	9.88
240-103610-4 MSD	SB-SEMW-10D-DUP MSD	910864	5.16	659852	7.69	314995	9.88

FB = Fluorobenzene
 FB = Fluorobenzene
 CBNZd5 = Chlorobenzene-d5
 CBNZd5 = Chlorobenzene-d5
 Area Limit = 50%-200% of internal standard area
 DCBd4 = 1,4-Dichlorobenzene-d4
 RT Limit = ± 0.5 minutes of internal standard RT
 DCBd4 = 1,4-Dichlorobenzene-d4

Column used to flag values outside QC limits

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: UX80628.D Lab Sample ID: MB 240-354032/7
 Matrix: Solid Heated Purge: (Y/N) Y
 Instrument ID: A3UX8 Date Analyzed: 11/07/2018 06:24
 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 240-354032/6	UX80627.D	11/07/2018 06:02
SB-SEMW-10D-10-15	240-103610-2	UX80652.D	11/07/2018 15:12
SB-SEMW-10D-20-28	240-103610-3	UX80653.D	11/07/2018 15:33
SB-SEMW-10D-DUP	240-103610-4	UX80654.D	11/07/2018 15:54
SB-SEMW-10D-DUP MS	240-103610-4 MS	UX80655.D	11/07/2018 16:16
SB-SEMW-10D-DUP MSD	240-103610-4 MSD	UX80656.D	11/07/2018 16:38

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.0	U	5.0	3.0
563-58-6	1,1-Dichloropropene	0.99	U	5.0	0.99
75-34-3	1,1-Dichloroethane	0.69	U	5.0	0.69
87-61-6	1,2,3-Trichlorobenzene	0.581	J	5.0	0.57
96-18-4	1,2,3-Trichloropropane	1.6	U	5.0	1.6
107-06-2	1,2-Dichloroethane	0.77	U	5.0	0.77
75-35-4	1,1-Dichloroethene	0.90	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	1.8	U	5.0	1.8
78-87-5	1,2-Dichloropropane	0.85	U	5.0	0.85
95-63-6	1,2,4-Trimethylbenzene	1.0	U	5.0	1.0
591-78-6	2-Hexanone	4.1	U	20	4.1
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	5.0	1.4
67-64-1	Acetone	21	U	25	21
71-43-2	Benzene	0.70	U	5.0	0.70
75-25-2	Bromoform	2.4	U	5.0	2.4
74-83-9	Bromomethane	0.99	U	5.0	0.99
75-15-0	Carbon disulfide	1.2	U	5.0	1.2
56-23-5	Carbon tetrachloride	3.3	U	5.0	3.3
71-55-6	1,1,1-Trichloroethane	0.82	U	5.0	0.82
108-90-7	Chlorobenzene	0.92	U	5.0	0.92
142-28-9	1,3-Dichloropropane	0.99	U	5.0	0.99
75-00-3	Chloroethane	1.2	U	5.0	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	3.6	U	10	3.6
67-66-3	Chloroform	0.79	U	5.0	0.79
74-87-3	Chloromethane	1.0	U	5.0	1.0
156-59-2	cis-1,2-Dichloroethene	0.65	U	5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	1.4	U	5.0	1.4
75-27-4	Bromodichloromethane	0.68	U	5.0	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.3	U	5.0	1.3
75-71-8	Dichlorodifluoromethane	0.94	U	5.0	0.94
120-82-1	1,2,4-Trichlorobenzene	0.57	U	5.0	0.57
100-41-4	Ethylbenzene	1.0	U	5.0	1.0
106-93-4	1,2-Dibromoethane	0.77	U	5.0	0.77
594-20-7	2,2-Dichloropropane	1.2	U	5.0	1.2
95-50-1	1,2-Dichlorobenzene	1.1	U	5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	0.82	U	5.0	0.82
106-46-7	1,4-Dichlorobenzene	0.88	U	5.0	0.88
110-75-8	2-Chloroethyl vinyl ether	8.9	U	50	8.9
98-82-8	Isopropylbenzene	0.83	U	5.0	0.83
95-49-8	2-Chlorotoluene	0.95	U	5.0	0.95
78-93-3	2-Butanone (MEK)	3.6	U	20	3.6
108-10-1	4-Methyl-2-pentanone (MIBK)	3.7	U	20	3.7
108-86-1	Bromobenzene	1.2	U	5.0	1.2
1634-04-4	Methyl tert-butyl ether	0.82	U	5.0	0.82
74-97-5	Bromochloromethane	0.59	U	5.0	0.59
75-09-2	Methylene Chloride	12	U	25	12
106-43-4	4-Chlorotoluene	0.86	U	5.0	0.86
99-87-6	p-Isopropyltoluene	2.9	U	5.0	2.9
100-42-5	Styrene	1.2	U	5.0	1.2
179601-23-1	m-Xylene & p-Xylene	0.78	U	10	0.78
95-47-6	o-Xylene	0.86	U	5.0	0.86
87-68-3	Hexachlorobutadiene	3.7	U	5.0	3.7
127-18-4	Tetrachloroethene	0.73	U	5.0	0.73
74-95-3	Dibromomethane	0.67	U	5.0	0.67
108-88-3	Toluene	0.77	U	5.0	0.77
108-20-3	Diisopropyl ether	0.76	U	10	0.76
91-20-3	Naphthalene	2.7	U	5.0	2.7
156-60-5	trans-1,2-Dichloroethene	0.47	U	5.0	0.47
104-51-8	n-Butylbenzene	3.5	U	5.0	3.5
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.0	1.0
103-65-1	N-Propylbenzene	0.73	U	5.0	0.73
79-01-6	Trichloroethene	0.63	U	5.0	0.63
135-98-8	sec-Butylbenzene	0.86	U	5.0	0.86
75-69-4	Trichlorofluoromethane	1.1	U	5.0	1.1
994-05-8	Tert-amyl methyl ether	2.2	U	5.0	2.2
637-92-3	Ethyl tert-butyl ether	2.3	U	5.0	2.3
98-06-6	tert-Butylbenzene	0.91	U	5.0	0.91
75-01-4	Vinyl chloride	0.84	U	5.0	0.84
108-05-4	Vinyl acetate	2.1	U	10	2.1
75-65-0	tert-Butyl alcohol	17	U	200	17
1330-20-7	Xylenes, Total	1.6	U	10	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2.8	U	5.0	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		48-123
460-00-4	4-Bromofluorobenzene (Surr)	80		49-141
2037-26-5	Toluene-d8 (Surr)	86		62-135
1868-53-7	Dibromofluoromethane (Surr)	89		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg
 Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: UX80627.D

Lab ID: LCS 240-354032/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	26.1	104	73-124	
1,1-Dichloropropene	25.0	24.8	99	72-127	
1,1-Dichloroethane	25.0	25.2	101	72-122	
1,2,3-Trichlorobenzene	25.0	22.4	90	59-120	
1,2,3-Trichloropropane	25.0	24.2	97	68-128	
1,2-Dichloroethane	25.0	24.0	96	64-126	
1,1-Dichloroethene	25.0	27.6	110	57-139	
1,2-Dichloropropane	25.0	24.3	97	78-122	
1,2,4-Trimethylbenzene	25.0	24.6	98	75-121	
2-Hexanone	50.0	48.1	96	52-145	
1,1,2,2-Tetrachloroethane	25.0	24.2	97	68-128	
Acetone	50.0	54.2	108	43-159	
Benzene	25.0	23.7	95	74-123	
Bromoform	25.0	20.9	83	46-137	
Bromomethane	25.0	24.7	99	10-152	
Carbon disulfide	25.0	26.5	106	29-153	
Carbon tetrachloride	25.0	26.6	106	56-139	
1,1,1-Trichloroethane	25.0	27.7	111	64-135	
Chlorobenzene	25.0	23.4	94	80-120	
1,3-Dichloropropane	25.0	23.4	94	76-120	
Chloroethane	25.0	25.5	102	15-155	
1,2-Dibromo-3-Chloropropane	25.0	21.9	88	38-135	
Chloroform	25.0	25.1	101	72-124	
Chloromethane	25.0	25.1	100	45-128	
cis-1,2-Dichloroethene	25.0	24.6	98	74-123	
cis-1,3-Dichloropropene	25.0	24.1	97	63-137	
Bromodichloromethane	25.0	24.3	97	63-132	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.3	105	56-138	
Dichlorodifluoromethane	25.0	22.8	91	26-138	
1,2,4-Trichlorobenzene	25.0	20.5	82	54-120	
Ethylbenzene	25.0	23.6	94	76-120	
1,2-Dibromoethane	25.0	24.1	96	76-120	
2,2-Dichloropropane	25.0	25.5	102	42-143	
1,2-Dichlorobenzene	25.0	23.0	92	73-120	
1,3-Dichlorobenzene	25.0	22.9	92	70-120	
1,4-Dichlorobenzene	25.0	22.4	89	71-120	
2-Chloroethyl vinyl ether	25.0	22.3 J	89	58-154	
Isopropylbenzene	25.0	25.3	101	77-124	
2-Chlorotoluene	25.0	24.0	96	75-120	
2-Butanone (MEK)	50.0	48.7	97	45-148	
4-Methyl-2-pentanone (MIBK)	50.0	49.5	99	53-139	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: UX80627.D
 Lab ID: LCS 240-354032/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Bromobenzene	25.0	22.7	91	75-120	
Methyl tert-butyl ether	25.0	25.1	101	66-127	
Bromochloromethane	25.0	26.5	106	72-124	
Methylene Chloride	25.0	27.2	109	62-137	
4-Chlorotoluene	25.0	24.5	98	74-121	
p-Isopropyltoluene	25.0	25.4	101	74-124	
Styrene	25.0	24.2	97	76-121	
m-Xylene & p-Xylene	25.0	24.2	97	77-120	
o-Xylene	25.0	24.6	98	79-120	
Hexachlorobutadiene	25.0	23.2	93	58-122	
Tetrachloroethene	25.0	23.3	93	76-120	
Dibromomethane	25.0	23.7	95	71-122	
Toluene	25.0	23.9	95	76-120	
Naphthalene	25.0	21.3	85	51-120	
trans-1,2-Dichloroethene	25.0	26.5	106	71-133	
n-Butylbenzene	25.0	25.0	100	64-133	
trans-1,3-Dichloropropene	25.0	20.3	81	55-121	
N-Propylbenzene	25.0	24.7	99	73-129	
Trichloroethene	25.0	23.4	94	73-126	
sec-Butylbenzene	25.0	24.6	98	73-126	
Trichlorofluoromethane	25.0	26.4	106	47-146	
tert-Butylbenzene	25.0	24.2	97	73-122	
Vinyl chloride	25.0	28.8	115	52-130	
Vinyl acetate	25.0	24.4	98	43-144	
tert-Butyl alcohol	250	231	92	41-139	
Xylenes, Total	50.0	48.8	98	79-120	

Column to be used to flag recovery and RPD values
 FORM III 8260B

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: UX80655.D

Lab ID: 240-103610-4 MS

Client ID: SB-SEMW-10D-DUP MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	27.9	3.5 U	23.1	83	16-137	
1,1-Dichloropropene	27.9	1.2 U	22.4	80	30-138	
1,1-Dichloroethane	27.9	0.81 U	23.3	84	50-133	
1,2,3-Trichlorobenzene	27.9	0.67 U	16.6	59	10-120	
1,2,3-Trichloropropane	27.9	1.8 U	22.8	82	10-178	
1,2-Dichloroethane	27.9	0.90 U	22.7	81	42-127	
1,1-Dichloroethene	27.9	1.1 U	23.7	85	36-150	
1,2-Dichloropropane	27.9	0.99 U	24.7	88	51-128	
1,2,4-Trimethylbenzene	27.9	1.2 U	22.0	79	10-149	
2-Hexanone	55.8	4.8 U	43.5	78	15-147	
1,1,2,2-Tetrachloroethane	27.9	1.7 U	23.2	83	16-178	
Acetone	55.8	25 U	46.0	82	10-160	
Benzene	27.9	0.82 U	23.3	84	39-133	
Bromoform	27.9	2.8 U	17.2	62	18-120	
Bromomethane	27.9	1.2 U	21.7	78	10-159	
Carbon disulfide	27.9	1.4 U	22.0	79	16-145	
Carbon tetrachloride	27.9	3.8 U	22.1	79	22-142	
1,1,1-Trichloroethane	27.9	0.96 U	24.3	87	38-143	
Chlorobenzene	27.9	1.1 U	22.6	81	21-131	
1,3-Dichloropropane	27.9	1.2 U	23.3	83	34-121	
Chloroethane	27.9	1.4 U	21.5	77	17-162	
1,2-Dibromo-3-Chloropropane	27.9	4.2 U	15.9	57	10-141	
Chloroform	27.9	0.92 U	23.0	82	51-130	
Chloromethane	27.9	1.2 U	22.8	82	26-149	
cis-1,2-Dichloroethene	27.9	0.76 U	24.6	88	50-128	
cis-1,3-Dichloropropene	27.9	1.7 U	22.3	80	15-132	
Bromodichloromethane	27.9	0.79 U	22.7	81	32-129	
1,1,2-Trichloro-1,2,2-trifluoroethane	27.9	1.5 U	23.3	83	37-147	
Dichlorodifluoromethane	27.9	1.1 U	19.5	70	15-150	
1,2,4-Trichlorobenzene	27.9	0.67 U	14.8	53	10-120	
Ethylbenzene	27.9	1.2 U	22.5	81	20-135	
1,2-Dibromoethane	27.9	0.90 U	22.9	82	36-125	
2,2-Dichloropropane	27.9	1.4 U	19.7	71	20-141	
1,2-Dichlorobenzene	27.9	1.3 U	20.6	74	10-130	
1,3-Dichlorobenzene	27.9	0.95 U	20.6	74	10-131	
1,4-Dichlorobenzene	27.9	1.0 U	19.9	71	10-130	
2-Chloroethyl vinyl ether	27.9	10 U	17.9 J	64	10-134	
Isopropylbenzene	27.9	0.97 U	22.6	81	20-138	
2-Chlorotoluene	27.9	1.1 U	22.4	80	10-179	
2-Butanone (MEK)	55.8	4.2 U	43.8	78	20-148	
4-Methyl-2-pentanone (MIBK)	55.8	4.3 U	44.2	79	29-143	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: UX80655.D

Lab ID: 240-103610-4 MS

Client ID: SB-SEMW-10D-DUP MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Bromobenzene	27.9	1.4 U	22.0	79	10-164	
Methyl tert-butyl ether	27.9	0.96 U	22.3	80	48-134	
Bromochloromethane	27.9	0.69 U	23.4	84	36-147	
Methylene Chloride	27.9	14 U	24.5 J	88	39-145	
4-Chlorotoluene	27.9	1.0 U	22.6	81	10-158	
p-Isopropyltoluene	27.9	3.4 U	21.4	77	10-142	
Styrene	27.9	1.4 U	22.8	82	10-134	
m-Xylene & p-Xylene	27.9	0.91 U	22.1	79	16-137	
o-Xylene	27.9	1.0 U	23.0	82	21-138	
Hexachlorobutadiene	27.9	4.4 U	15.7	56	10-120	
Tetrachloroethene	27.9	0.85 U	21.9	78	20-151	
Dibromomethane	27.9	0.78 U	22.5	80	37-138	
Toluene	27.9	0.90 U	23.6	85	29-141	
Naphthalene	27.9	3.2 U	15.3	55	10-120	
trans-1,2-Dichloroethene	27.9	0.54 U	24.1	86	44-141	
n-Butylbenzene	27.9	4.1 U	19.4	69	10-149	
trans-1,3-Dichloropropene	27.9	1.2 U	18.4	66	15-120	
N-Propylbenzene	27.9	0.86 U	22.3	80	10-162	
Trichloroethene	27.9	49	129	288	25-148	F1
sec-Butylbenzene	27.9	1.0 U	21.5	77	10-156	
Trichlorofluoromethane	27.9	1.3 U	21.9	78	38-149	
tert-Butylbenzene	27.9	1.1 U	22.0	79	10-148	
Vinyl chloride	27.9	0.98 U	24.3	87	31-148	
Vinyl acetate	27.9	2.5 U	22.7	81	10-120	
tert-Butyl alcohol	279	19 U	201 J	72	59-128	
Xylenes, Total	55.8	1.9 U	45.1	81	19-137	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: UX80656.D

Lab ID: 240-103610-4 MSD

Client ID: SB-SEMW-10D-DUP MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	30.1	27.2	90	16	40	16-137	
1,1-Dichloropropene	30.1	26.3	87	16	36	30-138	
1,1-Dichloroethane	30.1	27.7	92	17	40	50-133	
1,2,3-Trichlorobenzene	30.1	16.7	56	1	40	10-120	
1,2,3-Trichloropropane	30.1	27.8	92	20	40	10-178	
1,2-Dichloroethane	30.1	26.0	86	13	34	42-127	
1,1-Dichloroethene	30.1	28.8	96	20	40	36-150	
1,2-Dichloropropane	30.1	27.5	91	11	36	51-128	
1,2,4-Trimethylbenzene	30.1	25.3	84	14	40	10-149	
2-Hexanone	60.3	50.2	83	14	40	15-147	
1,1,2,2-Tetrachloroethane	30.1	26.7	89	14	40	16-178	
Acetone	60.3	60.0	100	26	39	10-160	
Benzene	30.1	26.8	89	14	40	39-133	
Bromoform	30.1	20.8	69	19	40	18-120	
Bromomethane	30.1	27.3	91	23	40	10-159	
Carbon disulfide	30.1	28.1	93	24	40	16-145	
Carbon tetrachloride	30.1	27.4	91	21	40	22-142	
1,1,1-Trichloroethane	30.1	28.9	96	17	40	38-143	
Chlorobenzene	30.1	25.6	85	12	40	21-131	
1,3-Dichloropropane	30.1	25.8	85	10	40	34-121	
Chloroethane	30.1	29.8	99	32	40	17-162	
1,2-Dibromo-3-Chloropropane	30.1	18.4	61	14	40	10-141	
Chloroform	30.1	28.1	93	20	32	51-130	
Chloromethane	30.1	29.2	97	24	37	26-149	
cis-1,2-Dichloroethene	30.1	29.6	98	18	40	50-128	
cis-1,3-Dichloropropene	30.1	25.9	86	15	40	15-132	
Bromodichloromethane	30.1	26.0	86	13	39	32-129	
1,1,2-Trichloro-1,2,2-trifluoroethane	30.1	27.7	92	17	37	37-147	
Dichlorodifluoromethane	30.1	23.7	79	19	31	15-150	
1,2,4-Trichlorobenzene	30.1	15.1	50	2	40	10-120	
Ethylbenzene	30.1	26.1	87	15	40	20-135	
1,2-Dibromoethane	30.1	25.4	84	10	40	36-125	
2,2-Dichloropropane	30.1	25.0	83	24	40	20-141	
1,2-Dichlorobenzene	30.1	20.4	68	1	40	10-130	
1,3-Dichlorobenzene	30.1	23.9	79	15	40	10-131	
1,4-Dichlorobenzene	30.1	22.9	76	14	40	10-130	
2-Chloroethyl vinyl ether	30.1	20.3 J	67	13	40	10-134	
Isopropylbenzene	30.1	26.8	89	17	40	20-138	
2-Chlorotoluene	30.1	24.6	82	9	40	10-179	
2-Butanone (MEK)	60.3	50.8	84	15	36	20-148	
4-Methyl-2-pentanone (MIBK)	60.3	51.5	85	15	40	29-143	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Matrix: Solid Level: Low Lab File ID: UX80656.D
 Lab ID: 240-103610-4 MSD Client ID: SB-SEMW-10D-DUP MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Bromobenzene	30.1	23.9	79	8	40	10-164	
Methyl tert-butyl ether	30.1	26.9	89	19	34	48-134	
Bromochloromethane	30.1	28.7	95	20	40	36-147	
Methylene Chloride	30.1	30.7	102	22	40	39-145	
4-Chlorotoluene	30.1	24.9	83	9	40	10-158	
p-Isopropyltoluene	30.1	25.1	83	16	40	10-142	
Styrene	30.1	26.6	88	16	40	10-134	
m-Xylene & p-Xylene	30.1	25.4	84	14	40	16-137	
o-Xylene	30.1	26.8	89	15	40	21-138	
Hexachlorobutadiene	30.1	16.0	53	2	40	10-120	
Tetrachloroethene	30.1	24.8	82	13	40	20-151	
Dibromomethane	30.1	26.7	89	17	30	37-138	
Toluene	30.1	25.5	85	8	40	29-141	
Naphthalene	30.1	15.9	53	4	40	10-120	
trans-1,2-Dichloroethene	30.1	29.1	96	19	40	44-141	
n-Butylbenzene	30.1	20.2	67	4	40	10-149	
trans-1,3-Dichloropropene	30.1	19.7	65	7	40	15-120	
N-Propylbenzene	30.1	24.9	83	11	40	10-162	
Trichloroethene	30.1	171	404	28	40	25-148	F1
sec-Butylbenzene	30.1	25.3	84	16	40	10-156	
Trichlorofluoromethane	30.1	28.6	95	26	39	38-149	
tert-Butylbenzene	30.1	25.1	83	13	40	10-148	
Vinyl chloride	30.1	31.8	105	27	37	31-148	
Vinyl acetate	30.1	25.5	85	12	40	10-120	
tert-Butyl alcohol	301	244	81	19	39	59-128	
Xylenes, Total	60.3	52.2	87	15	40	19-137	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: UXJ6208.D Lab Sample ID: MB 240-354546/6
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: A3UX11 Date Analyzed: 11/09/2018 11:14
 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 240-354546/4	UXJ6205.D	11/09/2018 10:07
TB-102918	240-103610-1	UXJ6226.D	11/09/2018 17:52

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354546/6
 Matrix: Water Lab File ID: UXJ6208.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 11:14
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14
563-58-6	1,1-Dichloropropene	0.14	U	1.0	0.14
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17
87-61-6	1,2,3-Trichlorobenzene	0.54	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	0.24	U	1.0	0.24
107-06-2	1,2-Dichloroethane	0.21	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19
526-73-8	1,2,3-Trimethylbenzene	0.14	U	5.0	0.14
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.070	U	1.0	0.070
591-78-6	2-Hexanone	0.54	U	10	0.54
79-34-5	1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13
67-64-1	Acetone	5.4	U	10	5.4
71-43-2	Benzene	0.13	U	1.0	0.13
75-25-2	Bromoform	0.76	U	1.0	0.76
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.28	U	1.0	0.28
56-23-5	Carbon tetrachloride	0.26	U	1.0	0.26
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
108-90-7	Chlorobenzene	0.14	U	1.0	0.14
142-28-9	1,3-Dichloropropane	0.21	U	1.0	0.21
75-00-3	Chloroethane	0.83	U	1.0	0.83
96-12-8	1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91
67-66-3	Chloroform	0.13	U	1.0	0.13
74-87-3	Chloromethane	0.20	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	0.16	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	0.61	U	1.0	0.61
75-27-4	Bromodichloromethane	0.17	U	1.0	0.17
76-13-1	1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41
75-71-8	Dichlorodifluoromethane	0.35	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	0.26	U	1.0	0.26
100-41-4	Ethylbenzene	0.11	U	1.0	0.11
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12
594-20-7	2,2-Dichloropropane	0.31	U	1.0	0.31
95-50-1	1,2-Dichlorobenzene	0.15	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	0.15	U	1.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354546/6
 Matrix: Water Lab File ID: UXJ6208.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 11:14
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-46-7	1,4-Dichlorobenzene	0.16	U	1.0	0.16
110-75-8	2-Chloroethyl vinyl ether	0.26	U	10	0.26
98-82-8	Isopropylbenzene	0.090	U	1.0	0.090
95-49-8	2-Chlorotoluene	0.15	U	1.0	0.15
78-93-3	2-Butanone (MEK)	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42
108-86-1	Bromobenzene	0.12	U	1.0	0.12
1634-04-4	Methyl tert-butyl ether	0.070	U	1.0	0.070
74-97-5	Bromochloromethane	0.14	U	1.0	0.14
75-09-2	Methylene Chloride	2.6	U	5.0	2.6
106-43-4	4-Chlorotoluene	0.090	U	1.0	0.090
99-87-6	4-Isopropyltoluene	0.13	U	1.0	0.13
100-42-5	Styrene	0.10	U	1.0	0.10
179601-23-1	m-Xylene & p-Xylene	0.080	U	2.0	0.080
95-47-6	o-Xylene	0.090	U	1.0	0.090
87-68-3	Hexachlorobutadiene	0.83	U	1.0	0.83
127-18-4	Tetrachloroethene	0.15	U	1.0	0.15
74-95-3	Dibromomethane	0.090	U	1.0	0.090
108-88-3	Toluene	0.14	U	1.0	0.14
108-20-3	Diisopropyl ether	0.17	U	10	0.17
91-20-3	Naphthalene	0.32	U	1.0	0.32
156-60-5	trans-1,2-Dichloroethene	0.19	U	1.0	0.19
104-51-8	n-Butylbenzene	0.14	U	1.0	0.14
10061-02-6	trans-1,3-Dichloropropene	0.67	U	1.0	0.67
103-65-1	N-Propylbenzene	0.15	U	1.0	0.15
79-01-6	Trichloroethene	0.10	U	1.0	0.10
135-98-8	sec-Butylbenzene	0.13	U	1.0	0.13
75-69-4	Trichlorofluoromethane	0.45	U	1.0	0.45
994-05-8	Tert-amyl methyl ether	0.11	U	5.0	0.11
637-92-3	Ethyl tert-butyl ether	0.15	U	5.0	0.15
98-06-6	tert-Butylbenzene	0.14	U	1.0	0.14
75-01-4	Vinyl chloride	0.20	U	1.0	0.20
108-05-4	Vinyl acetate	0.19	U	2.0	0.19
75-65-0	tert-Butyl alcohol	1.7	U	50	1.7
1330-20-7	Xylenes, Total	0.15	U	2.0	0.15
124-48-1	Chlorodibromomethane	0.39	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354546/6
 Matrix: Water Lab File ID: UXJ6208.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 11:14
 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.: 354546 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		70-121
460-00-4	4-Bromofluorobenzene (Surr)	78		59-120
2037-26-5	Toluene-d8 (Surr)	79		70-123
1868-53-7	Dibromofluoromethane (Surr)	120		75-128

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: UXJ6205.D

Lab ID: LCS 240-354546/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.5	115	80-124	
1,1-Dichloropropene	10.0	10.0	100	78-126	
1,1-Dichloroethane	10.0	10.2	102	75-133	
1,2,3-Trichlorobenzene	10.0	9.81	98	39-138	
1,2,3-Trichloropropane	10.0	8.70	87	66-139	
1,2-Dichloroethane	10.0	10.3	103	71-135	
1,1-Dichloroethene	10.0	9.84	98	65-139	
1,2-Dichloropropane	10.0	9.09	91	78-133	
1,2,4-Trimethylbenzene	10.0	7.79	78	74-120	
2-Hexanone	20.0	13.3	67	43-148	
1,1,2,2-Tetrachloroethane	10.0	7.50	75	65-139	
Acetone	20.0	19.7	99	21-162	
Benzene	10.0	9.37	94	80-123	
Bromoform	10.0	12.1	121	49-141	
Bromomethane	10.0	8.42	84	41-175	
Carbon disulfide	10.0	9.49	95	60-138	
Carbon tetrachloride	10.0	12.4	124	63-140	
1,1,1-Trichloroethane	10.0	11.8	118	69-134	
Chlorobenzene	10.0	9.76	98	80-121	
1,3-Dichloropropane	10.0	8.19	82	72-134	
Chloroethane	10.0	7.26	73	33-173	
1,2-Dibromo-3-Chloropropane	10.0	8.63	86	46-132	
Chloroform	10.0	11.6	116	79-127	
Chloromethane	10.0	8.56	86	54-143	
cis-1,2-Dichloroethene	10.0	10.5	105	76-128	
cis-1,3-Dichloropropene	10.0	8.17	82	64-132	
Bromodichloromethane	10.0	10.3	103	77-125	
1,1,2-Trichlorotrifluoroethane	10.0	11.8	118	50-156	
Dichlorodifluoromethane	10.0	13.0	130	29-148	
1,2,4-Trichlorobenzene	10.0	9.07	91	42-133	
Ethylbenzene	10.0	9.01	90	80-120	
1,2-Dibromoethane	10.0	8.65	87	77-123	
2,2-Dichloropropane	10.0	10.6	106	42-150	
1,2-Dichlorobenzene	10.0	9.54	95	78-120	
1,3-Dichlorobenzene	10.0	9.54	95	78-120	
1,4-Dichlorobenzene	10.0	9.35	93	78-120	
2-Chloroethyl vinyl ether	10.0	5.89 J	59	55-137	
Isopropylbenzene	10.0	9.10	91	74-120	
2-Chlorotoluene	10.0	9.42	94	78-123	
2-Butanone (MEK)	20.0	13.3	66	39-163	
4-Methyl-2-pentanone (MIBK)	20.0	14.6	73	49-143	
Bromobenzene	10.0	9.88	99	74-129	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXJ6205.D
 Lab ID: LCS 240-354546/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methyl tert-butyl ether	10.0	9.55	95	51-133	
Bromochloromethane	10.0	13.3	133	74-130	*
Methylene Chloride	10.0	11.5	115	70-134	
4-Chlorotoluene	10.0	8.99	90	77-125	
4-Isopropyltoluene	10.0	7.86	79	69-122	
Styrene	10.0	9.03	90	79-120	
m-Xylene & p-Xylene	10.0	9.16	92	80-120	
o-Xylene	10.0	9.22	92	80-120	
Hexachlorobutadiene	10.0	8.59	86	38-136	
Tetrachloroethene	10.0	11.3	113	74-130	
Dibromomethane	10.0	9.53	95	74-124	
Toluene	10.0	8.72	87	78-129	
Naphthalene	10.0	6.89	69	28-141	
trans-1,2-Dichloroethene	10.0	10.8	108	78-133	
n-Butylbenzene	10.0	6.96	70	57-126	
trans-1,3-Dichloropropene	10.0	7.76	78	55-128	
N-Propylbenzene	10.0	8.02	80	77-123	
Trichloroethene	10.0	10.9	109	76-125	
sec-Butylbenzene	10.0	7.37	74	68-123	
Trichlorofluoromethane	10.0	9.84	98	51-164	
tert-Butylbenzene	10.0	7.25	72	70-121	
Vinyl chloride	10.0	8.62	86	58-143	
Vinyl acetate	10.0	6.74	67	45-151	
tert-Butyl alcohol	100	110	110	10-161	
Xylenes, Total	20.0	18.4	92	80-120	

Column to be used to flag recovery and RPD values

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: J80807A.D BFB Injection Date: 08/07/2018
 Instrument ID: A3UX11 BFB Injection Time: 09:44
 Analysis Batch No.: 339715

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.7	
75	30.0 - 60.0 % of mass 95	52.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	83.4	
175	5.0 - 9.0 % of mass 174	6.5	(7.8) 1
176	95.0 - 101.0 % of mass 174	80.3	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.3	(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 240-339715/2	UXJ3440.D	08/07/2018	10:19
	STD8260 240-339715/3	UXJ3441.D	08/07/2018	10:41
	STD8260 240-339715/4	UXJ3442.D	08/07/2018	11:03
	STD8260 240-339715/5	UXJ3443.D	08/07/2018	11:26
	STD8260 240-339715/6	UXJ3444.D	08/07/2018	11:48
	STD8260 240-339715/7	UXJ3445.D	08/07/2018	12:10
	ICV 240-339715/14	UXJ3446.D	08/07/2018	12:33
	STD6 240-339715/8	UXJ3447.D	08/07/2018	12:55
	STD5 240-339715/9	UXJ3448.D	08/07/2018	13:17
	STD4 240-339715/10	UXJ3449.D	08/07/2018	13:39
	STD3 240-339715/11	UXJ3450.D	08/07/2018	14:02
	STD2 240-339715/12	UXJ3451.D	08/07/2018	14:24
	STD1 240-339715/13	UXJ3452.D	08/07/2018	14:46
	ICV 240-339715/15	UXJ3453.D	08/07/2018	15:08

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-339715/7	UXJ3445.D
Level 2	STD8260 240-339715/6	UXJ3444.D
Level 3	STD8260 240-339715/5	UXJ3443.D
Level 4	STD8260 240-339715/4	UXJ3442.D
Level 5	STD8260 240-339715/3	UXJ3441.D
Level 6	STD8260 240-339715/2	UXJ3440.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	0.2113 0.2754	0.2205	0.2514	0.2701	0.2552	Ave		0.2473			10.5		15.0				
Chloromethane	0.2966 0.2658	0.2669	0.2369	0.2642	0.2510	Ave		0.2636		0.1000	7.5		15.0				
Butadiene	0.2900 0.2983	0.2996	0.2687	0.3063	0.2906	Ave		0.2922			4.5		15.0				
Vinyl chloride	0.3410 0.3462	0.2906	0.2962	0.3301	0.3303	Ave		0.3224			7.3		15.0				
Bromomethane	0.2143 0.2276	0.2109	0.1862	0.2232	0.2234	Ave		0.2143			7.0		15.0				
Chloroethane	0.2081 0.2175	0.1820	0.1874	0.2169	0.2056	Ave		0.2029			7.4		15.0				
Dichlorofluoromethane	0.4987 0.4862	0.4843	0.4363	0.4824	0.4794	Ave		0.4779			4.5		15.0				
Trichlorofluoromethane	0.4391 0.4677	0.4073	0.4077	0.4518	0.4481	Ave		0.4369			5.6		15.0				
Ethyl ether	0.2465 0.2533	0.2557	0.2353	0.2364	0.2339	Ave		0.2435			4.0		15.0				
Acrolein	0.0759 0.0704	0.0703	0.0643	0.0544	0.0664	Ave		0.0670			10.9		15.0				
1,1-Dichloroethene	0.2835 0.2705	0.2694	0.2278	0.2497	0.2218	Ave		0.2538			9.8		15.0				
1,1,2-Trichlorotrifluoroethane	0.1886 0.2004	0.1793	0.1651	0.1792	0.1891	Ave		0.1836			6.5		15.0				
Acetone	++++ 0.1256	0.1097	0.1140	0.0844	0.1085	Ave		0.1084			13.9		15.0				
Iodomethane	0.3765 0.3938	0.3974	0.3709	0.3713	0.3649	Ave		0.3791			3.5		15.0				
Carbon disulfide	0.7838 0.8002	0.8291	0.7111	0.7182	0.7157	Ave		0.7597			6.7		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	0.1842 0.1931	0.1799	0.1853	0.1883	0.1745	Ave		0.1842			3.5		15.0				
Methyl acetate	0.3120 0.2718	0.3005	0.2764	0.2441	0.2852	Ave		0.2816			8.4		15.0				
Methylene Chloride	0.2465 0.2541	0.2600	0.2384	0.2463	0.2371	Ave		0.2471			3.6		15.0				
tert-Butyl alcohol	0.0449 0.0482	0.0271	0.0375	0.0294	0.0406	Qua	0.0221	0.0298	0.0000460					0.9980		0.9900	
Acrylonitrile	0.1530 0.1402	0.1434	0.1325	0.1156	0.1393	Ave		0.1373			9.2		15.0				
trans-1,2-Dichloroethene	0.3173 0.2799	0.2938	0.2593	0.2627	0.2556	Ave		0.2781			8.6		15.0				
Methyl tert-butyl ether	0.7025 0.7293	0.7524	0.6521	0.7053	0.7147	Ave		0.7094			4.7		15.0				
Hexane	0.0938 0.0874	0.0868	0.0886	0.0782	0.0870	Ave		0.0870			5.8		15.0				
1,1-Dichloroethane	0.4671 0.4860	0.5026	0.4549	0.4627	0.4600	Ave		0.4722		0.1000	3.9		15.0				
Vinyl acetate	0.6550 0.5994	0.6109	0.5939	0.5414	0.6173	Ave		0.6030			6.1		15.0				
cis-1,2-Dichloroethene	0.3206 0.2886	0.3118	0.2909	0.2867	0.2694	Ave		0.2947			6.3		15.0				
2,2-Dichloropropane	0.3140 0.3009	0.3134	0.2669	0.2887	0.2881	Ave		0.2953			6.1		15.0				
2-Butanone (MEK)	0.2472 0.1771	0.2101	0.2018	0.1738	0.2098	Ave		0.2033			13.2		15.0				
Bromochloromethane	0.1318 0.1289	0.1340	0.1263	0.1173	0.1214	Ave		0.1266			5.0		15.0				
Tetrahydrofuran	0.1508 0.1185	0.1488	0.1299	0.1111	0.1419	Ave		0.1335			12.3		15.0				
Chloroform	0.4501 0.4385	0.4667	0.4153	0.4412	0.4277	Ave		0.4399			4.0		15.0				
1,1,1-Trichloroethane	0.3505 0.3769	0.3912	0.3364	0.3638	0.3835	Ave		0.3670			5.7		15.0				
Cyclohexane	0.4465 0.4693	0.4545	0.4480	0.4464	0.4630	Ave		0.4546			2.1		15.0				
1,1-Dichloropropene	0.3360 0.3907	0.4134	0.3824	0.3708	0.3879	Ave		0.3802			6.8		15.0				
Carbon tetrachloride	0.3518 0.3442	0.3644	0.3271	0.3395	0.3353	Ave		0.3437			3.8		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	0.0232 0.0262	0.0226	0.0234	0.0215	0.0234	Ave		0.0234			6.6		15.0				
Benzene	1.1222 1.0686	1.1019	1.0204	1.0205	1.0586	Ave		1.0654			3.9		15.0				
1,2-Dichloroethane	0.3988 0.3589	0.3944	0.3421	0.3584	0.3661	Ave		0.3698			6.0		15.0				
n-Heptane	0.0871 0.0904	0.0824	0.0879	0.0817	0.0951	Ave		0.0874			5.8		15.0				
Trichloroethene	0.3118 0.2724	0.2870	0.2668	0.2668	0.2765	Ave		0.2802			6.1		15.0				
Methylcyclohexane	0.4796 0.5195	0.4976	0.4828	0.4753	0.4956	Ave		0.4917			3.3		15.0				
1,2-Dichloropropane	0.2481 0.2339	0.2676	0.2413	0.2322	0.2578	Ave		0.2468			5.6		15.0				
Dibromomethane	0.1916 0.1495	0.1735	0.1559	0.1491	0.1584	Ave		0.1630			10.2		15.0				
1,4-Dioxane	0.0018 0.0033	0.0024	0.0024	0.0031	0.0033	Lin1	-0.039	0.0033						0.9970		0.9900	
Bromodichloromethane	0.3350 0.3199	0.3431	0.3269	0.3198	0.3511	Ave		0.3326			3.8		15.0				
2-Chloroethyl vinyl ether	0.1977 0.1548	0.1743	0.1871	0.1596	0.2016	Ave		0.1792			10.9		15.0				
cis-1,3-Dichloropropene	0.4612 0.3848	0.4081	0.4004	0.3785	0.4269	Ave		0.4100			7.4		15.0				
4-Methyl-2-pentanone (MIBK)	0.4093 0.3080	0.3605	0.3540	0.3413	0.3856	Ave		0.3598			9.8		15.0				
Toluene	1.7043 1.7429	1.6573	1.5865	1.5729	1.6036	Ave		1.6446			4.2		15.0				
trans-1,3-Dichloropropene	0.5821 0.5592	0.5801	0.5507	0.5256	0.5622	Ave		0.5600			3.7		15.0				
Ethyl methacrylate	0.5398 0.5010	0.4957	0.4938	0.4974	0.5240	Ave		0.5086			3.7		15.0				
1,1,2-Trichloroethane	0.3576 0.3110	0.3495	0.3053	0.3019	0.3142	Ave		0.3232			7.4		15.0				
Tetrachloroethene	0.3108 0.3162	0.3056	0.3023	0.2968	0.3015	Ave		0.3055			2.3		15.0				
1,3-Dichloropropane	0.6243 0.5618	0.5686	0.5628	0.5497	0.5759	Ave		0.5738			4.6		15.0				
2-Hexanone	0.4399 0.3405	0.4417	0.4008	0.4080	0.4290	Ave		0.4100			9.2		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	0.3603 0.3658	0.3663	0.3459	0.3625	0.3623	Ave		0.3605			2.1		15.0				
1,2-Dibromoethane	0.3783 0.3173	0.3326	0.3203	0.3113	0.3285	Ave		0.3314			7.3		15.0				
Chlorobenzene	1.0540 0.9885	1.0242	0.9549	0.9534	0.9623	Ave		0.9896		0.3000	4.2		15.0				
1,1,1,2-Tetrachloroethane	0.3479 0.3526	0.3676	0.3148	0.3480	0.3192	Ave		0.3417			6.0		15.0				
Ethylbenzene	0.5165 0.5598	0.5941	0.5439	0.5446	0.5431	Ave		0.5503			4.7		15.0				
m-Xylene & p-Xylene	0.6867 0.6950	0.6556	0.6501	0.6526	0.6632	Ave		0.6672			2.8		15.0				
o-Xylene	0.5987 0.6716	0.6053	0.5917	0.6313	0.6267	Ave		0.6209			4.7		15.0				
Styrene	1.0210 1.1055	1.0931	1.0019	1.0434	1.0703	Ave		1.0559			3.9		15.0				
Bromoform	0.2735 0.2509	0.2607	0.2468	0.2535	0.2508	Ave		0.2560		0.1000	3.8		15.0				
Isopropylbenzene	1.7319 1.8318	1.7227	1.6269	1.6508	1.6772	Ave		1.7069			4.3		15.0				
1,1,2,2-Tetrachloroethane	1.1031 0.9672	1.0518	0.9569	0.9397	0.9566	Ave		0.9959		0.3000	6.6		15.0				
Bromobenzene	0.7755 0.7728	0.8428	0.7858	0.7561	0.7689	Ave		0.7837			3.9		15.0				
1,2,3-Trichloropropane	0.3314 0.3089	0.4042	0.3343	0.3161	0.3211	Ave		0.3360			10.3		15.0				
trans-1,4-Dichloro-2-butene	0.3422 0.2837	0.3748	0.3406	0.3053	0.3210	Ave		0.3279			9.7		15.0				
N-Propylbenzene	0.9682 0.9979	1.0752	0.9566	0.9342	0.9606	Ave		0.9821			5.1		15.0				
2-Chlorotoluene	0.8084 0.8069	0.8134	0.7783	0.7502	0.7658	Ave		0.7872			3.3		15.0				
1,3,5-Trimethylbenzene	2.8352 3.0005	2.8313	2.6946	2.6857	2.7266	Ave		2.7957			4.3		15.0				
4-Chlorotoluene	0.8308 0.8083	0.8444	0.7792	0.7838	0.8006	Ave		0.8078			3.2		15.0				
tert-Butylbenzene	2.4727 2.6589	2.3455	2.3803	2.2804	2.5152	Ave		2.4422			5.6		15.0				
1,2,4-Trimethylbenzene	2.9497 2.9942	2.9370	2.7123	2.7345	2.8285	Ave		2.8593			4.2		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	3.4706 4.0032	3.6555	3.5136	3.4874	3.7065	Ave		3.6395			5.6		15.0				
1,3-Dichlorobenzene	1.4827 1.4294	1.5563	1.4178	1.3884	1.4512	Ave		1.4543			4.1		15.0				
4-Isopropyltoluene	3.0208 3.2959	2.9682	2.9564	2.9783	3.0893	Ave		3.0515			4.2		15.0				
1,4-Dichlorobenzene	1.6181 1.4192	1.5822	1.4416	1.3856	1.4486	Ave		1.4826			6.4		15.0				
1,2-Dichlorobenzene	1.4461 1.3943	1.3583	1.2761	1.3011	1.3169	Ave		1.3488			4.7		15.0				
n-Butylbenzene	2.7917 2.9438	2.8420	2.6351	2.6422	2.8208	Ave		2.7793			4.3		15.0				
1,2-Dibromo-3-Chloropropane	0.3099 0.2581	0.3427	0.2561	0.2752	0.2727	Ave		0.2858			11.9		15.0				
1,2,4-Trichlorobenzene	1.0343 0.9847	0.9843	0.7977	0.9054	0.8895	Ave		0.9327			9.2		15.0				
Hexachlorobutadiene	0.4843 0.4537	0.4398	0.3857	0.4171	0.4414	Ave		0.4370			7.6		15.0				
Naphthalene	3.4842 3.3259	3.4926	2.6724	2.9660	3.0196	Ave		3.1601			10.4		15.0				
1,2,3-Trichlorobenzene	1.0474 0.9738	0.9604	0.7324	0.8501	0.8838	Ave		0.9080			12.2		15.0				
Dibromofluoromethane (Surr)	0.2447 0.2301	0.2304	0.2188	0.2371	0.2276	Ave		0.2315			3.8		15.0				
1,2-Dichloroethane-d4 (Surr)	0.3450 0.2970	0.3032	0.3004	0.2852	0.2919	Ave		0.3038			7.0		15.0				
Toluene-d8 (Surr)	1.4697 1.5033	1.4153	1.3785	1.4367	1.3796	Ave		1.4305			3.5		15.0				
4-Bromofluorobenzene (Surr)	0.4653 0.4235	0.4605	0.4377	0.4361	0.4275	Ave		0.4418			3.9		15.0				

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.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/14 Calibration Date: 08/07/2018 12:33
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3446.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	0.2473	0.2531		0.0102	0.0100	2.3	50.0
Chloromethane	Ave	0.2636	0.2421	0.1000	0.00919	0.0100	-8.1	50.0
Butadiene	Ave	0.2922	0.2582		0.00883	0.0100	-11.7	50.0
Vinyl chloride	Ave	0.3224	0.3029		0.00940	0.0100	-6.0	20.0
Bromomethane	Ave	0.2143	0.1941		0.00906	0.0100	-9.4	50.0
Chloroethane	Ave	0.2029	0.1980		0.00976	0.0100	-2.4	50.0
Dichlorofluoromethane	Ave	0.4779	0.4509		0.00943	0.0100	-5.7	50.0
Trichlorofluoromethane	Ave	0.4369	0.4246		0.00972	0.0100	-2.8	50.0
Ethyl ether	Ave	0.2435	0.2553		0.0105	0.0100	4.9	50.0
Acrolein	Ave	0.0670	0.0382		0.0285	0.0500	-42.9	50.0
1,1-Dichloroethene	Ave	0.2538	0.2622		0.0103	0.0100	3.3	20.0
1,1,2-Trichlorotrifluoroethane	Ave	0.1836	0.1904		0.0104	0.0100	3.7	50.0
Acetone	Ave	0.1084	0.0853		0.0174	0.0200	-21.4	50.0
Iodomethane	Ave	0.3791	0.3949		0.0104	0.0100	4.2	50.0
Carbon disulfide	Ave	0.7597	0.7656		0.0101	0.0100	0.8	50.0
3-Chloro-1-propene	Ave	0.1842	0.1988		0.0108	0.0100	7.9	50.0
Methyl acetate	Ave	0.2816	0.2330		0.0165	0.0200	-17.3	50.0
Methylene Chloride	Ave	0.2471	0.2557		0.0103	0.0100	3.5	50.0
tert-Butyl alcohol	Qua		0.0268		0.0795	0.100	-20.5	50.0
Acrylonitrile	Ave	0.1373	0.1135		0.0827	0.100	-17.3	50.0
trans-1,2-Dichloroethene	Ave	0.2781	0.2923		0.0105	0.0100	5.1	50.0
Methyl tert-butyl ether	Ave	0.7094	0.7342		0.0104	0.0100	3.5	50.0
Hexane	Ave	0.0870	0.0882		0.0101	0.0100	1.5	20.0
1,1-Dichloroethane	Ave	0.4722	0.5009	0.1000	0.0106	0.0100	6.1	50.0
Vinyl acetate	Ave	0.6030	0.5266		0.00873	0.0100	-12.7	50.0
2,2-Dichloropropane	Ave	0.2953	0.2889		0.00978	0.0100	-2.2	50.0
cis-1,2-Dichloroethene	Ave	0.2947	0.2913		0.00989	0.0100	-1.1	50.0
2-Butanone (MEK)	Ave	0.2033	0.1491		0.0147	0.0200	-26.6	50.0
Bromochloromethane	Ave	0.1266	0.1362		0.0108	0.0100	7.5	50.0
Tetrahydrofuran	Ave	0.1335	0.1084		0.0162	0.0200	-18.8	50.0
Chloroform	Ave	0.4399	0.4597		0.0104	0.0100	4.5	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.3888		0.0106	0.0100	5.9	50.0
Cyclohexane	Ave	0.4546	0.4751		0.0105	0.0100	4.5	50.0
1,1-Dichloropropene	Ave	0.3802	0.3927		0.0103	0.0100	3.3	50.0
Carbon tetrachloride	Ave	0.3437	0.3680		0.0107	0.0100	7.1	50.0
Isobutyl alcohol	Ave	0.0234	0.0188		0.201	0.250	-19.4	50.0
Benzene	Ave	1.065	1.076		0.0101	0.0100	1.0	50.0
1,2-Dichloroethane	Ave	0.3698	0.3676		0.00994	0.0100	-0.6	50.0
n-Heptane	Ave	0.0874	0.0887		0.0101	0.0100	1.5	50.0
Trichloroethene	Ave	0.2802	0.2827		0.0101	0.0100	0.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/14 Calibration Date: 08/07/2018 12:33
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3446.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	0.4917	0.4942		0.0101	0.0100	0.5	50.0
1,2-Dichloropropane	Ave	0.2468	0.2525		0.0102	0.0100	2.3	20.0
Dibromomethane	Ave	0.1630	0.1515		0.00929	0.0100	-7.1	50.0
1,4-Dioxane	Lin1		0.0024		0.153	0.200	-23.6	50.0
Bromodichloromethane	Ave	0.3326	0.3375		0.0101	0.0100	1.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1792	0.1585		0.00885	0.0100	-11.5	50.0
cis-1,3-Dichloropropene	Ave	0.4100	0.4046		0.00987	0.0100	-1.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3598	0.2976		0.0165	0.0200	-17.3	50.0
Toluene	Ave	1.645	1.713		0.0104	0.0100	4.1	20.0
trans-1,3-Dichloropropene	Ave	0.5600	0.5330		0.00952	0.0100	-4.8	50.0
Ethyl methacrylate	Ave	0.5086	0.5175		0.0102	0.0100	1.7	50.0
1,1,2-Trichloroethane	Ave	0.3232	0.3355		0.0104	0.0100	3.8	50.0
Tetrachloroethene	Ave	0.3055	0.3233		0.0106	0.0100	5.8	50.0
1,3-Dichloropropane	Ave	0.5738	0.5544		0.00966	0.0100	-3.4	50.0
2-Hexanone	Ave	0.4100	0.3457		0.0169	0.0200	-15.7	50.0
Chlorodibromomethane	Ave	0.3605	0.3794		0.0105	0.0100	5.2	50.0
1,2-Dibromoethane	Ave	0.3314	0.3225		0.00973	0.0100	-2.7	50.0
Chlorobenzene	Ave	0.9896	0.997	0.3000	0.0101	0.0100	0.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3417	0.3525		0.0103	0.0100	3.2	50.0
Ethylbenzene	Ave	0.5503	0.5639		0.0102	0.0100	2.5	20.0
m-Xylene & p-Xylene	Ave	0.6672	0.6995		0.0105	0.0100	4.8	50.0
o-Xylene	Ave	0.6209	0.6635		0.0107	0.0100	6.9	50.0
Styrene	Ave	1.056	1.090		0.0103	0.0100	3.2	50.0
Bromoform	Ave	0.2560	0.2510	0.1000	0.00980	0.0100	-2.0	50.0
Isopropylbenzene	Ave	1.707	1.780		0.0104	0.0100	4.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.996	0.9709	0.3000	0.00975	0.0100	-2.5	50.0
Bromobenzene	Ave	0.7837	0.7974		0.0102	0.0100	1.8	50.0
1,2,3-Trichloropropane	Ave	0.3360	0.3229		0.00961	0.0100	-3.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3279	0.3185		0.00971	0.0100	-2.9	50.0
N-Propylbenzene	Ave	0.9821	1.034		0.0105	0.0100	5.3	50.0
2-Chlorotoluene	Ave	0.7872	0.8272		0.0105	0.0100	5.1	50.0
1,3,5-Trimethylbenzene	Ave	2.796	2.874		0.0103	0.0100	2.8	50.0
4-Chlorotoluene	Ave	0.8078	0.7903		0.00978	0.0100	-2.2	50.0
tert-Butylbenzene	Ave	2.442	2.520		0.0103	0.0100	3.2	50.0
1,2,4-Trimethylbenzene	Ave	2.859	2.894		0.0101	0.0100	1.2	50.0
sec-Butylbenzene	Ave	3.639	3.786		0.0104	0.0100	4.0	50.0
1,3-Dichlorobenzene	Ave	1.454	1.448		0.00996	0.0100	-0.4	50.0
4-Isopropyltoluene	Ave	3.051	3.147		0.0103	0.0100	3.1	50.0
1,4-Dichlorobenzene	Ave	1.483	1.508		0.0102	0.0100	1.7	50.0
1,2-Dichlorobenzene	Ave	1.349	1.403		0.0104	0.0100	4.0	50.0
n-Butylbenzene	Ave	2.779	2.781		0.0100	0.0100	0.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/14 Calibration Date: 08/07/2018 12:33
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3446.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	0.2858	0.2452		0.00858	0.0100	-14.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9327	0.8708		0.00934	0.0100	-6.6	50.0
Hexachlorobutadiene	Ave	0.4370	0.4181		0.00957	0.0100	-4.3	50.0
Naphthalene	Ave	3.160	2.756		0.00872	0.0100	-12.8	50.0
1,2,3-Trichlorobenzene	Ave	0.9080	0.8430		0.00928	0.0100	-7.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2315	0.2470		0.0213	0.0200	6.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3038	0.3037		0.0200	0.0200	-0.0	50.0
Toluene-d8 (Surr)	Ave	1.431	1.484		0.0208	0.0200	3.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4418	0.4465		0.0202	0.0200	1.1	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 12:55 Calibration End Date: 08/07/2018 14:46 Calibration ID: 46384

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-339715/13	UXJ3452.D
Level 2	STD2 240-339715/12	UXJ3451.D
Level 3	STD3 240-339715/11	UXJ3450.D
Level 4	STD4 240-339715/10	UXJ3449.D
Level 5	STD5 240-339715/9	UXJ3448.D
Level 6	STD6 240-339715/8	UXJ3447.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								
Acetonitrile	0.0504 0.0338	0.0225	0.0412	0.0369	0.0398	Qua	-0.219	0.0451	-0.000027					0.9980			0.9900
2-Chloro-1,3-butadiene	0.4031 0.4070	0.4129	0.4184	0.4459	0.4336	Ave		0.4202			3.9		15.0				
Diisopropyl ether	0.2076 0.2133	0.2205	0.2186	0.2234	0.2226	Ave		0.2177			2.8		15.0				
Ethyl tert-butyl ether	0.6780 0.6534	0.6925	0.6983	0.6895	0.7178	Ave		0.6883			3.1		15.0				
Propionitrile	0.0592 0.0508	0.0616	0.0631	0.0547	0.0601	Ave		0.0583			7.9		15.0				
Ethyl acetate	0.3997 0.3455	0.3384	0.3311	0.3182	0.3412	Ave		0.3457			8.1		15.0				
Methacrylonitrile	0.2199 0.2139	0.2003	0.2005	0.2025	0.2141	Ave		0.2085			4.1		15.0				
Tert-amyl methyl ether	0.8494 0.7274	0.7941	0.7968	0.7870	0.7877	Ave		0.7904			4.9		15.0				
n-Butanol	0.0224 0.0191	0.0206	0.0232	0.0211	0.0253	Ave		0.0220			9.9		15.0				
Ethyl acrylate	0.4425 0.4331	0.3506	0.3690	0.3745	0.3787	Ave		0.3914			9.5		15.0				
Methyl methacrylate	0.2765 0.2861	0.2395	0.2436	0.2468	0.2551	Ave		0.2579			7.4		15.0				
2-Nitropropane	0.1202 0.1120	0.1061	0.1059	0.1047	0.1112	Ave		0.1100			5.3		15.0				
n-Butyl acetate	0.4934 0.4597	0.4116	0.4118	0.4058	0.4258	Ave		0.4347			8.0		15.0				
1-Chlorohexane	0.5927 0.5351	0.5084	0.4904	0.5382	0.5407	Ave		0.5342			6.5		15.0				
Cyclohexanone	0.0623 0.0494	0.0662	0.0591	0.0576	0.0718	Ave		0.0611			12.6		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 12:55 Calibration End Date: 08/07/2018 14:46 Calibration ID: 46384

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								
Pentachloroethane	0.2149 0.2210	0.2243	0.2152	0.2259	0.2345	Ave		0.2226			3.3		15.0				
1,2,3-Trimethylbenzene	2.7583 2.9261	2.7403	2.7042	2.8828	3.0256	Ave		2.8395			4.4		15.0				
Benzyl chloride	0.3040 0.4246	0.3146	0.3526	0.3957	0.4116	Ave		0.3672			13.9		15.0				
1,3,5-Trichlorobenzene	1.1377 1.0486	1.0259	1.0232	1.0488	1.1163	Ave		1.0668			4.5		15.0				
2-Methylnaphthalene	2.2775 1.8631	2.3102	2.2390	1.9982	2.2702	Ave		2.1597			8.5		15.0				
1-Chloro-1-fluoroethane TIC	0.2557 0.2668	0.2672	0.2782	0.2489	0.2713	None											

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.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/15 Calibration Date: 08/07/2018 15:08
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3453.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
Dibromofluoromethane (Surr)	Ave	0.2315	0.2532		0.0219	0.0200	9.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3038	0.3257		0.0214	0.0200	7.2	50.0
Toluene-d8 (Surr)	Ave	1.431	1.510		0.0211	0.0200	5.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4418	0.4573		0.0207	0.0200	3.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/15 Calibration Date: 08/07/2018 15:08
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 12:55
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 14:46
 Lab File ID: UXJ3453.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
Acetonitrile	Qua		0.0408		0.102	0.100	1.5	50.0
2-Chloro-1,3-butadiene	Ave	0.4202	0.4117		0.00980	0.0100	-2.0	50.0
Diisopropyl ether	Ave	0.2177	0.2091		0.00961	0.0100	-3.9	50.0
Ethyl tert-butyl ether	Ave	0.6883	0.6814		0.00990	0.0100	-1.0	50.0
Propionitrile	Ave	0.0583	0.0539		0.0925	0.100	-7.5	50.0
Ethyl acetate	Ave	0.3457	0.2992		0.0173	0.0200	-13.4	50.0
Methacrylonitrile	Ave	0.2085	0.1939		0.0930	0.100	-7.0	50.0
Tert-amyl methyl ether	Ave	0.7904	0.7617		0.00964	0.0100	-3.6	50.0
n-Butanol	Ave	0.0220	0.0168		0.191	0.250	-23.7	50.0
Ethyl acrylate	Ave	0.3914	0.3507		0.00896	0.0100	-10.4	50.0
Methyl methacrylate	Ave	0.2579	0.2382		0.0185	0.0200	-7.7	50.0
2-Nitropropane	Ave	0.1100	0.0996		0.0181	0.0200	-9.5	50.0
n-Butyl acetate	Ave	0.4347	0.4016		0.00924	0.0100	-7.6	50.0
1-Chlorohexane	Ave	0.5342	0.5239		0.00981	0.0100	-1.9	50.0
Cyclohexanone	Ave	0.0611	0.0386		0.0631	0.100	-36.9	50.0
Pentachloroethane	Ave	0.2226	0.1821		0.0164	0.0200	-18.2	50.0
1,2,3-Trimethylbenzene	Ave	2.840	2.866		0.0101	0.0100	0.9	50.0
Benzyl chloride	Ave	0.3672	0.3176		0.00865	0.0100	-13.5	50.0
1,3,5-Trichlorobenzene	Ave	1.067	1.015		0.00952	0.0100	-4.8	50.0
2-Methylnaphthalene	Ave	2.160	1.857		0.0172	0.0200	-14.0	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB1109A.D BFB Injection Date: 11/09/2018
 Instrument ID: A3UX11 BFB Injection Time: 09:19
 Analysis Batch No.: 354546

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.9
75	30.0 - 60.0 % of mass 95	49.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.2
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	105.8
175	5.0 - 9.0 % of mass 174	8.3 (7.8) 1
176	95.0 - 101.0 % of mass 174	102.4 (96.7) 1
177	5.0 - 9.0 % of mass 176	6.5 (6.4) 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 240-354546/2	UXJ6204.D	11/09/2018	09:45
	LCS 240-354546/4	UXJ6205.D	11/09/2018	10:07
	CCV 240-354546/3	UXJ6206.D	11/09/2018	10:29
	MB 240-354546/6	UXJ6208.D	11/09/2018	11:14
TB-102918	240-103610-1	UXJ6226.D	11/09/2018	17:52

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354546/2 Calibration Date: 11/09/2018 09:45
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ6204.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	0.2473	0.3496		0.0141	0.0100	41.4	50.0
Chloromethane	Ave	0.2636	0.2505	0.1000	0.00950	0.0100	-5.0	50.0
Butadiene	Ave	0.2922	0.2319		0.00794	0.0100	-20.6	50.0
Vinyl chloride	Ave	0.3224	0.2695		0.00836	0.0100	-16.4	20.0
Bromomethane	Ave	0.2143	0.1911		0.00892	0.0100	-10.8	50.0
Chloroethane	Ave	0.2029	0.1610		0.00794	0.0100	-20.6	50.0
Dichlorofluoromethane	Ave	0.4779	0.3938		0.00824	0.0100	-17.6	50.0
Trichlorofluoromethane	Ave	0.4369	0.4625		0.0106	0.0100	5.9	50.0
Ethyl ether	Ave	0.2435	0.1946		0.00799	0.0100	-20.1	50.0
Acrolein	Ave	0.0670	0.0555		0.0414	0.0500	-17.2	50.0
1,1-Dichloroethene	Ave	0.2538	0.2590		0.0102	0.0100	2.1	20.0
1,1,2-Trichlorotrifluoroethane	Ave	0.1836	0.2256		0.0123	0.0100	22.9	50.0
Acetone	Ave	0.1084	0.1298		0.0239	0.0200	19.7	50.0
Iodomethane	Ave	0.3791	0.4998		0.0132	0.0100	31.8	50.0
Carbon disulfide	Ave	0.7597	0.7857		0.0103	0.0100	3.4	50.0
3-Chloro-1-propene	Ave	0.1842	0.1688		0.00917	0.0100	-8.3	50.0
Methyl acetate	Ave	0.2816	0.2485		0.0176	0.0200	-11.8	50.0
Methylene Chloride	Ave	0.2471	0.2875		0.0116	0.0100	16.4	50.0
tert-Butyl alcohol	Qua		0.0431		0.121	0.100	21.3	50.0
Acrylonitrile	Ave	0.1373	0.1288		0.0938	0.100	-6.2	50.0
trans-1,2-Dichloroethene	Ave	0.2781	0.3000		0.0108	0.0100	7.9	50.0
Methyl tert-butyl ether	Ave	0.7094	0.6805		0.00959	0.0100	-4.1	50.0
Hexane	Ave	0.0870	0.0744		0.00856	0.0100	-14.4	20.0
1,1-Dichloroethane	Ave	0.4722	0.4904	0.1000	0.0104	0.0100	3.8	50.0
Vinyl acetate	Ave	0.6030	0.4829		0.00801	0.0100	-19.9	50.0
2,2-Dichloropropane	Ave	0.2953	0.3177		0.0108	0.0100	7.6	50.0
cis-1,2-Dichloroethene	Ave	0.2947	0.3214		0.0109	0.0100	9.1	50.0
2-Butanone (MEK)	Ave	0.2033	0.1494		0.0147	0.0200	-26.5	50.0
Bromochloromethane	Ave	0.1266	0.1692		0.0134	0.0100	33.6	50.0
Tetrahydrofuran	Ave	0.1335	0.0951		0.0142	0.0200	-28.8	50.0
Chloroform	Ave	0.4399	0.5103		0.0116	0.0100	16.0	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.4446		0.0121	0.0100	21.1	50.0
Cyclohexane	Ave	0.4546	0.3764		0.00828	0.0100	-17.2	50.0
1,1-Dichloropropene	Ave	0.3802	0.3862		0.0102	0.0100	1.6	50.0
Carbon tetrachloride	Ave	0.3437	0.4199		0.0122	0.0100	22.2	50.0
Isobutyl alcohol	Ave	0.0234	0.0177		0.190	0.250	-24.1	50.0
Benzene	Ave	1.065	1.055		0.00990	0.0100	-1.0	50.0
1,2-Dichloroethane	Ave	0.3698	0.3962		0.0107	0.0100	7.1	50.0
n-Heptane	Ave	0.0874	0.0702		0.00803	0.0100	-19.7	50.0
Trichloroethene	Ave	0.2802	0.3328		0.0119	0.0100	18.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354546/2 Calibration Date: 11/09/2018 09:45
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ6204.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	0.4917	0.4372		0.00889	0.0100	-11.1	50.0
1,2-Dichloropropane	Ave	0.2468	0.2186		0.00886	0.0100	-11.4	20.0
Dibromomethane	Ave	0.1630	0.1735		0.0106	0.0100	6.4	50.0
1,4-Dioxane	Lin1		0.0036		0.225	0.200	12.5	50.0
Bromodichloromethane	Ave	0.3326	0.3628		0.0109	0.0100	9.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1792	0.1353		0.0151	0.0200	-24.5	50.0
cis-1,3-Dichloropropene	Ave	0.4100	0.3769		0.00919	0.0100	-8.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3598	0.2763		0.0154	0.0200	-23.2	50.0
Toluene	Ave	1.645	1.505		0.00915	0.0100	-8.5	20.0
trans-1,3-Dichloropropene	Ave	0.5600	0.4733		0.00845	0.0100	-15.5	50.0
Ethyl methacrylate	Ave	0.5086	0.4003		0.00787	0.0100	-21.3	50.0
1,1,2-Trichloroethane	Ave	0.3232	0.2968		0.00918	0.0100	-8.2	50.0
Tetrachloroethene	Ave	0.3055	0.3791		0.0124	0.0100	24.1	50.0
1,3-Dichloropropane	Ave	0.5738	0.4938		0.00860	0.0100	-14.0	50.0
2-Hexanone	Ave	0.4100	0.2638		0.0129	0.0200	-35.7	50.0
Chlorodibromomethane	Ave	0.3605	0.3932		0.0109	0.0100	9.1	50.0
1,2-Dibromoethane	Ave	0.3314	0.3228		0.00974	0.0100	-2.6	50.0
Chlorobenzene	Ave	0.9896	0.9540	0.3000	0.00964	0.0100	-3.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3417	0.3850		0.0113	0.0100	12.7	50.0
Ethylbenzene	Ave	0.5503	0.4892		0.00889	0.0100	-11.1	20.0
m-Xylene & p-Xylene	Ave	0.6672	0.6170		0.00925	0.0100	-7.5	50.0
o-Xylene	Ave	0.6209	0.5601		0.00902	0.0100	-9.8	50.0
Styrene	Ave	1.056	1.004		0.00951	0.0100	-4.9	50.0
Bromoform	Ave	0.2560	0.3176	0.1000	0.0124	0.0100	24.0	50.0
Isopropylbenzene	Ave	1.707	1.506		0.00883	0.0100	-11.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.996	0.7983	0.3000	0.00802	0.0100	-19.8	50.0
Bromobenzene	Ave	0.7837	0.7843		0.0100	0.0100	0.0	50.0
1,2,3-Trichloropropane	Ave	0.3360	0.2855		0.00850	0.0100	-15.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3279	0.2171		0.00662	0.0100	-33.8	50.0
N-Propylbenzene	Ave	0.9821	0.7815		0.00796	0.0100	-20.4	50.0
2-Chlorotoluene	Ave	0.7872	0.7438		0.00945	0.0100	-5.5	50.0
1,3,5-Trimethylbenzene	Ave	2.796	2.267		0.00811	0.0100	-18.9	50.0
4-Chlorotoluene	Ave	0.8078	0.7532		0.00932	0.0100	-6.8	50.0
tert-Butylbenzene	Ave	2.442	1.907		0.00781	0.0100	-21.9	50.0
1,2,4-Trimethylbenzene	Ave	2.859	2.343		0.00819	0.0100	-18.1	50.0
sec-Butylbenzene	Ave	3.639	2.841		0.00781	0.0100	-21.9	50.0
1,3-Dichlorobenzene	Ave	1.454	1.429		0.00983	0.0100	-1.7	50.0
4-Isopropyltoluene	Ave	3.051	2.462		0.00807	0.0100	-19.3	50.0
1,4-Dichlorobenzene	Ave	1.483	1.480		0.00998	0.0100	-0.2	50.0
1,2-Dichlorobenzene	Ave	1.349	1.363		0.0101	0.0100	1.0	50.0
n-Butylbenzene	Ave	2.779	1.939		0.00698	0.0100	-30.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354546/2 Calibration Date: 11/09/2018 09:45
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ6204.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	0.2858	0.2589		0.00906	0.0100	-9.4	50.0
1,2,4-Trichlorobenzene	Ave	0.9327	0.8571		0.00919	0.0100	-8.1	50.0
Hexachlorobutadiene	Ave	0.4370	0.3911		0.00895	0.0100	-10.5	50.0
Naphthalene	Ave	3.160	2.247		0.00711	0.0100	-28.9	50.0
1,2,3-Trichlorobenzene	Ave	0.9080	0.8929		0.00983	0.0100	-1.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2315	0.2601		0.0225	0.0200	12.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3038	0.3285		0.0216	0.0200	8.1	50.0
Toluene-d8 (Surr)	Ave	1.431	1.201		0.0168	0.0200	-16.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4418	0.3933		0.0178	0.0200	-11.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCV 240-354546/3 Calibration Date: 11/09/2018 10:29
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 12:55
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 14:46
 Lab File ID: UXJ6206.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
Acetonitrile	Qua		0.0302		0.0751	0.100	-24.9	50.0
2-Chloro-1,3-butadiene	Ave	0.4202	0.3780		0.00900	0.0100	-10.0	50.0
Diisopropyl ether	Ave	0.2177	0.1950		0.00896	0.0100	-10.4	50.0
Ethyl tert-butyl ether	Ave	0.6883	0.5673		0.00824	0.0100	-17.6	50.0
Propionitrile	Ave	0.0583	0.0405		0.0696	0.100	-30.4	50.0
Ethyl acetate	Ave	0.3457	0.2340		0.0135	0.0200	-32.3	50.0
Methacrylonitrile	Ave	0.2085	0.1618		0.0776	0.100	-22.4	50.0
Tert-amyl methyl ether	Ave	0.7904	0.5922		0.00749	0.0100	-25.1	50.0
n-Butanol	Ave	0.0220	0.0136		0.155	0.250	-37.9	50.0
Ethyl acrylate	Ave	0.3914	0.2615		0.00668	0.0100	-33.2	50.0
Methyl methacrylate	Ave	0.2579	0.1755		0.0136	0.0200	-32.0	50.0
2-Nitropropane	Ave	0.1100	0.0800		0.0145	0.0200	-27.3	50.0
n-Butyl acetate	Ave	0.4347	0.2768		0.00637	0.0100	-36.3	50.0
1-Chlorohexane	Ave	0.5342	0.3987		0.00746	0.0100	-25.4	50.0
Cyclohexanone	Ave	0.0611	0.0296		0.0484	0.100	-51.6*	50.0
Pentachloroethane	Ave	0.2226	0.2346		0.0211	0.0200	5.4	50.0
1,2,3-Trimethylbenzene	Ave	2.840	2.073		0.00730	0.0100	-27.0	50.0
Benzyl chloride	Ave	0.3672	0.3674		0.0100	0.0100	0.0	50.0
1,3,5-Trichlorobenzene	Ave	1.067	0.9755		0.00914	0.0100	-8.6	50.0
2-Methylnaphthalene	Ave	2.160	0.9654		0.00894	0.0200	-55.3*	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB8753.D BFB Injection Date: 10/18/2018
 Instrument ID: A3UX8 BFB Injection Time: 01:59
 Analysis Batch No.: 350647

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	36.8	
75	30.0 - 60.0 % of mass 95	51.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.6	
175	5.0 - 9.0 % of mass 174	4.9	(7.5) 1
176	95.0 - 101.0 % of mass 174	64.5	(98.3) 1
177	5.0 - 9.0 % of mass 176	4.0	(6.2) 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
	STDA9 240-350647/4	UX80006.D	10/18/2018	02:52
	STDA9 240-350647/5	UX80007.D	10/18/2018	03:14
	STDA9 240-350647/6	UX80008.D	10/18/2018	03:37
	STDA9 240-350647/7	UX80009.D	10/18/2018	04:00
	STDA9 240-350647/8	UX80010.D	10/18/2018	04:21
	STDA9 240-350647/9	UX80011.D	10/18/2018	04:43
	STDA9 240-350647/10	UX80012.D	10/18/2018	05:05
	STDA9 240-350647/11	UX80013.D	10/18/2018	05:27
	STDA9 240-350647/12	UX80014.D	10/18/2018	05:49

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-350647/12	UX80014.D
Level 2	STDA9 240-350647/11	UX80013.D
Level 3	STDA9 240-350647/10	UX80012.D
Level 4	STDA9 240-350647/9	UX80011.D
Level 5	STDA9 240-350647/8	UX80010.D
Level 6	STDA9 240-350647/7	UX80009.D
Level 7	STDA9 240-350647/6	UX80008.D
Level 8	STDA9 240-350647/5	UX80007.D
Level 9	STDA9 240-350647/4	UX80006.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Acetonitrile	0.0659 0.0524	0.0585 0.0505	0.0667 0.0482	0.0624 0.0472	0.0562	Ave		0.0564			13.1		15.0				
Diisopropyl ether	0.2104 0.2465	0.2128 0.2517	0.2652 0.2429	0.2705 0.2297	0.2674	Ave		0.2441			9.2		15.0				
2-Chloro-1,3-butadiene	0.7281 0.8227	0.6733 0.8636	0.8699 0.8631	0.8586 0.8358	0.8564	Ave		0.8191			8.6		15.0				
Ethyl tert-butyl ether	1.0204 1.1113	1.0102 1.1142	1.2137 1.1062	1.1919 1.0158	1.1443	Ave		1.1031			6.8		15.0				
Ethyl acetate	0.4472 0.3456	0.4509 0.3591	0.4428 0.3481	0.3995 0.3449	0.3828	Ave		0.3912			11.7		15.0				
Propionitrile	0.0522 0.0477	0.0511 0.0478	0.0622 0.0460	0.0559 0.0437	0.0520	Ave		0.0510			11.0		15.0				
Methacrylonitrile	0.2598 0.2485	0.2458 0.2532	0.3002 0.2450	0.2799 0.2373	0.2748	Ave		0.2605			7.9		15.0				
Tert-amyl methyl ether	0.5374 0.6368	0.5318 0.6409	0.6989 0.6260	0.6746 0.5747	0.6512	Ave		0.6191			9.5		15.0				
n-Butanol	++++ 0.0078	++++ 0.0083	0.0151 0.0083	0.0091 0.0078	0.0075	Lin1	0.5793	0.0078						0.9960		0.9900	
Ethyl acrylate	0.3022 0.3622	0.3199 0.3783	0.4075 0.3636	0.3824 0.3686	0.3911	Ave		0.3640			9.2		15.0				
Methyl methacrylate	0.2925 0.3311	0.3125 0.3447	0.3829 0.3255	0.3644 0.3274	0.3685	Ave		0.3388			8.6		15.0				
2-Nitropropane	0.0299 0.0485	0.0393 0.0596	0.0555 0.0686	0.0522 ++++	0.0479	Qua	-0.036	0.0478	0.0000526					1.0000		0.9900	
n-Butyl acetate	++++ 0.5208	++++ 0.5380	0.7420 0.5055	0.5741 0.5174	0.5316	Ave		0.5613			14.7		15.0				

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.: 240-103610-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1-Chlorohexane	0.3943 0.4521	0.3936 0.4872	0.4454 0.4786	0.4530 0.4782	0.4748	Ave		0.4508			7.8		15.0				
Cyclohexanone	++++ 0.0137	++++ 0.0151	0.0238 0.0156	0.0149 0.0143	0.0121	Lin1	0.1864	0.0146						0.9930		0.9900	
Pentachloroethane	0.2309 0.3683	0.2693 0.4224	0.5213 0.4442	0.3558 0.4051	0.3424	Lin1	-0.423	0.4177						0.9950		0.9900	
1,2,3-Trimethylbenzene	3.3780 3.4782	3.1998 3.6509	4.9367 3.4477	3.9795 3.1789	3.6771	Ave		3.6585			14.8		15.0				
Benzyl chloride	++++ 0.1192	++++ 0.1625	0.1439 0.1932	0.0968 0.1911	0.0927	Qua	-0.965	0.1570	0.0001663					0.9970		0.9900	
1,3,5-Trichlorobenzene	++++ 1.2467	++++ 1.3061	2.0755 1.2098	1.4281 1.1029	1.3188	Lin1	4.1420	1.1538						0.9960		0.9900	
2-Methylnaphthalene	++++ 1.4067	++++ 1.4942	2.2722 1.3322	1.4840 ++++	1.3574	Lin1	6.4375	1.3512						0.9950		0.9900	
1-Chloro-1-fluoroethane TIC	0.6254 0.5744	0.5656 0.5624	0.7066 0.5413	0.6740 0.5249	0.6179	None											

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB8776.D BFB Injection Date: 11/06/2018
 Instrument ID: A3UX8 BFB Injection Time: 06:11
 Analysis Batch No.: 353820

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.3	
75	30.0 - 60.0 % of mass 95	50.5	
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	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	74.8	
175	5.0 - 9.0 % of mass 174	5.6	(7.5) 1
176	95.0 - 101.0 % of mass 174	72.6	(97.0) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.0) 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
	STD8260 240-353820/3	UX80595.D	11/06/2018	06:49
	STD8260 240-353820/4	UX80596.D	11/06/2018	07:11
	STD8260 240-353820/5	UX80597.D	11/06/2018	07:34
	STD8260 240-353820/6	UX80598.D	11/06/2018	07:56
	ICIS 240-353820/7	UX80599.D	11/06/2018	08:18
	STD8260 240-353820/8	UX80600.D	11/06/2018	08:40
	STD8260 240-353820/9	UX80601.D	11/06/2018	09:02
	STD8260 240-353820/10	UX80602.D	11/06/2018	09:24
	STD8260 240-353820/11	UX80603.D	11/06/2018	09:45
	ICV 240-353820/13	UX80605.D	11/06/2018	10:30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-353820/11	UX80603.D
Level 2	STD8260 240-353820/10	UX80602.D
Level 3	STD8260 240-353820/9	UX80601.D
Level 4	STD8260 240-353820/8	UX80600.D
Level 5	ICIS 240-353820/7	UX80599.D
Level 6	STD8260 240-353820/6	UX80598.D
Level 7	STD8260 240-353820/5	UX80597.D
Level 8	STD8260 240-353820/4	UX80596.D
Level 9	STD8260 240-353820/3	UX80595.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Dichlorodifluoromethane	0.3664 0.3475	0.4353 0.3350	0.3768 0.3095	0.4143 0.3233	0.3804	Ave	0.3654				11.4	15.0					
Chloromethane	0.7187 0.6261	0.7217 0.6052	0.7097 0.5775	0.7412 0.5865	0.6995	Ave	0.6651		0.1000	9.8	15.0						
Vinyl chloride	0.4368 0.3685	0.4318 0.3529	0.4007 0.3368	0.4289 0.3492	0.4087	Ave	0.3905			10.0	15.0						
Butadiene	0.6116 0.5367	0.6182 0.5197	0.5808 0.5027	0.6380 0.5183	0.5998	Ave	0.5695			8.9	15.0						
Bromomethane	0.2481 0.1886	0.2297 0.1609	0.2332 +++++	0.2358 +++++	0.2205	Ave	0.2167			14.2	15.0						
Chloroethane	0.2958 0.2482	0.2842 0.2301	0.2788 0.2028	0.2971 +++++	0.2734	Ave	0.2638			12.8	15.0						
Dichlorofluoromethane	0.5733 0.5013	0.6076 0.4816	0.5591 0.4563	0.5942 0.4577	0.5602	Ave	0.5324			11.0	15.0						
Trichlorofluoromethane	0.5051 0.4367	0.4821 0.4296	0.5114 0.4097	0.5241 0.4142	0.4896	Ave	0.4669			9.5	15.0						
Ethyl ether	0.3406 0.3208	0.3449 0.2771	0.3598 0.2745	0.3337 0.2726	0.3282	Ave	0.3169			10.6	15.0						
Acrolein	0.0502 0.0529	0.0586 0.0508	0.0593 0.0481	0.0598 0.0478	0.0606	Ave	0.0542			9.8	15.0						
1,1-Dichloroethene	0.2906 0.3059	0.3201 0.2599	0.3282 0.2539	0.3387 0.2567	0.3086	Ave	0.2958			10.9	15.0						
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2181 0.2193	0.2522 0.1900	0.2295 0.1859	0.2436 0.1935	0.2325	Ave	0.2183			11.0	15.0						
Acetone	0.3264 0.1190	0.2145 0.1056	0.1620 0.1030	0.1492 0.1047	0.1406	Lin1	0.5104 0.1048						0.9970		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 Canton Job No.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Iodomethane	0.5119 0.4732	0.5002 0.4074	0.4885 0.4052	0.5363 0.4056	0.4997	Ave		0.4698			10.8		15.0				
Carbon disulfide	0.7553 0.9415	0.8388 0.8249	0.8500 0.8452	0.9296 0.8558	0.9371	Ave		0.8642			7.1		15.0				
3-Chloro-1-propene	0.1464 0.1859	0.1467 0.1690	0.1695 0.1674	0.1826 0.1692	0.1866	Ave		0.1693			8.8		15.0				
Methyl acetate	0.3303 0.2772	0.3251 0.2631	0.3115 0.2587	0.3318 0.2632	0.3247	Ave		0.2984			10.7		15.0				
Methylene Chloride	++++ 0.3340	0.6410 0.2839	0.4476 0.2758	0.4126 0.2725	0.3693	Lin1	0.9302	0.2762						0.9960		0.9900	
tert-Butyl alcohol	0.0244 0.0234	0.0222 0.0213	0.0245 0.0211	0.0257 0.0209	0.0289	Ave		0.0236			11.1		15.0				
Acrylonitrile	0.1478 0.1242	0.1388 0.1124	0.1366 0.1116	0.1452 0.1121	0.1440	Ave		0.1303			11.7		15.0				
Methyl tert-butyl ether	0.7282 0.6666	0.6756 0.6054	0.6994 0.5961	0.7592 0.5682	0.7296	Ave		0.6698			10.0		15.0				
trans-1,2-Dichloroethene	0.3588 0.3349	0.3517 0.2913	0.3669 0.2881	0.3819 0.2850	0.3565	Ave		0.3350			11.1		15.0				
Hexane	0.0720 0.0848	0.0981 0.0845	0.0910 0.0812	0.0994 0.0876	0.0966	Ave		0.0883			10.1		15.0				
1,1-Dichloroethane	0.7962 0.7024	0.7470 0.6320	0.7665 0.6283	0.7903 0.6284	0.7332	Ave		0.7138		0.1000	9.7		15.0				
Vinyl acetate	0.5807 0.6541	0.5605 0.6477	0.6112 0.6581	0.6326 0.6663	0.6453	Ave		0.6285			5.9		15.0				
2-Butanone (MEK)	++++ 0.1596	++++ 0.1532	0.2063 0.1514	0.1975 0.1524	0.1967	Ave		0.1739			14.3		15.0				
cis-1,2-Dichloroethene	0.4221 0.3556	0.3743 0.3152	0.3783 0.3083	0.3993 0.3036	0.3753	Ave		0.3591			11.7		15.0				
2,2-Dichloropropane	0.3928 0.3567	0.3817 0.3217	0.3535 0.3231	0.3983 0.3135	0.3644	Ave		0.3562			8.8		15.0				
Bromochloromethane	0.1326 0.1416	0.1083 0.1274	0.1419 0.1246	0.1519 0.1237	0.1464	Ave		0.1331			10.2		15.0				
Tetrahydrofuran	0.3787 0.1081	0.2380 0.1006	0.1476 0.0982	0.1339 0.0991	0.1288	Lin1	0.5794	0.0984						0.9990		0.9900	
Chloroform	0.5765 0.5260	0.5489 0.4752	0.5581 0.4770	0.5830 0.4712	0.5527	Ave		0.5298			8.4		15.0				
1,1,1-Trichloroethane	0.3711 0.4733	0.3937 0.4239	0.4495 0.4257	0.5002 0.4231	0.4903	Ave		0.4390			9.9		15.0				
Cyclohexane	0.9909 0.9153	0.8858 0.8154	0.9822 0.8112	1.0097 0.8231	0.9952	Ave		0.9143			9.1		15.0				

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.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1,1-Dichloropropene	0.4248	0.4194	0.4634	0.4929	0.4328	Ave	0.4284				7.5	15.0					
	0.4267	0.4014	0.3974	0.3970													
Carbon tetrachloride	0.3159	0.3297	0.3768	0.4060	0.4045	Ave	0.3717				8.6	15.0					
	0.4041	0.3645	0.3713	0.3722													
Isobutyl alcohol	0.0135	0.0120	0.0116	0.0135	0.0142	Ave	0.0122				10.3	15.0					
	0.0122	0.0109	0.0109	0.0110													
1,2-Dichloroethane	0.5365	0.4928	0.5363	0.5080	0.4980	Ave	0.4799				9.4	15.0					
	0.4658	0.4272	0.4287	0.4260													
Benzene	1.4341	1.2912	1.4171	1.3767	1.3052	Ave	1.2762				9.4	15.0					
	1.2505	1.1485	1.1341	1.1282													
n-Heptane	0.0701	0.0876	0.0940	0.1011	0.0966	Ave	0.0897				9.6	15.0					
	0.0906	0.0879	0.0876	0.0916													
Trichloroethene	0.4245	0.3310	0.3558	0.3320	0.3175	Ave	0.3280				12.9	15.0					
	0.3159	0.2929	0.2904	0.2915													
Methylcyclohexane	0.4948	0.5769	0.6316	0.6586	0.6392	Ave	0.5781				10.2	15.0					
	0.6088	0.5367	0.5256	0.5312													
1,2-Dichloropropane	0.3855	0.3301	0.3876	0.3863	0.3595	Ave	0.3548				7.6	15.0					
	0.3579	0.3330	0.3269	0.3260													
Dibromomethane	0.1380	0.1280	0.1514	0.1463	0.1457	Ave	0.1373				6.6	15.0					
	0.1404	0.1286	0.1283	0.1294													
1,4-Dioxane	++++	0.0016	0.0021	0.0021	0.0022	Ave	0.0019				11.1	15.0					
	0.0019	0.0018	0.0018	0.0018													
Bromodichloromethane	0.2946	0.2571	0.2909	0.3106	0.3185	Ave	0.3092				8.0	15.0					
	0.3328	0.3175	0.3310	0.3295													
2-Chloroethyl vinyl ether	0.1095	0.1072	0.1237	0.1248	0.1349	Ave	0.1240				7.6	15.0					
	0.1286	0.1293	0.1288	0.1288													
cis-1,3-Dichloropropene	0.3137	0.2334	0.3185	0.3374	0.3598	Ave	0.3419				14.2	15.0					
	0.3806	0.3707	0.3801	0.3824													
4-Methyl-2-pentanone (MIBK)	0.2995	0.3147	0.3354	0.3615	0.3762	Ave	0.3276				8.1	15.0					
	0.3348	0.3123	0.3055	0.3087													
Toluene	1.9927	1.7824	1.9104	1.8497	1.8141	Ave	1.7866				6.8	15.0					
	1.7689	1.6272	1.6700	1.6638													
trans-1,3-Dichloropropene	0.2772	0.2491	0.3305	0.3716	0.3739	Lin1	-0.323	0.4370						0.9990		0.9900	
	0.4161	0.4172	0.4463	0.4421													
Ethyl methacrylate	0.2774	0.2870	0.3275	0.3550	0.3739	Ave	0.3411				10.6	15.0					
	0.3681	0.3646	0.3646	0.3513													
1,1,2-Trichloroethane	0.3464	0.2692	0.2754	0.2899	0.2849	Ave	0.2768				10.8	15.0					
	0.2732	0.2523	0.2507	0.2494													
1,3-Dichloropropane	0.5234	0.4909	0.5187	0.5349	0.5174	Ave	0.4921				6.7	15.0					
	0.4824	0.4548	0.4553	0.4513													

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.: 240-103610-1

Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49

Calibration End Date: 11/06/2018 09:45

Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Tetrachloroethene	0.4142 0.3280	0.3524 0.3088	0.3458 0.3099	0.3585 0.3096	0.3320	Ave		0.3399			9.9		15.0				
2-Hexanone	0.2337 0.3124	0.2538 0.2980	0.3094 0.2938	0.3441 0.2892	0.3564	Ave		0.2990			13.0		15.0				
Dibromochloromethane	0.1395 0.2687	0.1639 0.2676	0.2164 0.2837	0.2372 0.2827	0.2548	Lin1	-0.214	0.2799						0.9990		0.9900	
1,2-Dibromoethane	0.2306 0.2553	0.2189 0.2419	0.2600 0.2420	0.2679 0.2421	0.2551	Ave		0.2460			6.2		15.0				
Chlorobenzene	1.2386 1.0989	1.1532 1.0096	1.2529 1.0203	1.2460 1.0156	1.1408	Ave		1.1306		0.3000	8.9		15.0				
1,1,1,2-Tetrachloroethane	0.2537 0.3665	0.2571 0.3352	0.3481 0.3470	0.3587 0.3417	0.3651	Ave		0.3304			13.2		15.0				
Ethylbenzene	0.6614 0.6132	0.5976 0.5712	0.6552 0.5773	0.6658 0.5711	0.6241	Ave		0.6152			6.3		15.0				
m-Xylene & p-Xylene	0.7759 0.7631	0.7836 0.6995	0.8211 0.7008	0.8099 0.6923	0.7695	Ave		0.7573			6.4		15.0				
o-Xylene	0.7202 0.7486	0.6317 0.6639	0.7862 0.6603	0.8170 0.6421	0.7754	Ave		0.7162			9.6		15.0				
Styrene	0.9270 1.1781	0.8974 1.0966	1.1695 1.1010	1.2244 1.0664	1.1838	Ave		1.0938			10.5		15.0				
Bromoform	++++ 0.1292	0.0841 0.1333	0.0901 0.1451	0.1060 0.1462	0.1209	Lin1	-0.214	0.1431		0.1000				0.9980		0.9900	
Isopropylbenzene	1.6366 2.0169	1.7801 1.8248	2.1084 1.8179	2.1090 1.8059	2.0896	Ave		1.9099			9.1		15.0				
1,1,2,2-Tetrachloroethane	0.5751 0.6495	0.5904 0.6068	0.6468 0.6116	0.7043 0.6088	0.6913	Ave		0.6316		0.3000	7.0		15.0				
Bromobenzene	1.1104 0.8541	0.8439 0.8242	0.9291 0.8221	0.9351 0.8059	0.8810	Ave		0.8895			10.6		15.0				
1,2,3-Trichloropropane	0.2072 0.2040	0.2261 0.1938	0.2571 0.1939	0.2400 0.1892	0.2341	Ave		0.2162			11.1		15.0				
trans-1,4-Dichloro-2-butene	0.1800 0.2825	0.2295 0.2860	0.2758 0.3020	0.2942 0.3030	0.2848	Ave		0.2709			14.9		15.0				
N-Propylbenzene	0.9893 1.1369	0.9999 1.0634	1.1884 1.0810	1.1802 1.0518	1.1888	Ave		1.0977			7.2		15.0				
2-Chlorotoluene	0.9069 0.9373	0.9278 0.9018	1.0143 0.8970	1.0740 0.8828	1.0013	Ave		0.9492			6.9		15.0				
1,3,5-Trimethylbenzene	3.2078 3.5524	2.9287 3.3254	3.7053 3.3220	3.7535 3.2855	3.5808	Ave		3.4068			7.7		15.0				
4-Chlorotoluene	0.9080 0.9484	0.9454 0.9172	1.0556 0.9076	1.0628 0.8846	0.9801	Ave		0.9566			6.7		15.0				

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.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
tert-Butylbenzene	3.0682	2.7070	3.2686	3.2425	3.1766	Ave		3.0341			6.2		15.0				
	3.1279	2.9233	2.9225	2.8702													
1,2,4-Trimethylbenzene	3.0198	3.0614	3.8105	3.8620	3.7031	Ave		3.4432			9.0		15.0				
	3.5662	3.3391	3.3561	3.2707													
sec-Butylbenzene	4.1781	4.3421	4.9121	5.0382	4.7060	Ave		4.4982			7.4		15.0				
	4.6382	4.2584	4.2401	4.1702													
1,3-Dichlorobenzene	2.0244	1.9514	1.9356	1.9768	1.8298	Ave		1.7963			10.3		15.0				
	1.6962	1.5935	1.5992	1.5596													
p-Isopropyltoluene	3.2018	3.5929	3.8787	4.0470	3.9068	Ave		3.6532			7.2		15.0				
	3.7311	3.5439	3.5227	3.4539													
1,4-Dichlorobenzene	2.3535	2.0534	1.9515	1.9964	1.8176	Ave		1.8528			14.0		15.0				
	1.7117	1.6170	1.6154	1.5583													
n-Butylbenzene	3.0374	3.1236	3.4494	3.5708	3.4639	Ave		3.2723			5.8		15.0				
	3.3593	3.1679	3.1536	3.1245													
1,2-Dichlorobenzene	2.0627	1.7884	1.8879	1.8575	1.6785	Ave		1.6787			14.2		15.0				
	1.5858	1.4342	1.4241	1.3890													
1,2-Dibromo-3-Chloropropane	++++	++++	0.0512	0.0771	0.0749	Lin1	-0.171	0.0861						0.9980		0.9900	
	0.0821	0.0775	0.0850	0.0883													
1,2,4-Trichlorobenzene	1.3241	1.1884	1.1356	1.1047	1.0852	Ave		1.0752			12.2		15.0				
	1.0196	0.9362	0.9520	0.9314													
Hexachlorobutadiene	++++	++++	0.6794	0.7315	0.6512	Ave		0.6026			14.2		15.0				
	0.5828	0.5231	0.5338	0.5167													
Naphthalene	2.2190	1.9473	1.9824	2.2202	2.2344	Ave		2.0464			7.4		15.0				
	2.1136	1.9145	1.9382	1.8484													
1,2,3-Trichlorobenzene	++++	++++	1.0921	1.1088	1.0355	Ave		0.9454			14.1		15.0				
	0.9285	0.8150	0.8370	0.8009													
Dibromofluoromethane (Surr)	0.2333	0.2605	0.2694	0.2595	0.2657	Ave		0.2472			6.6		15.0				
	0.2250	0.2364	0.2363	0.2388													
1,2-Dichloroethane-d4 (Surr)	0.3962	0.3756	0.4161	0.3566	0.3572	Ave		0.3443			13.7		15.0				
	0.2799	0.3024	0.3045	0.3103													
Toluene-d8 (Surr)	1.4502	1.4983	1.5808	1.4646	1.4755	Ave		1.4290			6.1		15.0				
	1.3143	1.3251	1.3784	1.3735													
4-Bromofluorobenzene (Surr)	0.5861	0.6093	0.6154	0.5821	0.5667	Ave		0.5387			12.1		15.0				
	0.4570	0.4755	0.4838	0.4723													

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.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-353820/13 Calibration Date: 11/06/2018 10:30
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80605.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3654	0.3269		0.0224	0.0250	-10.5	50.0
Chloromethane	Ave	0.6651	0.5914	0.1000	0.0222	0.0250	-11.1	50.0
Vinyl chloride	Ave	0.3905	0.3639		0.0233	0.0250	-6.8	20.0
Butadiene	Ave	0.5695	0.4600		0.0202	0.0250	-19.2	50.0
Bromomethane	Ave	0.2167	0.1809		0.0209	0.0250	-16.5	50.0
Chloroethane	Ave	0.2638	0.2306		0.0219	0.0250	-12.6	50.0
Dichlorofluoromethane	Ave	0.5324	0.4860		0.0228	0.0250	-8.7	50.0
Trichlorofluoromethane	Ave	0.4669	0.3980		0.0213	0.0250	-14.8	50.0
Ethyl ether	Ave	0.3169	0.2892		0.0228	0.0250	-8.7	50.0
Acrolein	Ave	0.0542	0.0507		0.117	0.125	-6.6	50.0
1,1-Dichloroethene	Ave	0.2958	0.2590		0.0219	0.0250	-12.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2183	0.1896		0.0217	0.0250	-13.2	50.0
Acetone	Lin1		0.1046		0.0451	0.0500	-9.9	50.0
Iodomethane	Ave	0.4698	0.4102		0.0218	0.0250	-12.7	50.0
Carbon disulfide	Ave	0.8642	0.7476		0.0216	0.0250	-13.5	50.0
3-Chloro-1-propene	Ave	0.1693	0.1547		0.0228	0.0250	-8.6	50.0
Methyl acetate	Ave	0.2984	0.2402		0.0402	0.0500	-19.5	50.0
Methylene Chloride	Lin1		0.2989		0.0237	0.0250	-5.3	50.0
tert-Butyl alcohol	Ave	0.0236	0.0223		0.236	0.250	-5.5	50.0
Acrylonitrile	Ave	0.1303	0.1143		0.219	0.250	-12.3	50.0
Methyl tert-butyl ether	Ave	0.6698	0.5832		0.0218	0.0250	-12.9	50.0
trans-1,2-Dichloroethene	Ave	0.3350	0.3015		0.0225	0.0250	-10.0	50.0
Hexane	Ave	0.0883	0.0739		0.0209	0.0250	-16.3	20.0
1,1-Dichloroethane	Ave	0.7138	0.6265	0.1000	0.0219	0.0250	-12.2	50.0
Vinyl acetate	Ave	0.6285	0.6863		0.0273	0.0250	9.2	50.0
2-Butanone (MEK)	Ave	0.1739	0.1582		0.0455	0.0500	-9.0	50.0
cis-1,2-Dichloroethene	Ave	0.3591	0.3147		0.0219	0.0250	-12.4	50.0
2,2-Dichloropropane	Ave	0.3562	0.2852		0.0200	0.0250	-19.9	50.0
Bromochloromethane	Ave	0.1331	0.1279		0.0240	0.0250	-4.0	50.0
Chloroform	Ave	0.5298	0.4763		0.0225	0.0250	-10.1	20.0
Tetrahydrofuran	Lin1		0.1072		0.0485	0.0500	-2.9	50.0
1,1,1-Trichloroethane	Ave	0.4390	0.3995		0.0228	0.0250	-9.0	50.0
Cyclohexane	Ave	0.9143	0.7786		0.0213	0.0250	-14.8	50.0
1,1-Dichloropropene	Ave	0.4284	0.3703		0.0216	0.0250	-13.6	50.0
Carbon tetrachloride	Ave	0.3717	0.3304		0.0222	0.0250	-11.1	50.0
Isobutyl alcohol	Ave	0.0122	0.0115		0.587	0.625	-6.0	50.0
1,2-Dichloroethane	Ave	0.4799	0.4323		0.0225	0.0250	-9.9	50.0
Benzene	Ave	1.276	1.109		0.0217	0.0250	-13.1	50.0
n-Heptane	Ave	0.0897	0.0818		0.0228	0.0250	-8.8	50.0
Trichloroethene	Ave	0.3280	0.2825		0.0215	0.0250	-13.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-353820/13 Calibration Date: 11/06/2018 10:30
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80605.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5781	0.4885		0.0211	0.0250	-15.5	50.0
1,2-Dichloropropane	Ave	0.3548	0.3267		0.0230	0.0250	-7.9	20.0
Dibromomethane	Ave	0.1373	0.1237		0.0225	0.0250	-10.0	50.0
1,4-Dioxane	Ave	0.0019	0.0018		0.479	0.500	-4.2	50.0
Bromodichloromethane	Ave	0.3092	0.2752		0.0223	0.0250	-11.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1240	0.1153		0.0233	0.0250	-7.0	50.0
cis-1,3-Dichloropropene	Ave	0.3419	0.3264		0.0239	0.0250	-4.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3276	0.3130		0.0478	0.0500	-4.5	50.0
Toluene	Ave	1.787	1.571		0.0220	0.0250	-12.1	20.0
trans-1,3-Dichloropropene	Lin1		0.3367		0.0200	0.0250	-20.0	50.0
Ethyl methacrylate	Ave	0.3411	0.3304		0.0242	0.0250	-3.1	50.0
1,1,2-Trichloroethane	Ave	0.2768	0.2582		0.0233	0.0250	-6.7	50.0
1,3-Dichloropropane	Ave	0.4921	0.4540		0.0231	0.0250	-7.7	50.0
Tetrachloroethene	Ave	0.3399	0.2909		0.0214	0.0250	-14.4	50.0
2-Hexanone	Ave	0.2990	0.2877		0.0481	0.0500	-3.8	50.0
Dibromochloromethane	Lin1		0.2278		0.0211	0.0250	-15.5	50.0
1,2-Dibromoethane	Ave	0.2460	0.2350		0.0239	0.0250	-4.5	50.0
Chlorobenzene	Ave	1.131	0.996	0.3000	0.0220	0.0250	-11.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3304	0.3157		0.0239	0.0250	-4.5	50.0
Ethylbenzene	Ave	0.6152	0.5455		0.0222	0.0250	-11.3	20.0
m-Xylene & p-Xylene	Ave	0.7573	0.6701		0.0221	0.0250	-11.5	50.0
o-Xylene	Ave	0.7162	0.6412		0.0224	0.0250	-10.5	50.0
Styrene	Ave	1.094	1.030		0.0235	0.0250	-5.8	50.0
Bromoform	Lin1		0.1077	0.1000	0.0203	0.0250	-18.8	50.0
Isopropylbenzene	Ave	1.910	1.763		0.0231	0.0250	-7.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6316	0.6097	0.3000	0.0241	0.0250	-3.5	50.0
Bromobenzene	Ave	0.8895	0.7776		0.0219	0.0250	-12.6	50.0
1,2,3-Trichloropropane	Ave	0.2162	0.1977		0.0229	0.0250	-8.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2709	0.2705		0.0250	0.0250	-0.1	50.0
N-Propylbenzene	Ave	1.098	0.9770		0.0222	0.0250	-11.0	50.0
2-Chlorotoluene	Ave	0.9492	0.8543		0.0225	0.0250	-10.0	50.0
1,3,5-Trimethylbenzene	Ave	3.407	3.047		0.0224	0.0250	-10.6	50.0
4-Chlorotoluene	Ave	0.9566	0.8685		0.0227	0.0250	-9.2	50.0
tert-Butylbenzene	Ave	3.034	2.680		0.0221	0.0250	-11.7	50.0
1,2,4-Trimethylbenzene	Ave	3.443	3.122		0.0227	0.0250	-9.3	50.0
sec-Butylbenzene	Ave	4.498	3.970		0.0221	0.0250	-11.7	50.0
1,3-Dichlorobenzene	Ave	1.796	1.523		0.0212	0.0250	-15.2	50.0
p-Isopropyltoluene	Ave	3.653	3.248		0.0222	0.0250	-11.1	50.0
1,4-Dichlorobenzene	Ave	1.853	1.554		0.0210	0.0250	-16.1	50.0
n-Butylbenzene	Ave	3.272	2.676		0.0204	0.0250	-18.2	50.0
1,2-Dichlorobenzene	Ave	1.679	1.430		0.0213	0.0250	-14.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-353820/13 Calibration Date: 11/06/2018 10:30
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80605.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.0632		0.0203	0.0250	-18.6	50.0
1,2,4-Trichlorobenzene	Ave	1.075	0.7711		0.0179	0.0250	-28.3	50.0
Hexachlorobutadiene	Ave	0.6026	0.4807		0.0199	0.0250	-20.2	50.0
Naphthalene	Ave	2.046	1.591		0.0194	0.0250	-22.2	50.0
1,2,3-Trichlorobenzene	Ave	0.9454	0.7476		0.0198	0.0250	-20.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2472	0.2157		0.0436	0.0500	-12.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3443	0.2764		0.0401	0.0500	-19.7	50.0
Toluene-d8 (Surr)	Ave	1.429	1.248		0.0437	0.0500	-12.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5387	0.4366		0.0405	0.0500	-19.0	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB8777.D BFB Injection Date: 11/07/2018
 Instrument ID: A3UX8 BFB Injection Time: 04:45
 Analysis Batch No.: 354032

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	34.4
75	30.0 - 60.0 % of mass 95	49.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	73.8
175	5.0 - 9.0 % of mass 174	5.4 (7.3) 1
176	95.0 - 101.0 % of mass 174	70.2 (95.1) 1
177	5.0 - 9.0 % of mass 176	4.5 (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 240-354032/4	UX80625.D	11/07/2018	05:19
	CCV 240-354032/5	UX80626.D	11/07/2018	05:41
	LCS 240-354032/6	UX80627.D	11/07/2018	06:02
	MB 240-354032/7	UX80628.D	11/07/2018	06:24
SB-SEMW-10D-10-15	240-103610-2	UX80652.D	11/07/2018	15:12
SB-SEMW-10D-20-28	240-103610-3	UX80653.D	11/07/2018	15:33
SB-SEMW-10D-DUP	240-103610-4	UX80654.D	11/07/2018	15:54
SB-SEMW-10D-DUP MS	240-103610-4 MS	UX80655.D	11/07/2018	16:16
SB-SEMW-10D-DUP MSD	240-103610-4 MSD	UX80656.D	11/07/2018	16:38

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354032/4 Calibration Date: 11/07/2018 05:19
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80625.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3654	0.3738		0.0205	0.0200	2.3	50.0
Chloromethane	Ave	0.6651	0.6471	0.1000	0.0195	0.0200	-2.7	50.0
Vinyl chloride	Ave	0.3905	0.4247		0.0218	0.0200	8.8	20.0
Butadiene	Ave	0.5695	0.6322		0.0222	0.0200	11.0	50.0
Bromomethane	Ave	0.2167	0.1955		0.0180	0.0200	-9.8	50.0
Chloroethane	Ave	0.2638	0.2527		0.0192	0.0200	-4.2	50.0
Dichlorofluoromethane	Ave	0.5324	0.5231		0.0197	0.0200	-1.7	50.0
Trichlorofluoromethane	Ave	0.4669	0.4836		0.0207	0.0200	3.6	50.0
Ethyl ether	Ave	0.3169	0.3076		0.0194	0.0200	-3.0	50.0
Acrolein	Ave	0.0542	0.0496		0.0914	0.100	-8.6	50.0
1,1-Dichloroethene	Ave	0.2958	0.3059		0.0207	0.0200	3.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2183	0.2249		0.0206	0.0200	3.0	50.0
Acetone	Lin1		0.1179		0.0401	0.0400	0.3	50.0
Iodomethane	Ave	0.4698	0.4511		0.0192	0.0200	-4.0	50.0
Carbon disulfide	Ave	0.8642	0.8873		0.0205	0.0200	2.7	50.0
3-Chloro-1-propene	Ave	0.1693	0.1815		0.0214	0.0200	7.2	50.0
Methyl acetate	Ave	0.2984	0.2667		0.0357	0.0400	-10.6	50.0
Methylene Chloride	Lin1		0.3239		0.0201	0.0200	0.4	50.0
tert-Butyl alcohol	Ave	0.0236	0.0198		0.168	0.200	-16.1	50.0
Acrylonitrile	Ave	0.1303	0.1167		0.179	0.200	-10.5	50.0
Methyl tert-butyl ether	Ave	0.6698	0.6200		0.0185	0.0200	-7.4	50.0
trans-1,2-Dichloroethene	Ave	0.3350	0.3381		0.0202	0.0200	0.9	50.0
Hexane	Ave	0.0883	0.0937		0.0212	0.0200	6.0	20.0
1,1-Dichloroethane	Ave	0.7138	0.6856	0.1000	0.0192	0.0200	-3.9	50.0
Vinyl acetate	Ave	0.6285	0.5754		0.0183	0.0200	-8.4	50.0
2,2-Dichloropropane	Ave	0.3562	0.3473		0.0195	0.0200	-2.5	50.0
2-Butanone (MEK)	Ave	0.1739	0.1631		0.0375	0.0400	-6.2	50.0
cis-1,2-Dichloroethene	Ave	0.3591	0.3475		0.0194	0.0200	-3.2	50.0
Bromochloromethane	Ave	0.1331	0.1392		0.0209	0.0200	4.6	50.0
Chloroform	Ave	0.5298	0.5141		0.0194	0.0200	-3.0	20.0
Tetrahydrofuran	Lin1		0.1093		0.0385	0.0400	-3.7	50.0
1,1,1-Trichloroethane	Ave	0.4390	0.4614		0.0210	0.0200	5.1	50.0
Cyclohexane	Ave	0.9143	0.9297		0.0203	0.0200	1.7	50.0
1,1-Dichloropropene	Ave	0.4284	0.4295		0.0201	0.0200	0.3	50.0
Carbon tetrachloride	Ave	0.3717	0.3916		0.0211	0.0200	5.4	50.0
Isobutyl alcohol	Ave	0.0122	0.0102		0.417	0.500	-16.6	50.0
1,2-Dichloroethane	Ave	0.4799	0.4600		0.0192	0.0200	-4.2	50.0
Benzene	Ave	1.276	1.235		0.0194	0.0200	-3.2	50.0
n-Heptane	Ave	0.0897	0.0877		0.0196	0.0200	-2.2	50.0
Trichloroethene	Ave	0.3280	0.3093		0.0189	0.0200	-5.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354032/4 Calibration Date: 11/07/2018 05:19
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80625.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3548	0.3330		0.0188	0.0200	-6.1	20.0
Methylcyclohexane	Ave	0.5781	0.6005		0.0208	0.0200	3.9	50.0
1,4-Dioxane	Ave	0.0019	0.0018		0.367	0.400	-8.3	50.0
Dibromomethane	Ave	0.1373	0.1274		0.0186	0.0200	-7.2	50.0
Bromodichloromethane	Ave	0.3092	0.2943		0.0190	0.0200	-4.8	50.0
2-Chloroethyl vinyl ether	Ave	0.1240	0.1008		0.0325	0.0400	-18.7	50.0
cis-1,3-Dichloropropene	Ave	0.3419	0.3093		0.0181	0.0200	-9.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3276	0.2862		0.0349	0.0400	-12.6	50.0
Toluene	Ave	1.787	1.786		0.0200	0.0200	-0.0	20.0
trans-1,3-Dichloropropene	Lin1		0.3459		0.0166	0.0200	-17.2	50.0
Ethyl methacrylate	Ave	0.3411	0.3076		0.0180	0.0200	-9.8	50.0
1,1,2-Trichloroethane	Ave	0.2768	0.2630		0.0190	0.0200	-5.0	50.0
1,3-Dichloropropane	Ave	0.4921	0.4650		0.0189	0.0200	-5.5	50.0
Tetrachloroethene	Ave	0.3399	0.3505		0.0206	0.0200	3.1	50.0
2-Hexanone	Ave	0.2990	0.2807		0.0376	0.0400	-6.1	50.0
Dibromochloromethane	Lin1		0.2394		0.0179	0.0200	-10.6	50.0
1,2-Dibromoethane	Ave	0.2460	0.2431		0.0198	0.0200	-1.2	50.0
Chlorobenzene	Ave	1.131	1.109	0.3000	0.0196	0.0200	-1.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3304	0.3482		0.0211	0.0200	5.4	50.0
Ethylbenzene	Ave	0.6152	0.6125		0.0199	0.0200	-0.4	20.0
m-Xylene & p-Xylene	Ave	0.7573	0.7324		0.0193	0.0200	-3.3	50.0
o-Xylene	Ave	0.7162	0.7375		0.0206	0.0200	3.0	50.0
Styrene	Ave	1.094	1.106		0.0202	0.0200	1.1	50.0
Bromoform	Lin1		0.1048	0.1000	0.0161	0.0200	-19.3	50.0
Isopropylbenzene	Ave	1.910	2.064		0.0216	0.0200	8.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6316	0.5907	0.3000	0.0187	0.0200	-6.5	50.0
Bromobenzene	Ave	0.8895	0.8234		0.0185	0.0200	-7.4	50.0
1,2,3-Trichloropropane	Ave	0.2162	0.1969		0.0182	0.0200	-8.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2709	0.2427		0.0179	0.0200	-10.4	50.0
N-Propylbenzene	Ave	1.098	1.101		0.0201	0.0200	0.3	50.0
2-Chlorotoluene	Ave	0.9492	0.9304		0.0196	0.0200	-2.0	50.0
1,3,5-Trimethylbenzene	Ave	3.407	3.538		0.0208	0.0200	3.9	50.0
4-Chlorotoluene	Ave	0.9566	0.9390		0.0196	0.0200	-1.8	50.0
tert-Butylbenzene	Ave	3.034	3.081		0.0203	0.0200	1.5	50.0
1,2,4-Trimethylbenzene	Ave	3.443	3.580		0.0208	0.0200	4.0	50.0
sec-Butylbenzene	Ave	4.498	4.654		0.0207	0.0200	3.5	50.0
1,3-Dichlorobenzene	Ave	1.796	1.671		0.0186	0.0200	-6.9	50.0
p-Isopropyltoluene	Ave	3.653	3.827		0.0210	0.0200	4.8	50.0
1,4-Dichlorobenzene	Ave	1.853	1.700		0.0183	0.0200	-8.3	50.0
n-Butylbenzene	Ave	3.272	3.501		0.0214	0.0200	7.0	50.0
1,2-Dichlorobenzene	Ave	1.679	1.561		0.0186	0.0200	-7.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354032/4 Calibration Date: 11/07/2018 05:19
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80625.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.0626		0.0165	0.0200	-17.3	50.0
1,2,4-Trichlorobenzene	Ave	1.075	0.9030		0.0168	0.0200	-16.0	50.0
Hexachlorobutadiene	Ave	0.6026	0.5552		0.0184	0.0200	-7.9	50.0
Naphthalene	Ave	2.046	1.514		0.0148	0.0200	-26.0	50.0
1,2,3-Trichlorobenzene	Ave	0.9454	0.7870		0.0166	0.0200	-16.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2472	0.2232		0.0451	0.0500	-9.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3443	0.2823		0.0410	0.0500	-18.0	50.0
Toluene-d8 (Surr)	Ave	1.429	1.291		0.0452	0.0500	-9.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5387	0.4607		0.0428	0.0500	-14.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCV 240-354032/5 Calibration Date: 11/07/2018 05:41
 Instrument ID: A3UX8 Calib Start Date: 10/18/2018 02:52
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 10/18/2018 05:49
 Lab File ID: UX80626.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0564	0.0477		0.169	0.200	-15.5	50.0
Diisopropyl ether	Ave	0.2441	0.2463		0.0202	0.0200	0.9	50.0
2-Chloro-1,3-butadiene	Ave	0.8191	0.8547		0.0209	0.0200	4.4	50.0
Ethyl tert-butyl ether	Ave	1.103	1.068		0.0194	0.0200	-3.2	50.0
Ethyl acetate	Ave	0.3912	0.2963		0.0303	0.0400	-24.3	50.0
Propionitrile	Ave	0.0510	0.0409		0.161	0.200	-19.7	50.0
Methacrylonitrile	Ave	0.2605	0.2142		0.164	0.200	-17.8	50.0
Tert-amyl methyl ether	Ave	0.6191	0.6178		0.0200	0.0200	-0.2	50.0
n-Butanol	Lin1		0.0062		0.324	0.500	-35.3	50.0
Ethyl acrylate	Ave	0.3640	0.2828		0.0155	0.0200	-22.3	50.0
Methyl methacrylate	Ave	0.3388	0.2720		0.0321	0.0400	-19.7	50.0
2-Nitropropane	Qua		0.0388		0.0321	0.0400	-19.9	50.0
n-Butyl acetate	Ave	0.5613	0.4308		0.0153	0.0200	-23.3	50.0
1-Chlorohexane	Ave	0.4508	0.4925		0.0219	0.0200	9.3	50.0
Cyclohexanone	Lin1		0.0113		0.142	0.200	-28.8	50.0
Pentachloroethane	Lin1		0.3529		0.0348	0.0400	-13.0	50.0
1,2,3-Trimethylbenzene	Ave	3.659	3.368		0.0184	0.0200	-8.0	50.0
Benzyl chloride	Qua		0.0953		0.0179	0.0200	-10.3	50.0
1,3,5-Trichlorobenzene	Lin1		1.209		0.0174	0.0200	-13.2	50.0
2-Methylnaphthalene	Lin1		0.7973		0.0188	0.0400	-52.9*	50.0

TA North Canton, OH

158 Starlite Drive

Marietta, OH 45750

JAM 2.0/29

MICROBAC TESTAMERICA

Phone: 740-373-4071

Toll Free: 800-373-4071



Company Name: **Tetra Tech Inc.**

Project Contact: **J. Mullis** Contact Phone #: **410.279-2700**

Turn Around Requirements: **STANDARD** Location: **MPC BLOCK F**

Project ID: **Block F TCB 112-IL08667**

Sampler (print): **Josh Mullis** Signature: *[Signature]*

Sample I.D. No.	Comp	Grab	Date	Time	Matrix*	NUMBER OF CONTAINERS	Hold
TB-103018		X	10/30/18	0000	water	2	X
SB-MW135A-2-5.5		X	10/30/18	1530	SOIL	1	X
SB-MW135B-12.5-18		X	10/30/18	1600	SOIL	1	X
SB-MW136A-1.2-2		X	10/31/18	1020	SOIL	1	X
SB-MW136B-15.8-18.5		X	10/31/18	1040	SOIL	1	X

Additional Information: **180325**, **10/31/18**

Barcode: 240-103714 Chain of Custody

Relinquished by: *[Signature]* Date: **10/31/18** Time: **1410**

Received by: *[Signature]*

Relinquished by: *[Signature]* Date: **10/31/18** Time: **1030**

Received by: *[Signature]* Date: **11-1-18** Time: **1050**

Received for Laboratory by: *[Signature]* Date: _____ Time: _____

Remarks: **VOL samples during Block F TCB well installation**

Page 195 of 196

*Water (W), Soil (S), Solid Waste (SD), Unknown (X)

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility

Login # : 103714

Client TETRA TECH. Site Name _____
Cooler Received on 11-1-18 Opened on 11-1-18


Cooler unpacked by:

POP

FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA 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 +0.9 °C) Observed Cooler Temp. 2.0 °C Corrected Cooler Temp. 2.9 °C
IR GUN #36 (CF +0.6 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
-Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
-Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No NA
-Were tamper/custody seals intact and uncompromised? Yes No NA
3. Shippers' packing slip attached to the cooler(s)? Yes No Yes
4. Did custody papers accompany the sample(s)? Yes No Yes
5. Were the custody papers relinquished & signed in the appropriate place? Yes No Yes
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes No Yes
7. Did all bottles arrive in good condition (Unbroken)? Yes No Yes
8. Could all bottle labels be reconciled with the COC? Yes No Yes
9. Were correct bottle(s) used for the test(s) indicated? Yes No Yes
10. Sufficient quantity received to perform indicated analyses? Yes No Yes
11. Are these work share samples? Yes No
If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC849161
13. Were VOAs on the COC? Yes No Yes
14. Were air bubbles >6 mm in any VOA vials?  ← Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # 0 Yes No Yes
16. Was a LL Hg or Me Hg trip blank present? Yes No Yes

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:

POP

18. 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)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC Block F TCB Well Installation

Report Number: 240-103714-1

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 11/1/2018 10:50 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.9° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SB-MW135A-2-5.5 (240-103714-2), SB-MW135B-12.5-18 (240-103714-3), SB-MW136A-1.2-2 (240-103714-4) and SB-MW136B-15.8-18.5 (240-103714-5) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared and analyzed on 11/14/2018.

1,2,3-Trichlorobenzene and 1,2,4-Trichlorobenzene were detected in method blank MB 240-355270/8 at levels that were above the method detection limit but below the reporting limit. The values should be considered estimates, and have been flagged. If the associated sample reported a result above the MDL and/or RL, the result has been flagged.

The following samples were analyzed outside of analytical holding time due to instrument malfunction: SB-MW135A-2-5.5 (240-103714-2) and SB-MW135B-12.5-18 (240-103714-3). The samples were initially run within hold time, but due the laboratory's backlog the samples were analyzed on the day they were expiring. Since the instrument malfunctioned the samples were analyzed the following day outside of hold time.

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

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TB-103018 (240-103714-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 11/10/2018.

The following sample was received preserved with hydrochloric acid: TB-103018 (240-103714-1). The requested target analyte list includes 2-Chloroethyl vinyl ether, an acid-labile compound that degrades in an acidic medium.

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

PERCENT SOLIDS

Samples SB-MW135A-2-5.5 (240-103714-2), SB-MW135B-12.5-18 (240-103714-3), SB-MW136A-1.2-2 (240-103714-4) and SB-MW136B-15.8-18.5 (240-103714-5) were analyzed for percent solids in accordance with ASTM Method D2216-80. The samples were analyzed on 11/02/2018.

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

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F TCB Well Installation

TestAmerica Job ID: 240-103714-1

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.
H	Sample was prepped or analyzed beyond the specified holding time
B	Compound was found in the blank and sample.

GC/MS VOA TICs

Qualifier	Qualifier Description
H	Sample was prepped or analyzed beyond the specified holding time
J	Indicates an Estimated Value for TICs
N	This flag indicates the presumptive evidence of a compound.
T	Result is a tentatively identified compound (TIC) and an estimated value.

Glossary

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

Sample Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F TCB Well Installation

TestAmerica Job ID: 240-103714-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-103714-1	TB-103018	Water	10/30/18 00:00	11/01/18 10:50
240-103714-2	SB-MW135A-2-5.5	Solid	10/30/18 15:30	11/01/18 10:50
240-103714-3	SB-MW135B-12.5-18	Solid	10/30/18 16:00	11/01/18 10:50
240-103714-4	SB-MW136A-1.2-2	Solid	10/31/18 10:20	11/01/18 10:50
240-103714-5	SB-MW136B-15.8-18.5	Solid	10/31/18 10:40	11/01/18 10:50

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F TCB Well Installation

TestAmerica Job ID: 240-103714-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103714-1

SDG No.: _____

Matrix: Solid Level: Low

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

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB-MW135A-2-5.5	240-103714-2	85	86	85	81
SB-MW135B-12.5-18	240-103714-3	84	85	83	80
SB-MW136A-1.2-2	240-103714-4	84	85	85	81
SB-MW136B-15.8-18.5	240-103714-5	84	87	87	80
	MB 240-355270/8	86	87	82	82
	LCS 240-355270/7	91	84	88	88

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

QC LIMITS
49-132
48-123
62-135
49-141

Column to be used to flag recovery values

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103714-1

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-103018	240-103714-1	93	94	87	85
	MB 240-354712/8	89	91	85	82
	LCS 240-354712/6	91	92	89	86

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

QC LIMITS
75-128
70-121
70-123
59-120

Column to be used to flag recovery values

FORM II 8260B

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

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Sample No.: ICIS 240-339529/11 Date Analyzed: 08/06/2018 13:30
 Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXM13047.D Heated Purge: (Y/N) N
 Calibration ID: 46373

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	1045549	5.81	764520	8.50	398215	10.74
UPPER LIMIT	2091098	6.31	1529040	9.00	796430	11.24
LOWER LIMIT	522775	5.31	382260	8.00	199108	10.24
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 240-339529/15	925042	5.81	672047	8.50	357513	10.74
ICV 240-339529/24	1015570	5.81	741308	8.50	394696	10.74
CCVIS 240-354712/4	715441	5.81	601267	8.50	296450	10.74

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Sample No.: CCVIS 240-354712/4 Date Analyzed: 11/10/2018 10:36
 Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXM15490.D Heated Purge: (Y/N) N
 Calibration ID: 46377

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	715441	5.81	601267	8.50	296450	10.74	
UPPER LIMIT	1430882	6.31	1202534	9.00	592900	11.24	
LOWER LIMIT	357721	5.31	300634	8.00	148225	10.24	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-354712/5		748652	5.81	616014	8.50	304664	10.74
LCS 240-354712/6		764167	5.81	649365	8.50	322784	10.74
MB 240-354712/8		751373	5.81	631400	8.50	300498	10.74
240-103714-1	TB-103018	670608	5.81	577266	8.50	278682	10.74

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Sample No.: ICIS 240-353820/7 Date Analyzed: 11/06/2018 08:18
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UX80599.D Heated Purge: (Y/N) Y
 Calibration ID: 47798

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	897987	5.16	657341	7.69	317330	9.88
UPPER LIMIT	1795974	5.66	1314682	8.19	634660	10.38
LOWER LIMIT	448994	4.66	328671	7.19	158665	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 240-353820/13	976104	5.16	701529	7.69	328898	9.88
CCVIS 240-355270/6	717882	5.16	489980	7.69	248943	9.88

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Sample No.: CCVIS 240-355270/6 Date Analyzed: 11/13/2018 23:15
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UX80899.D Heated Purge: (Y/N) Y
 Calibration ID: 47798

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	717882	5.16	489980	7.69	248943	9.88	
UPPER LIMIT	1435764	5.66	979960	8.19	497886	10.38	
LOWER LIMIT	358941	4.66	244990	7.19	124472	9.38	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-355270/5	750737	5.16	520749	7.69	246524	9.88	
LCS 240-355270/7	694543	5.16	480921	7.69	242337	9.88	
MB 240-355270/8	665880	5.16	471537	7.69	232592	9.88	
240-103714-2	SB-MW135A-2-5.5	646287	5.16	455925	7.69	219585	9.88
240-103714-3	SB-MW135B-12.5-18	670402	5.16	452866	7.69	221406	9.88
240-103714-4	SB-MW136A-1.2-2	660127	5.16	453901	7.69	218916	9.88
240-103714-5	SB-MW136B-15.8-18.5	622564	5.16	430789	7.69	201286	9.88

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 IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab File ID: UX80901.D Lab Sample ID: MB 240-355270/8
 Matrix: Solid Heated Purge: (Y/N) Y
 Instrument ID: A3UX8 Date Analyzed: 11/13/2018 23:59
 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 240-355270/7	UX80900.D	11/13/2018 23:37
SB-MW135A-2-5.5	240-103714-2	UX80903.D	11/14/2018 00:50
SB-MW135B-12.5-18	240-103714-3	UX80904.D	11/14/2018 01:13
SB-MW136A-1.2-2	240-103714-4	UX80905.D	11/14/2018 01:35
SB-MW136B-15.8-18.5	240-103714-5	UX80906.D	11/14/2018 01:57

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-355270/8
 Matrix: Solid Lab File ID: UX80901.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/13/2018 23:59
 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.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.0	U	5.0	3.0
563-58-6	1,1-Dichloropropene	0.99	U	5.0	0.99
75-34-3	1,1-Dichloroethane	0.69	U	5.0	0.69
87-61-6	1,2,3-Trichlorobenzene	0.818	J	5.0	0.57
96-18-4	1,2,3-Trichloropropane	1.6	U	5.0	1.6
107-06-2	1,2-Dichloroethane	0.77	U	5.0	0.77
75-35-4	1,1-Dichloroethene	0.90	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	1.8	U	5.0	1.8
78-87-5	1,2-Dichloropropane	0.85	U	5.0	0.85
95-63-6	1,2,4-Trimethylbenzene	1.0	U	5.0	1.0
591-78-6	2-Hexanone	4.1	U	20	4.1
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	5.0	1.4
67-64-1	Acetone	21	U	25	21
71-43-2	Benzene	0.70	U	5.0	0.70
75-25-2	Bromoform	2.4	U	5.0	2.4
74-83-9	Bromomethane	0.99	U	5.0	0.99
75-15-0	Carbon disulfide	1.2	U	5.0	1.2
56-23-5	Carbon tetrachloride	3.3	U	5.0	3.3
71-55-6	1,1,1-Trichloroethane	0.82	U	5.0	0.82
108-90-7	Chlorobenzene	0.92	U	5.0	0.92
142-28-9	1,3-Dichloropropane	0.99	U	5.0	0.99
75-00-3	Chloroethane	1.2	U	5.0	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	3.6	U	10	3.6
67-66-3	Chloroform	0.79	U	5.0	0.79
74-87-3	Chloromethane	1.0	U	5.0	1.0
156-59-2	cis-1,2-Dichloroethene	0.65	U	5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	1.4	U	5.0	1.4
75-27-4	Bromodichloromethane	0.68	U	5.0	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.3	U	5.0	1.3
75-71-8	Dichlorodifluoromethane	0.94	U	5.0	0.94
120-82-1	1,2,4-Trichlorobenzene	1.36	J	5.0	0.57
100-41-4	Ethylbenzene	1.0	U	5.0	1.0
106-93-4	1,2-Dibromoethane	0.77	U	5.0	0.77
594-20-7	2,2-Dichloropropane	1.2	U	5.0	1.2
95-50-1	1,2-Dichlorobenzene	1.1	U	5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-355270/8
 Matrix: Solid Lab File ID: UX80901.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/13/2018 23:59
 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.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	0.82	U	5.0	0.82
106-46-7	1,4-Dichlorobenzene	0.88	U	5.0	0.88
110-75-8	2-Chloroethyl vinyl ether	8.9	U	50	8.9
98-82-8	Isopropylbenzene	0.83	U	5.0	0.83
95-49-8	2-Chlorotoluene	0.95	U	5.0	0.95
78-93-3	2-Butanone (MEK)	3.6	U	20	3.6
108-10-1	4-Methyl-2-pentanone (MIBK)	3.7	U	20	3.7
108-86-1	Bromobenzene	1.2	U	5.0	1.2
1634-04-4	Methyl tert-butyl ether	0.82	U	5.0	0.82
74-97-5	Bromochloromethane	0.59	U	5.0	0.59
75-09-2	Methylene Chloride	12	U	25	12
106-43-4	4-Chlorotoluene	0.86	U	5.0	0.86
99-87-6	p-Isopropyltoluene	2.9	U	5.0	2.9
100-42-5	Styrene	1.2	U	5.0	1.2
179601-23-1	m-Xylene & p-Xylene	0.78	U	10	0.78
95-47-6	o-Xylene	0.86	U	5.0	0.86
87-68-3	Hexachlorobutadiene	3.7	U	5.0	3.7
127-18-4	Tetrachloroethene	0.73	U	5.0	0.73
74-95-3	Dibromomethane	0.67	U	5.0	0.67
108-88-3	Toluene	0.77	U	5.0	0.77
108-20-3	Diisopropyl ether	0.76	U	10	0.76
91-20-3	Naphthalene	2.7	U	5.0	2.7
156-60-5	trans-1,2-Dichloroethene	0.47	U	5.0	0.47
104-51-8	n-Butylbenzene	3.5	U	5.0	3.5
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.0	1.0
103-65-1	N-Propylbenzene	0.73	U	5.0	0.73
79-01-6	Trichloroethene	0.63	U	5.0	0.63
135-98-8	sec-Butylbenzene	0.86	U	5.0	0.86
75-69-4	Trichlorofluoromethane	1.1	U	5.0	1.1
994-05-8	Tert-amyl methyl ether	2.2	U	5.0	2.2
637-92-3	Ethyl tert-butyl ether	2.3	U	5.0	2.3
98-06-6	tert-Butylbenzene	0.91	U	5.0	0.91
75-01-4	Vinyl chloride	0.84	U	5.0	0.84
108-05-4	Vinyl acetate	2.1	U	10	2.1
75-65-0	tert-Butyl alcohol	17	U	200	17
1330-20-7	Xylenes, Total	1.6	U	10	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-355270/8
 Matrix: Solid Lab File ID: UX80901.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/13/2018 23:59
 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.: 355270 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2.8	U	5.0	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		48-123
460-00-4	4-Bromofluorobenzene (Surr)	82		49-141
2037-26-5	Toluene-d8 (Surr)	82		62-135
1868-53-7	Dibromofluoromethane (Surr)	86		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-355270/8
 Matrix: Solid Lab File ID: UX80901.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/13/2018 23:59
 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.: 355270 Units: ug/Kg
 Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103714-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: UX80900.D

Lab ID: LCS 240-355270/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	29.0	116	73-124	
1,1-Dichloropropene	25.0	27.3	109	72-127	
1,1-Dichloroethane	25.0	23.9	96	72-122	
1,2,3-Trichlorobenzene	25.0	25.2	101	59-120	
1,2,3-Trichloropropane	25.0	27.0	108	68-128	
1,2-Dichloroethane	25.0	25.8	103	64-126	
1,1-Dichloroethene	25.0	26.7	107	57-139	
1,2-Dichloropropane	25.0	23.8	95	78-122	
1,2,4-Trimethylbenzene	25.0	27.6	111	75-121	
2-Hexanone	50.0	50.7	101	52-145	
1,1,2,2-Tetrachloroethane	25.0	25.8	103	68-128	
Acetone	50.0	53.0	106	43-159	
Benzene	25.0	26.0	104	74-123	
Bromoform	25.0	24.6	98	46-137	
Bromomethane	25.0	20.1	80	10-152	
Carbon disulfide	25.0	26.9	108	29-153	
Carbon tetrachloride	25.0	31.1	124	56-139	
1,1,1-Trichloroethane	25.0	31.4	125	64-135	
Chlorobenzene	25.0	26.7	107	80-120	
1,3-Dichloropropane	25.0	28.5	114	76-120	
Chloroethane	25.0	19.9	79	15-155	
1,2-Dibromo-3-Chloropropane	25.0	21.5	86	38-135	
Chloroform	25.0	28.4	114	72-124	
Chloromethane	25.0	17.3	69	45-128	
cis-1,2-Dichloroethene	25.0	25.9	104	74-123	
cis-1,3-Dichloropropene	25.0	27.1	108	63-137	
Bromodichloromethane	25.0	28.3	113	63-132	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	30.9	123	56-138	
Dichlorodifluoromethane	25.0	22.0	88	26-138	
1,2,4-Trichlorobenzene	25.0	23.8	95	54-120	
Ethylbenzene	25.0	27.7	111	76-120	
1,2-Dibromoethane	25.0	28.3	113	76-120	
2,2-Dichloropropane	25.0	28.3	113	42-143	
1,2-Dichlorobenzene	25.0	26.3	105	73-120	
1,3-Dichlorobenzene	25.0	26.8	107	70-120	
1,4-Dichlorobenzene	25.0	25.7	103	71-120	
2-Chloroethyl vinyl ether	25.0	21.9 J	87	58-154	
Isopropylbenzene	25.0	29.2	117	77-124	
2-Chlorotoluene	25.0	26.2	105	75-120	
2-Butanone (MEK)	50.0	44.8	90	45-148	
4-Methyl-2-pentanone (MIBK)	50.0	46.5	93	53-139	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103714-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: UX80900.D

Lab ID: LCS 240-355270/7 Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Bromobenzene	25.0	27.1	109	75-120	
Methyl tert-butyl ether	25.0	28.1	113	66-127	
Bromochloromethane	25.0	27.2	109	72-124	
Methylene Chloride	25.0	27.4	110	62-137	
4-Chlorotoluene	25.0	25.9	103	74-121	
p-Isopropyltoluene	25.0	28.0	112	74-124	
Styrene	25.0	28.3	113	76-121	
m-Xylene & p-Xylene	25.0	26.8	107	77-120	
o-Xylene	25.0	27.9	112	79-120	
Hexachlorobutadiene	25.0	26.4	106	58-122	
Tetrachloroethene	25.0	28.3	113	76-120	
Dibromomethane	25.0	28.0	112	71-122	
Toluene	25.0	27.0	108	76-120	
Naphthalene	25.0	22.8	91	51-120	
trans-1,2-Dichloroethene	25.0	27.5	110	71-133	
n-Butylbenzene	25.0	27.1	108	64-133	
trans-1,3-Dichloropropene	25.0	23.7	95	55-121	
N-Propylbenzene	25.0	27.0	108	73-129	
Trichloroethene	25.0	25.3	101	73-126	
sec-Butylbenzene	25.0	26.8	107	73-126	
Trichlorofluoromethane	25.0	23.4	94	47-146	
tert-Butylbenzene	25.0	26.8	107	73-122	
Vinyl chloride	25.0	21.2	85	52-130	
Vinyl acetate	25.0	21.7	87	43-144	
tert-Butyl alcohol	250	207	83	41-139	
Xylenes, Total	50.0	54.7	109	79-120	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab File ID: UXM15494.D Lab Sample ID: MB 240-354712/8
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: A3UX16 Date Analyzed: 11/10/2018 12:11
 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 240-354712/6	UXM15492.D	11/10/2018 11:23
TB-103018	240-103714-1	UXM15513.D	11/10/2018 19:46

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354712/8
 Matrix: Water Lab File ID: UXM15494.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/10/2018 12:11
 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.: 354712 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14
563-58-6	1,1-Dichloropropene	0.14	U	1.0	0.14
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17
87-61-6	1,2,3-Trichlorobenzene	0.54	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	0.24	U	1.0	0.24
107-06-2	1,2-Dichloroethane	0.21	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19
526-73-8	1,2,3-Trimethylbenzene	0.14	U	5.0	0.14
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.070	U	1.0	0.070
591-78-6	2-Hexanone	0.54	U	10	0.54
79-34-5	1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13
67-64-1	Acetone	5.4	U	10	5.4
71-43-2	Benzene	0.13	U	1.0	0.13
75-25-2	Bromoform	0.76	U	1.0	0.76
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.28	U	1.0	0.28
56-23-5	Carbon tetrachloride	0.26	U	1.0	0.26
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
108-90-7	Chlorobenzene	0.14	U	1.0	0.14
142-28-9	1,3-Dichloropropane	0.21	U	1.0	0.21
75-00-3	Chloroethane	0.83	U	1.0	0.83
96-12-8	1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91
67-66-3	Chloroform	0.13	U	1.0	0.13
74-87-3	Chloromethane	0.20	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	0.16	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	0.61	U	1.0	0.61
75-27-4	Bromodichloromethane	0.17	U	1.0	0.17
76-13-1	1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41
75-71-8	Dichlorodifluoromethane	0.35	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	0.26	U	1.0	0.26
100-41-4	Ethylbenzene	0.11	U	1.0	0.11
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12
594-20-7	2,2-Dichloropropane	0.31	U	1.0	0.31
95-50-1	1,2-Dichlorobenzene	0.15	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	0.15	U	1.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354712/8
 Matrix: Water Lab File ID: UXM15494.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/10/2018 12:11
 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.: 354712 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-46-7	1,4-Dichlorobenzene	0.16	U	1.0	0.16
110-75-8	2-Chloroethyl vinyl ether	0.26	U	10	0.26
98-82-8	Isopropylbenzene	0.090	U	1.0	0.090
95-49-8	2-Chlorotoluene	0.15	U	1.0	0.15
78-93-3	2-Butanone (MEK)	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42
108-86-1	Bromobenzene	0.12	U	1.0	0.12
1634-04-4	Methyl tert-butyl ether	0.070	U	1.0	0.070
74-97-5	Bromochloromethane	0.14	U	1.0	0.14
75-09-2	Methylene Chloride	2.6	U	5.0	2.6
106-43-4	4-Chlorotoluene	0.090	U	1.0	0.090
99-87-6	4-Isopropyltoluene	0.13	U	1.0	0.13
100-42-5	Styrene	0.10	U	1.0	0.10
179601-23-1	m-Xylene & p-Xylene	0.080	U	2.0	0.080
95-47-6	o-Xylene	0.090	U	1.0	0.090
87-68-3	Hexachlorobutadiene	0.83	U	1.0	0.83
127-18-4	Tetrachloroethene	0.15	U	1.0	0.15
74-95-3	Dibromomethane	0.090	U	1.0	0.090
108-88-3	Toluene	0.14	U	1.0	0.14
108-20-3	Diisopropyl ether	0.17	U	10	0.17
91-20-3	Naphthalene	0.32	U	1.0	0.32
156-60-5	trans-1,2-Dichloroethene	0.19	U	1.0	0.19
104-51-8	n-Butylbenzene	0.14	U	1.0	0.14
10061-02-6	trans-1,3-Dichloropropene	0.67	U	1.0	0.67
103-65-1	N-Propylbenzene	0.15	U	1.0	0.15
79-01-6	Trichloroethene	0.10	U	1.0	0.10
135-98-8	sec-Butylbenzene	0.13	U	1.0	0.13
75-69-4	Trichlorofluoromethane	0.45	U	1.0	0.45
994-05-8	Tert-amyl methyl ether	0.11	U	5.0	0.11
637-92-3	Ethyl tert-butyl ether	0.15	U	5.0	0.15
98-06-6	tert-Butylbenzene	0.14	U	1.0	0.14
75-01-4	Vinyl chloride	0.20	U	1.0	0.20
108-05-4	Vinyl acetate	0.19	U	2.0	0.19
75-65-0	tert-Butyl alcohol	1.7	U	50	1.7
1330-20-7	Xylenes, Total	0.15	U	2.0	0.15
124-48-1	Chlorodibromomethane	0.39	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354712/8
 Matrix: Water Lab File ID: UXM15494.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/10/2018 12:11
 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.: 354712 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	91		70-121
460-00-4	4-Bromofluorobenzene (Surr)	82		59-120
2037-26-5	Toluene-d8 (Surr)	85		70-123
1868-53-7	Dibromofluoromethane (Surr)	89		75-128

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103714-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: UXM15492.D

Lab ID: LCS 240-354712/6

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	20.0	18.2	91	80-124	
1,1-Dichloropropene	20.0	21.1	106	78-126	
1,1-Dichloroethane	20.0	21.2	106	75-133	
1,2,3-Trichlorobenzene	20.0	12.9	65	39-138	
1,2,3-Trichloropropane	20.0	23.1	115	66-139	
1,2-Dichloroethane	20.0	22.1	111	71-135	
1,1-Dichloroethene	20.0	23.4	117	65-139	
1,2-Dichloropropane	20.0	23.1	115	78-133	
1,2,4-Trimethylbenzene	20.0	17.8	89	74-120	
2-Hexanone	40.0	42.2	105	43-148	
1,1,2,2-Tetrachloroethane	20.0	20.9	105	65-139	
Acetone	40.0	43.8	109	21-162	
Benzene	20.0	21.6	108	80-123	
Bromoform	20.0	18.2	91	49-141	
Bromomethane	20.0	22.2	111	41-175	
Carbon disulfide	20.0	21.7	109	60-138	
Carbon tetrachloride	20.0	22.1	111	63-140	
1,1,1-Trichloroethane	20.0	21.4	107	69-134	
Chlorobenzene	20.0	19.3	97	80-121	
1,3-Dichloropropane	20.0	19.8	99	72-134	
Chloroethane	20.0	21.3	106	33-173	
1,2-Dibromo-3-Chloropropane	20.0	16.7	83	46-132	
Chloroform	20.0	22.0	110	79-127	
Chloromethane	20.0	18.8	94	54-143	
cis-1,2-Dichloroethene	20.0	21.2	106	76-128	
cis-1,3-Dichloropropene	20.0	23.0	115	64-132	
Bromodichloromethane	20.0	21.8	109	77-125	
1,1,2-Trichlorotrifluoroethane	20.0	23.0	115	50-156	
Dichlorodifluoromethane	20.0	21.7	109	29-148	
1,2,4-Trichlorobenzene	20.0	13.9	70	42-133	
Ethylbenzene	20.0	18.2	91	80-120	
1,2-Dibromoethane	20.0	20.1	100	77-123	
2,2-Dichloropropane	20.0	21.2	106	42-150	
1,2-Dichlorobenzene	20.0	18.2	91	78-120	
1,3-Dichlorobenzene	20.0	17.6	88	78-120	
1,4-Dichlorobenzene	20.0	17.8	89	78-120	
2-Chloroethyl vinyl ether	20.0	23.9	119	55-137	
Isopropylbenzene	20.0	17.8	89	74-120	
2-Chlorotoluene	20.0	19.0	95	78-123	
2-Butanone (MEK)	40.0	45.6	114	39-163	
4-Methyl-2-pentanone (MIBK)	40.0	47.9	120	49-143	
Bromobenzene	20.0	18.9	95	74-129	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103714-1

SDG No.: _____

Matrix: Water Level: Low Lab File ID: UXM15492.D

Lab ID: LCS 240-354712/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methyl tert-butyl ether	20.0	20.5	103	51-133	
Bromochloromethane	20.0	22.1	111	74-130	
Methylene Chloride	20.0	21.6	108	70-134	
4-Chlorotoluene	20.0	18.9	95	77-125	
4-Isopropyltoluene	20.0	16.7	83	69-122	
Styrene	20.0	19.2	96	79-120	
m-Xylene & p-Xylene	20.0	18.3	92	80-120	
o-Xylene	20.0	18.3	92	80-120	
Hexachlorobutadiene	20.0	10.7	54	38-136	
Tetrachloroethene	20.0	17.5	88	74-130	
Dibromomethane	20.0	21.2	106	74-124	
Toluene	20.0	19.7	99	78-129	
Naphthalene	20.0	13.9	69	28-141	
trans-1,2-Dichloroethene	20.0	22.4	112	78-133	
n-Butylbenzene	20.0	16.7	83	57-126	
trans-1,3-Dichloropropene	20.0	19.3	96	55-128	
N-Propylbenzene	20.0	18.5	92	77-123	
Trichloroethene	20.0	20.9	105	76-125	
sec-Butylbenzene	20.0	16.9	85	68-123	
Trichlorofluoromethane	20.0	23.7	118	51-164	
tert-Butylbenzene	20.0	17.6	88	70-121	
Vinyl chloride	20.0	21.4	107	58-143	
Vinyl acetate	20.0	21.0	105	45-151	
tert-Butyl alcohol	200	242	121	10-161	
Xylenes, Total	40.0	36.6	92	80-120	

Column to be used to flag recovery and RPD values

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

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab File ID: BFB5706.D BFB Injection Date: 08/06/2018
 Instrument ID: A3UX16 BFB Injection Time: 11:19
 Analysis Batch No.: 339529

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	15.7
75	30.0 - 60.0 % of mass 95	47.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.5
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	74.7
175	5.0 - 9.0 % of mass 174	5.6 (7.4) 1
176	95.0 - 101.0 % of mass 174	72.1 (96.6) 1
177	5.0 - 9.0 % of mass 176	4.7 (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 240-339529/8	UXM13044.D	08/06/2018	12:19
	STD8260 240-339529/9	UXM13045.D	08/06/2018	12:43
	STD8260 240-339529/10	UXM13046.D	08/06/2018	13:06
	ICIS 240-339529/11	UXM13047.D	08/06/2018	13:30
	STD8260 240-339529/12	UXM13048.D	08/06/2018	13:54
	STD8260 240-339529/13	UXM13049.D	08/06/2018	14:18
	STD8260 240-339529/14	UXM13050.D	08/06/2018	14:42
	ICV 240-339529/15	UXM13051.D	08/06/2018	15:24
	STDA9 240-339529/18	UXM13054.D	08/06/2018	16:36
	STDA9 240-339529/19	UXM13055.D	08/06/2018	17:00
	STDA9 240-339529/20	UXM13056.D	08/06/2018	17:24
	STDA9 240-339529/21	UXM13057.D	08/06/2018	17:48
	STDA9 240-339529/22	UXM13058.D	08/06/2018	18:12
	STDA9 240-339529/23	UXM13059.D	08/06/2018	18:36
	ICV 240-339529/24	UXM13060.D	08/06/2018	19:00

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103714-1 Analy Batch No.: 339529

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 12:19 Calibration End Date: 08/06/2018 14:42 Calibration ID: 46373

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-339529/14	UXM13050.D
Level 2	STD8260 240-339529/13	UXM13049.D
Level 3	STD8260 240-339529/12	UXM13048.D
Level 4	ICIS 240-339529/11	UXM13047.D
Level 5	STD8260 240-339529/10	UXM13046.D
Level 6	STD8260 240-339529/9	UXM13045.D
Level 7	STD8260 240-339529/8	UXM13044.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Dichlorodifluoromethane	++++ 0.2648	0.1902 0.2620	0.2363	0.2482	0.2917	Ave		0.2489			13.7		15.0				
Chloromethane	++++ 0.2253	0.2100 0.2104	0.2364	0.2208	0.2347	Ave		0.2229		0.1000	5.1		15.0				
Butadiene	++++ 0.2431	0.2172 0.2339	0.2268	0.2421	0.2671	Ave		0.2384			7.2		15.0				
Vinyl chloride	0.1379 0.2720	0.2379 0.2609	0.2653	0.2598	0.2895	Lin1	-0.054	0.2710						0.9980		0.9900	
Bromomethane	0.1566 0.2341	0.1931 0.2501	0.2107	0.2092	0.2288	Ave		0.2118			14.5		15.0				
Chloroethane	0.1810 0.1862	0.1572 0.2057	0.1836	0.1795	0.1939	Ave		0.1839			8.1		15.0				
Dichlorofluoromethane	0.4692 0.4417	0.4284 0.4447	0.4418	0.4343	0.4693	Ave		0.4471			3.6		15.0				
Trichlorofluoromethane	0.2993 0.4064	0.3363 0.4094	0.3859	0.3997	0.4495	Ave		0.3838			13.1		15.0				
Ethyl ether	++++ 0.1938	0.1714 0.1927	0.1948	0.1886	0.2003	Ave		0.1903			5.3		15.0				
Acrolein	0.0469 0.0491	0.0411 0.0482	0.0477	0.0458	0.0525	Ave		0.0474			7.3		15.0				
1,1-Dichloroethene	0.1979 0.2422	0.2097 0.2381	0.2360	0.2340	0.2582	Ave		0.2309			8.8		15.0				
1,1,2-Trichlorotrifluoroethane	0.1273 0.1661	0.1427 0.1691	0.1657	0.1677	0.1921	Ave		0.1615			12.9		15.0				
Acetone	++++ 0.0229	0.0320 0.0228	0.0245	0.0228	0.0239	Ave		0.0248			14.5		15.0				
Iodomethane	0.3998 0.4377	0.3922 0.4173	0.4214	0.4242	0.4533	Ave		0.4209			5.0		15.0				

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.: 240-103714-1 Analy Batch No.: 339529

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 12:19 Calibration End Date: 08/06/2018 14:42 Calibration ID: 46373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Carbon disulfide	0.6221 0.7296	0.6991 0.7227	0.7143	0.7181	0.7896	Ave		0.7136			6.9		15.0				
3-Chloro-1-propene	0.4340 0.3186	0.3587 0.3123	0.3161	0.3082	0.3384	Ave		0.3409			13.1		15.0				
Methyl acetate	0.1665 0.1627	0.1775 0.1600	0.1636	0.1667	0.1752	Ave		0.1674			3.9		15.0				
Methylene Chloride	0.2849 0.2638	0.2346 0.2571	0.2609	0.2541	0.2742	Ave		0.2614			6.1		15.0				
tert-Butyl alcohol	0.0222 0.0244	0.0251 0.0249	0.0273	0.0263	0.0256	Ave		0.0251			6.4		15.0				
Acrylonitrile	0.0854 0.0907	0.0918 0.0914	0.0926	0.0910	0.0966	Ave		0.0913			3.6		15.0				
trans-1,2-Dichloroethene	0.2324 0.2762	0.2501 0.2702	0.2644	0.2665	0.2843	Ave		0.2635			6.6		15.0				
Methyl tert-butyl ether	0.7287 0.7867	0.7701 0.7926	0.7963	0.7859	0.8344	Ave		0.7850			4.0		15.0				
Hexane	0.1735 0.1578	0.1588 0.1593	0.1640	0.1593	0.1728	Ave		0.1637			4.1		15.0				
1,1-Dichloroethane	0.3500 0.3989	0.3779 0.3962	0.4007	0.3904	0.4157	Ave		0.3900		0.1000	5.4		15.0				
Vinyl acetate	0.3887 0.4673	0.3734 0.4676	0.4622	0.4612	0.4752	Ave		0.4422			9.6		15.0				
cis-1,2-Dichloroethene	0.2922 0.2965	0.2849 0.2960	0.2954	0.2965	0.3084	Ave		0.2957			2.4		15.0				
2,2-Dichloropropane	++++ 0.0623	0.0602 0.0615	0.0628	0.0650	0.0681	Ave		0.0633			4.4		15.0				
2-Butanone (MEK)	++++ 0.0322	0.0296 0.0339	0.0347	0.0335	0.0348	Ave		0.0331			5.9		15.0				
Bromochloromethane	0.1040 0.1452	0.1402 0.1432	0.1430	0.1412	0.1505	Ave		0.1382			11.2		15.0				
Tetrahydrofuran	0.0477 0.0608	0.0623 0.0628	0.0629	0.0622	0.0659	Ave		0.0607			9.7		15.0				
Chloroform	0.3727 0.4436	0.4118 0.4427	0.4421	0.4331	0.4581	Ave		0.4292			6.7		15.0				
1,1,1-Trichloroethane	0.3380 0.4078	0.3487 0.4053	0.3980	0.3913	0.4224	Ave		0.3874			8.2		15.0				
Cyclohexane	0.2362 0.2623	0.2571 0.2698	0.2625	0.2549	0.2891	Ave		0.2617			6.1		15.0				
1,1-Dichloropropene	0.3051 0.3416	0.3283 0.3459	0.3375	0.3287	0.3518	Ave		0.3341			4.6		15.0				

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.: 240-103714-1 Analy Batch No.: 339529

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 12:19 Calibration End Date: 08/06/2018 14:42 Calibration ID: 46373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
Carbon tetrachloride	0.2631 0.3280	0.2945 0.3376	0.3131	0.3170	0.3467	Ave		0.3143			9.0		15.0				
Isobutyl alcohol	0.0052 0.0068	0.0061 0.0072	0.0073	0.0073	0.0072	Ave		0.0067			11.8		15.0				
Benzene	0.9445 1.0211	0.9328 1.0137	0.9933	0.9866	1.0423	Ave		0.9906			4.0		15.0				
1,2-Dichloroethane	0.3565 0.3499	0.3028 0.3527	0.3478	0.3416	0.3549	Ave		0.3437			5.4		15.0				
n-Heptane	1.2158 0.0814	0.6626 0.0741	0.1279	0.1004	0.0893	Lin1	0.5802	0.0703						0.9980		0.9900	
Trichloroethene	0.2682 0.2906	0.2763 0.2913	0.2927	0.2843	0.3019	Ave		0.2865			3.9		15.0				
Methylcyclohexane	0.2602 0.2470	0.2683 0.2469	0.2483	0.2431	0.2675	Ave		0.2545			4.2		15.0				
1,2-Dichloropropane	0.1570 0.2093	0.2040 0.2122	0.2034	0.2067	0.2108	Ave		0.2005			9.7		15.0				
Dibromomethane	0.1719 0.1617	0.1440 0.1612	0.1572	0.1568	0.1671	Ave		0.1600			5.5		15.0				
1,4-Dioxane	++++ 0.0033	0.0035 0.0037	0.0034	0.0034	0.0030	Ave		0.0034			6.7		15.0				
Bromodichloromethane	0.2951 0.3402	0.2899 0.3488	0.3257	0.3316	0.3452	Ave		0.3252			7.3		15.0				
2-Chloroethyl vinyl ether	0.1172 0.1398	0.1270 0.1459	0.1398	0.1417	0.1397	Ave		0.1359			7.4		15.0				
cis-1,3-Dichloropropene	0.3007 0.3898	0.3522 0.3948	0.3686	0.3721	0.3922	Ave		0.3672			9.0		15.0				
4-Methyl-2-pentanone (MIBK)	0.1681 0.1894	0.1791 0.1962	0.1968	0.1944	0.2014	Ave		0.1894			6.2		15.0				
Toluene	1.3395 1.4565	1.3237 1.4793	1.4267	1.4241	1.4897	Ave		1.4199			4.6		15.0				
trans-1,3-Dichloropropene	0.4127 0.4944	0.4235 0.5070	0.4782	0.4824	0.5000	Ave		0.4712			8.0		15.0				
Ethyl methacrylate	0.3848 0.4039	0.3763 0.4212	0.4097	0.4217	0.4169	Ave		0.4049			4.4		15.0				
1,1,2-Trichloroethane	0.2766 0.2942	0.2604 0.3036	0.2938	0.2935	0.3011	Ave		0.2890			5.3		15.0				
Tetrachloroethene	0.2750 0.2589	0.2523 0.2658	0.2636	0.2595	0.2736	Ave		0.2641			3.1		15.0				
1,3-Dichloropropane	0.4588 0.5037	0.4986 0.5183	0.5154	0.5036	0.5129	Ave		0.5016			4.0		15.0				

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.: 240-103714-1 Analy Batch No.: 339529

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 12:19 Calibration End Date: 08/06/2018 14:42 Calibration ID: 46373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
2-Hexanone	0.1723 0.1626	0.1724 0.1759	0.1837	0.1837	0.1807	Ave		0.1759			4.3		15.0				
Chlorodibromomethane	0.2493 0.3554	0.2750 0.3691	0.3362	0.3454	0.3632	Ave		0.3277			14.2		15.0				
1,2-Dibromoethane	0.2714 0.3167	0.2775 0.3282	0.3275	0.3160	0.3299	Ave		0.3096			8.0		15.0				
Chlorobenzene	0.9068 0.9597	0.9166 0.9636	0.9541	0.9572	0.9824	Ave		0.9486		0.3000	2.8		15.0				
1,1,1,2-Tetrachloroethane	0.3386 0.3602	0.3375 0.3629	0.3402	0.3544	0.3738	Ave		0.3525			4.0		15.0				
Ethylbenzene	0.4870 0.5054	0.4924 0.5213	0.5021	0.5008	0.5286	Ave		0.5054			2.9		15.0				
m-Xylene & p-Xylene	0.6067 0.6331	0.5895 0.6478	0.6265	0.6080	0.6612	Ave		0.6247			4.0		15.0				
o-Xylene	0.6165 0.6322	0.6532 0.6470	0.6189	0.6198	0.6584	Ave		0.6351			2.8		15.0				
Styrene	0.9641 1.0810	0.9259 1.1166	1.0633	1.0558	1.1117	Ave		1.0455			7.0		15.0				
Bromoform	0.1767 0.2320	0.1861 0.2461	0.2165	0.2253	0.2475	Ave		0.2186		0.1000	12.7		15.0				
Isopropylbenzene	1.3123 1.3748	1.4013 1.4068	1.3728	1.3674	1.4344	Ave		1.3814			2.8		15.0				
1,1,2,2-Tetrachloroethane	0.6525 0.7666	0.7036 0.7650	0.7688	0.7711	0.8106	Ave		0.7483		0.3000	7.0		15.0				
Bromobenzene	0.7367 0.7806	0.7562 0.7710	0.7605	0.7735	0.8123	Ave		0.7701			3.0		15.0				
1,2,3-Trichloropropane	0.2026 0.2847	0.2429 0.2836	0.2859	0.2947	0.2959	Ave		0.2700			12.8		15.0				
trans-1,4-Dichloro-2-butene	0.1389 0.2122	0.1614 0.2236	0.2064	0.2193	0.2241	Lin1	-0.049	0.2204						0.9990		0.9900	
N-Propylbenzene	0.6851 0.7137	0.7232 0.7003	0.6893	0.7069	0.7317	Ave		0.7072			2.4		15.0				
2-Chlorotoluene	0.6593 0.6892	0.6360 0.6811	0.6644	0.6868	0.7032	Ave		0.6743			3.3		15.0				
1,3,5-Trimethylbenzene	2.0536 2.1813	2.1103 2.1758	2.0970	2.1329	2.2162	Ave		2.1382			2.6		15.0				
4-Chlorotoluene	0.6949 0.7277	0.7002 0.7095	0.7153	0.7261	0.7404	Ave		0.7163			2.3		15.0				
tert-Butylbenzene	1.8145 1.9984	2.1515 1.9835	1.9415	1.9799	2.0330	Ave		1.9860			5.1		15.0				

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.: 240-103714-1 Analy Batch No.: 339529

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 12:19 Calibration End Date: 08/06/2018 14:42 Calibration ID: 46373

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7															
1,2,4-Trimethylbenzene	2.2322 2.3233	2.2597 2.3136	2.2352	2.2846	2.3610	Ave		2.2871			2.1	15.0					
sec-Butylbenzene	2.2474 2.2651	2.5914 2.2163	2.2062	2.2348	2.2952	Ave		2.2938			5.9	15.0					
1,3-Dichlorobenzene	1.3067 1.3767	1.5029 1.3515	1.3457	1.3577	1.3946	Ave		1.3765			4.5	15.0					
4-Isopropyltoluene	2.1056 2.0862	2.4082 2.0547	2.0143	2.0374	2.0958	Ave		2.1146			6.3	15.0					
1,4-Dichlorobenzene	1.4704 1.4210	1.4770 1.3935	1.4201	1.3925	1.4359	Ave		1.4300			2.4	15.0					
n-Butylbenzene	1.9059 1.6036	2.3851 1.5437	1.6299	1.6229	1.6497	Lin1	0.3905	1.5842					0.9990		0.9900		
1,2-Dichlorobenzene	1.3766 1.3590	1.4326 1.3549	1.3462	1.3501	1.3940	Ave		1.3733			2.3	15.0					
1,2-Dibromo-3-Chloropropane	++++ 0.2006	0.1601 0.2073	0.1929	0.1960	0.2102	Ave		0.1945			9.3	15.0					
1,2,4-Trichlorobenzene	0.9208 0.6985	1.0524 0.7149	0.7058	0.7350	0.6981	Lin1	0.1854	0.7045					0.9990		0.9900		
Hexachlorobutadiene	++++ 0.2426	0.8400 0.2432	0.3099	0.2891	0.2581	Lin1	0.6248	0.2384					0.9990		0.9900		
Naphthalene	2.7201 2.5652	2.9631 2.6938	2.5582	2.6526	2.6380	Ave		2.6844			5.1	15.0					
1,2,3-Trichlorobenzene	0.8633 0.6534	0.9721 0.6731	0.6886	0.6805	0.6439	Lin1	0.1743	0.6595					0.9990		0.9900		
Dibromofluoromethane (Surr)	0.2291 0.2535	0.2214 0.2420	0.2402	0.2476	0.2589	Ave		0.2418			5.4	15.0					
1,2-Dichloroethane-d4 (Surr)	0.2758 0.2990	0.2819 0.2936	0.3150	0.3019	0.3072	Ave		0.2963			4.7	15.0					
Toluene-d8 (Surr)	1.1311 1.2727	1.1448 1.2739	1.2399	1.2730	1.3233	Ave		1.2369			5.8	15.0					
4-Bromofluorobenzene (Surr)	0.4774 0.4571	0.4920 0.4552	0.4588	0.4620	0.4712	Ave		0.4677			2.9	15.0					

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.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339529/15 Calibration Date: 08/06/2018 15:24
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 12:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 14:42
 Lab File ID: UXM13051.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	0.2489	0.3087		0.0248	0.0200	24.0	50.0
Chloromethane	Ave	0.2229	0.2507	0.1000	0.0225	0.0200	12.4	50.0
Butadiene	Ave	0.2384	0.2518		0.0211	0.0200	5.6	50.0
Vinyl chloride	Lin1		0.3027		0.0225	0.0200	12.7	20.0
Bromomethane	Ave	0.2118	0.2316		0.0219	0.0200	9.3	50.0
Chloroethane	Ave	0.1839	0.2013		0.0219	0.0200	9.5	50.0
Dichlorofluoromethane	Ave	0.4471	0.4991		0.0223	0.0200	11.6	50.0
Trichlorofluoromethane	Ave	0.3838	0.4585		0.0239	0.0200	19.5	50.0
Ethyl ether	Ave	0.1903	0.2184		0.0230	0.0200	14.8	50.0
Acrolein	Ave	0.0474	0.0338		0.0715	0.100	-28.5	50.0
1,1-Dichloroethene	Ave	0.2309	0.2687		0.0233	0.0200	16.4	20.0
1,1,2-Trichlorotrifluoroethane	Ave	0.1615	0.1992		0.0247	0.0200	23.3	50.0
Acetone	Ave	0.0248	0.0240		0.0387	0.0400	-3.3	50.0
Iodomethane	Ave	0.4209	0.4701		0.0223	0.0200	11.7	50.0
Carbon disulfide	Ave	0.7136	0.8124		0.0228	0.0200	13.8	50.0
3-Chloro-1-propene	Ave	0.3409	0.3538		0.0208	0.0200	3.8	50.0
Methyl acetate	Ave	0.1674	0.1812		0.0433	0.0400	8.2	50.0
Methylene Chloride	Ave	0.2614	0.2834		0.0217	0.0200	8.4	50.0
tert-Butyl alcohol	Ave	0.0251	0.0266		0.212	0.200	5.9	50.0
Acrylonitrile	Ave	0.0913	0.0978		0.214	0.200	7.1	50.0
Methyl tert-butyl ether	Ave	0.7850	0.8569		0.0218	0.0200	9.2	50.0
trans-1,2-Dichloroethene	Ave	0.2635	0.3127		0.0237	0.0200	18.7	50.0
Hexane	Ave	0.1637	0.1871		0.0229	0.0200	14.3	20.0
1,1-Dichloroethane	Ave	0.3900	0.4462	0.1000	0.0229	0.0200	14.4	50.0
Vinyl acetate	Ave	0.4422	0.4541		0.0205	0.0200	2.7	50.0
2,2-Dichloropropane	Ave	0.0633	0.0686		0.0217	0.0200	8.3	50.0
2-Butanone (MEK)	Ave	0.0331	0.0335		0.0404	0.0400	1.0	50.0
cis-1,2-Dichloroethene	Ave	0.2957	0.3290		0.0222	0.0200	11.2	50.0
Bromochloromethane	Ave	0.1382	0.1550		0.0224	0.0200	12.2	50.0
Tetrahydrofuran	Ave	0.0607	0.0640		0.0422	0.0400	5.5	50.0
Chloroform	Ave	0.4292	0.4910		0.0229	0.0200	14.4	20.0
1,1,1-Trichloroethane	Ave	0.3874	0.4506		0.0233	0.0200	16.3	50.0
Cyclohexane	Ave	0.2617	0.3025		0.0231	0.0200	15.6	50.0
1,1-Dichloropropene	Ave	0.3341	0.3705		0.0222	0.0200	10.9	50.0
Carbon tetrachloride	Ave	0.3143	0.3674		0.0234	0.0200	16.9	50.0
Isobutyl alcohol	Ave	0.0067	0.0074		0.548	0.500	9.5	50.0
1,2-Dichloroethane	Ave	0.3437	0.3806		0.0221	0.0200	10.7	50.0
Benzene	Ave	0.9906	1.092		0.0220	0.0200	10.2	50.0
n-Heptane	Lin1		0.1067		0.0221	0.0200	10.4	50.0
Trichloroethene	Ave	0.2865	0.3147		0.0220	0.0200	9.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339529/15 Calibration Date: 08/06/2018 15:24
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 12:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 14:42
 Lab File ID: UXM13051.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	0.2545	0.2777		0.0218	0.0200	9.1	50.0
1,2-Dichloropropane	Ave	0.2005	0.2308		0.0230	0.0200	15.1	20.0
1,4-Dioxane	Ave	0.0034	0.0038		0.443	0.400	10.8	50.0
Dibromomethane	Ave	0.1600	0.1705		0.0213	0.0200	6.6	50.0
Bromodichloromethane	Ave	0.3252	0.3622		0.0223	0.0200	11.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1359	0.1475		0.0217	0.0200	8.5	50.0
cis-1,3-Dichloropropene	Ave	0.3672	0.4255		0.0232	0.0200	15.9	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1894	0.1963		0.0415	0.0400	3.6	50.0
Toluene	Ave	1.420	1.577		0.0222	0.0200	11.1	20.0
trans-1,3-Dichloropropene	Ave	0.4712	0.5141		0.0218	0.0200	9.1	50.0
Ethyl methacrylate	Ave	0.4049	0.4388		0.0217	0.0200	8.4	50.0
1,1,2-Trichloroethane	Ave	0.2890	0.3286		0.0227	0.0200	13.7	50.0
Tetrachloroethene	Ave	0.2641	0.2866		0.0217	0.0200	8.5	50.0
1,3-Dichloropropane	Ave	0.5016	0.5515		0.0220	0.0200	9.9	50.0
2-Hexanone	Ave	0.1759	0.1756		0.0399	0.0400	-0.2	50.0
Chlorodibromomethane	Ave	0.3277	0.3832		0.0234	0.0200	16.9	50.0
1,2-Dibromoethane	Ave	0.3096	0.3431		0.0222	0.0200	10.8	50.0
Chlorobenzene	Ave	0.9486	1.052	0.3000	0.0222	0.0200	10.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3525	0.3923		0.0223	0.0200	11.3	50.0
Ethylbenzene	Ave	0.5054	0.5456		0.0216	0.0200	8.0	20.0
m-Xylene & p-Xylene	Ave	0.6247	0.6780		0.0217	0.0200	8.5	50.0
o-Xylene	Ave	0.6351	0.6992		0.0220	0.0200	10.1	50.0
Styrene	Ave	1.045	1.141		0.0218	0.0200	9.1	50.0
Bromoform	Ave	0.2186	0.2375	0.1000	0.0217	0.0200	8.6	50.0
Isopropylbenzene	Ave	1.381	1.527		0.0221	0.0200	10.5	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7483	0.8079	0.3000	0.0216	0.0200	8.0	50.0
Bromobenzene	Ave	0.7701	0.8322		0.0216	0.0200	8.1	50.0
1,2,3-Trichloropropane	Ave	0.2700	0.3000		0.0222	0.0200	11.1	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.2242		0.0206	0.0200	2.8	50.0
N-Propylbenzene	Ave	0.7072	0.7597		0.0215	0.0200	7.4	50.0
2-Chlorotoluene	Ave	0.6743	0.7413		0.0220	0.0200	9.9	50.0
1,3,5-Trimethylbenzene	Ave	2.138	2.288		0.0214	0.0200	7.0	50.0
4-Chlorotoluene	Ave	0.7163	0.7573		0.0211	0.0200	5.7	50.0
tert-Butylbenzene	Ave	1.986	2.135		0.0215	0.0200	7.5	50.0
1,2,4-Trimethylbenzene	Ave	2.287	2.439		0.0213	0.0200	6.6	50.0
sec-Butylbenzene	Ave	2.294	2.397		0.0209	0.0200	4.5	50.0
1,3-Dichlorobenzene	Ave	1.377	1.456		0.0212	0.0200	5.8	50.0
4-Isopropyltoluene	Ave	2.115	2.177		0.0206	0.0200	3.0	50.0
1,4-Dichlorobenzene	Ave	1.430	1.502		0.0210	0.0200	5.0	50.0
n-Butylbenzene	Lin1		1.671		0.0209	0.0200	4.3	50.0
1,2-Dichlorobenzene	Ave	1.373	1.467		0.0214	0.0200	6.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339529/15 Calibration Date: 08/06/2018 15:24
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 12:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 14:42
 Lab File ID: UXM13051.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	0.1945	0.2001		0.0206	0.0200	2.9	50.0
1,2,4-Trichlorobenzene	Lin1		0.7526		0.0211	0.0200	5.5	50.0
Hexachlorobutadiene	Lin1		0.2738		0.0203	0.0200	1.7	50.0
Naphthalene	Ave	2.684	2.742		0.0204	0.0200	2.2	50.0
1,2,3-Trichlorobenzene	Lin1		0.7131		0.0214	0.0200	6.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2418	0.2346		0.0194	0.0200	-3.0	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2963	0.2813		0.0190	0.0200	-5.1	50.0
Toluene-d8 (Surr)	Ave	1.237	1.216		0.0197	0.0200	-1.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4677	0.4558		0.0195	0.0200	-2.6	50.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103714-1 Analy Batch No.: 339529

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 16:36 Calibration End Date: 08/06/2018 18:36 Calibration ID: 46377

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-339529/23	UXM13059.D
Level 2	STDA9 240-339529/22	UXM13058.D
Level 3	STDA9 240-339529/21	UXM13057.D
Level 4	STDA9 240-339529/20	UXM13056.D
Level 5	STDA9 240-339529/19	UXM13055.D
Level 6	STDA9 240-339529/18	UXM13054.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								
Acetonitrile	0.0367 0.0290	0.0339	0.0297	0.0292	0.0307	Ave		0.0315			9.8		15.0				
Diisopropyl ether	0.2225 0.2538	0.2207	0.2439	0.2507	0.2563	Ave		0.2413			6.6		15.0				
2-Chloro-1,3-butadiene	0.3104 0.3735	0.3235	0.3510	0.3590	0.3804	Ave		0.3496			7.9		15.0				
Ethyl tert-butyl ether	0.6480 0.7637	0.6705	0.7244	0.7417	0.7760	Ave		0.7207			7.1		15.0				
Ethyl acetate	0.1837 0.1974	0.1989	0.1948	0.1973	0.1983	Ave		0.1951			3.0		15.0				
Propionitrile	0.0319 0.0351	0.0346	0.0347	0.0355	0.0353	Ave		0.0345			3.8		15.0				
Methacrylonitrile	0.1241 0.1415	0.1265	0.1343	0.1377	0.1410	Ave		0.1342			5.5		15.0				
Tert-amyl methyl ether	0.7155 0.8358	0.7097	0.7760	0.8104	0.8378	Ave		0.7809			7.4		15.0				
n-Butanol	0.0059 0.0072	0.0059	0.0072	0.0072	0.0071	Ave		0.0068			9.9		15.0				
Ethyl acrylate	0.2541 0.2737	0.2619	0.2613	0.2693	0.2715	Ave		0.2653			2.8		15.0				
Methyl methacrylate	0.1624 0.1822	0.1545	0.1762	0.1817	0.1854	Ave		0.1737			7.2		15.0				
2-Nitropropane	0.0585 0.0663	0.0488	0.0595	0.0639	0.0652	Ave		0.0604			10.7		15.0				
n-Butyl acetate	0.2600 0.2913	0.2867	0.2898	0.2937	0.2935	Ave		0.2858			4.5		15.0				
1-Chlorohexane	0.3964 0.3542	0.3624	0.3255	0.3493	0.3586	Ave		0.3577			6.4		15.0				
Cyclohexanone	+++++ 0.0308	0.0297	0.0288	0.0360	0.0349	Ave		0.0320			10.0		15.0				

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.: 240-103714-1 Analy Batch No.: 339529

SDG No.: _____

Instrument ID: A3UX16 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/06/2018 16:36 Calibration End Date: 08/06/2018 18:36 Calibration ID: 46377

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								
Pentachloroethane	++++ 0.2457	0.1760	0.2023	0.2214	0.2386	Ave		0.2168			13.1		15.0				
1,2,3-Trimethylbenzene	2.1293 2.7666	2.4223	2.4405	2.5578	2.6989	Ave		2.5026			9.1		15.0				
Benzyl chloride	++++ 0.4354	0.2429	0.3082	0.3599	0.3936	Lin1	-0.277	0.4138						0.9930		0.9900	
1,3,5-Trichlorobenzene	0.9097 0.8294	0.9581	0.7640	0.8119	0.8427	Ave		0.8526			8.2		15.0				
2-Methylnaphthalene	++++ 1.3766	1.8895	1.2393	1.3841	1.4820	Lin1	0.7290	1.3877						0.9970		0.9900	

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.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339529/24 Calibration Date: 08/06/2018 19:00
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 12:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 14:42
 Lab File ID: UXM13060.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
Dibromofluoromethane (Surr)	Ave	0.2418	0.2071		0.0171	0.0200	-14.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2963	0.2420		0.0163	0.0200	-18.3	50.0
Toluene-d8 (Surr)	Ave	1.237	1.096		0.0177	0.0200	-11.4	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4677	0.4121		0.0176	0.0200	-11.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339529/24 Calibration Date: 08/06/2018 19:00
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 16:36
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 18:36
 Lab File ID: UXM13060.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
Acetonitrile	Ave	0.0315	0.0267		0.169	0.200	-15.4	50.0
Diisopropyl ether	Ave	0.2413	0.2311		0.0192	0.0200	-4.2	50.0
2-Chloro-1,3-butadiene	Ave	0.3496	0.3217		0.0184	0.0200	-8.0	50.0
Ethyl tert-butyl ether	Ave	0.7207	0.6792		0.0188	0.0200	-5.8	50.0
Ethyl acetate	Ave	0.1951	0.1848		0.0379	0.0400	-5.3	50.0
Propionitrile	Ave	0.0345	0.0326		0.189	0.200	-5.7	50.0
Methacrylonitrile	Ave	0.1342	0.1282		0.191	0.200	-4.5	50.0
Tert-amyl methyl ether	Ave	0.7809	0.7379		0.0189	0.0200	-5.5	50.0
n-Butanol	Ave	0.0068	0.0064		0.472	0.500	-5.6	50.0
Ethyl acrylate	Ave	0.2653	0.2503		0.0189	0.0200	-5.7	50.0
Methyl methacrylate	Ave	0.1737	0.1695		0.0390	0.0400	-2.4	50.0
2-Nitropropane	Ave	0.0604	0.0582		0.0385	0.0400	-3.7	50.0
n-Butyl acetate	Ave	0.2858	0.2734		0.0191	0.0200	-4.4	50.0
1-Chlorohexane	Ave	0.3577	0.3078		0.0172	0.0200	-14.0	50.0
Cyclohexanone	Ave	0.0320	0.0213		0.133	0.200	-33.6	50.0
Pentachloroethane	Ave	0.2168	0.1681		0.0310	0.0400	-22.4	50.0
1,2,3-Trimethylbenzene	Ave	2.503	2.307		0.0184	0.0200	-7.8	50.0
Benzyl chloride	Lin1		0.2721		0.0138	0.0200	-30.9	50.0
1,3,5-Trichlorobenzene	Ave	0.8526	0.6423		0.0151	0.0200	-24.7	50.0
2-Methylnaphthalene	Lin1		0.9538		0.0270	0.0400	-32.6	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab File ID: BFB5877.D BFB Injection Date: 11/10/2018
 Instrument ID: A3UX16 BFB Injection Time: 10:08
 Analysis Batch No.: 354712

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	18.9	
75	30.0 - 60.0 % of mass 95	55.7	
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	0.6	(0.8) 1
174	50.0 - 120.00 % of mass 95	73.5	
175	5.0 - 9.0 % of mass 174	5.7	(7.8) 1
176	95.0 - 101.0 % of mass 174	72.8	(99.0) 1
177	5.0 - 9.0 % of mass 176	4.8	(6.5) 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 240-354712/4	UXM15490.D	11/10/2018	10:36
	CCV 240-354712/5	UXM15491.D	11/10/2018	10:59
	LCS 240-354712/6	UXM15492.D	11/10/2018	11:23
	MB 240-354712/8	UXM15494.D	11/10/2018	12:11
TB-103018	240-103714-1	UXM15513.D	11/10/2018	19:46

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354712/4 Calibration Date: 11/10/2018 10:36
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 12:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 14:42
 Lab File ID: UXM15490.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	0.2489	0.2585		0.0208	0.0200	3.9	50.0
Chloromethane	Ave	0.2229	0.1980	0.1000	0.0178	0.0200	-11.2	50.0
Butadiene	Ave	0.2384	0.2513		0.0211	0.0200	5.4	50.0
Vinyl chloride	Lin1		0.2725		0.0203	0.0200	1.5	20.0
Bromomethane	Ave	0.2118	0.2439		0.0230	0.0200	15.2	50.0
Chloroethane	Ave	0.1839	0.1963		0.0213	0.0200	6.7	50.0
Dichlorofluoromethane	Ave	0.4471	0.4737		0.0212	0.0200	6.0	50.0
Trichlorofluoromethane	Ave	0.3838	0.4701		0.0245	0.0200	22.5	50.0
Ethyl ether	Ave	0.1903	0.2080		0.0219	0.0200	9.3	50.0
Acrolein	Ave	0.0474	0.0498		0.105	0.100	5.1	50.0
1,1-Dichloroethene	Ave	0.2309	0.2648		0.0229	0.0200	14.7	20.0
1,1,2-Trichlorotrifluoroethane	Ave	0.1615	0.1886		0.0233	0.0200	16.7	50.0
Acetone	Ave	0.0248	0.0257		0.0414	0.0400	3.4	50.0
Iodomethane	Ave	0.4209	0.4425		0.0210	0.0200	5.1	50.0
Carbon disulfide	Ave	0.7136	0.7626		0.0214	0.0200	6.9	50.0
3-Chloro-1-propene	Ave	0.3409	0.3183		0.0187	0.0200	-6.6	50.0
Methyl acetate	Ave	0.1674	0.1747		0.0417	0.0400	4.3	50.0
Methylene Chloride	Ave	0.2614	0.2883		0.0221	0.0200	10.3	50.0
tert-Butyl alcohol	Ave	0.0251	0.0243		0.193	0.200	-3.3	50.0
Acrylonitrile	Ave	0.0913	0.0921		0.202	0.200	0.8	50.0
Methyl tert-butyl ether	Ave	0.7850	0.7762		0.0198	0.0200	-1.1	50.0
trans-1,2-Dichloroethene	Ave	0.2635	0.2813		0.0214	0.0200	6.8	50.0
Hexane	Ave	0.1637	0.1700		0.0208	0.0200	3.9	20.0
1,1-Dichloroethane	Ave	0.3900	0.4106	0.1000	0.0211	0.0200	5.3	50.0
Vinyl acetate	Ave	0.4422	0.3758		0.0170	0.0200	-15.0	50.0
cis-1,2-Dichloroethene	Ave	0.2957	0.3070		0.0208	0.0200	3.8	50.0
2,2-Dichloropropane	Ave	0.0633	0.0626		0.0198	0.0200	-1.2	50.0
2-Butanone (MEK)	Ave	0.0331	0.0354		0.0427	0.0400	6.8	50.0
Bromochloromethane	Ave	0.1382	0.1449		0.0210	0.0200	4.9	50.0
Tetrahydrofuran	Ave	0.0607	0.0619		0.0408	0.0400	2.1	50.0
Chloroform	Ave	0.4292	0.4700		0.0219	0.0200	9.5	20.0
1,1,1-Trichloroethane	Ave	0.3874	0.4211		0.0217	0.0200	8.7	50.0
Cyclohexane	Ave	0.2617	0.2825		0.0216	0.0200	7.9	50.0
1,1-Dichloropropene	Ave	0.3341	0.3610		0.0216	0.0200	8.0	50.0
Carbon tetrachloride	Ave	0.3143	0.3475		0.0221	0.0200	10.6	50.0
Isobutyl alcohol	Ave	0.0067	0.0070		0.521	0.500	4.1	50.0
Benzene	Ave	0.9906	1.068		0.0216	0.0200	7.8	50.0
1,2-Dichloroethane	Ave	0.3437	0.3820		0.0222	0.0200	11.1	50.0
n-Heptane	Lin1		0.1063		0.0220	0.0200	9.9	50.0
Trichloroethene	Ave	0.2865	0.2957		0.0206	0.0200	3.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354712/4 Calibration Date: 11/10/2018 10:36
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 12:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 14:42
 Lab File ID: UXM15490.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	0.2545	0.2662		0.0209	0.0200	4.6	50.0
1,2-Dichloropropane	Ave	0.2005	0.2262		0.0226	0.0200	12.8	20.0
Dibromomethane	Ave	0.1600	0.1676		0.0209	0.0200	4.7	50.0
1,4-Dioxane	Ave	0.0034	0.0032		0.372	0.400	-7.1	50.0
Bromodichloromethane	Ave	0.3252	0.3575		0.0220	0.0200	9.9	50.0
2-Chloroethyl vinyl ether	Ave	0.1359	0.1571		0.0462	0.0400	15.6	50.0
cis-1,3-Dichloropropene	Ave	0.3672	0.4063		0.0221	0.0200	10.6	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.1894	0.2081		0.0440	0.0400	9.9	50.0
Toluene	Ave	1.420	1.400		0.0197	0.0200	-1.4	20.0
trans-1,3-Dichloropropene	Ave	0.4712	0.4571		0.0194	0.0200	-3.0	50.0
Ethyl methacrylate	Ave	0.4049	0.4012		0.0198	0.0200	-0.9	50.0
1,1,2-Trichloroethane	Ave	0.2890	0.2917		0.0202	0.0200	0.9	50.0
1,3-Dichloropropane	Ave	0.5016	0.5024		0.0200	0.0200	0.2	50.0
Tetrachloroethene	Ave	0.2641	0.2263		0.0171	0.0200	-14.3	50.0
2-Hexanone	Ave	0.1759	0.1689		0.0384	0.0400	-4.0	50.0
Chlorodibromomethane	Ave	0.3277	0.3152		0.0192	0.0200	-3.8	50.0
1,2-Dibromoethane	Ave	0.3096	0.3111		0.0201	0.0200	0.5	50.0
Chlorobenzene	Ave	0.9486	0.9303	0.3000	0.0196	0.0200	-1.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3525	0.3243		0.0184	0.0200	-8.0	50.0
Ethylbenzene	Ave	0.5054	0.4784		0.0189	0.0200	-5.3	20.0
m-Xylene & p-Xylene	Ave	0.6247	0.5832		0.0187	0.0200	-6.6	50.0
o-Xylene	Ave	0.6351	0.5880		0.0185	0.0200	-7.4	50.0
Styrene	Ave	1.045	1.025		0.0196	0.0200	-2.0	50.0
Bromoform	Ave	0.2186	0.1975	0.1000	0.0181	0.0200	-9.7	50.0
Isopropylbenzene	Ave	1.381	1.283		0.0186	0.0200	-7.2	50.0
1,1,2,2-Tetrachloroethane	Ave	0.7483	0.7573	0.3000	0.0202	0.0200	1.2	50.0
Bromobenzene	Ave	0.7701	0.7582		0.0197	0.0200	-1.5	50.0
1,2,3-Trichloropropane	Ave	0.2700	0.2887		0.0214	0.0200	6.9	50.0
trans-1,4-Dichloro-2-butene	Lin1		0.2143		0.0197	0.0200	-1.7	50.0
N-Propylbenzene	Ave	0.7072	0.6646		0.0188	0.0200	-6.0	50.0
2-Chlorotoluene	Ave	0.6743	0.6582		0.0195	0.0200	-2.4	50.0
1,3,5-Trimethylbenzene	Ave	2.138	2.065		0.0193	0.0200	-3.4	50.0
4-Chlorotoluene	Ave	0.7163	0.6847		0.0191	0.0200	-4.4	50.0
tert-Butylbenzene	Ave	1.986	1.715		0.0173	0.0200	-13.7	50.0
1,2,4-Trimethylbenzene	Ave	2.287	2.232		0.0195	0.0200	-2.4	50.0
sec-Butylbenzene	Ave	2.294	2.107		0.0184	0.0200	-8.1	50.0
1,3-Dichlorobenzene	Ave	1.377	1.261		0.0183	0.0200	-8.4	50.0
4-Isopropyltoluene	Ave	2.115	1.877		0.0177	0.0200	-11.3	50.0
1,4-Dichlorobenzene	Ave	1.430	1.353		0.0189	0.0200	-5.4	50.0
n-Butylbenzene	Lin1		1.471		0.0183	0.0200	-8.4	50.0
1,2-Dichlorobenzene	Ave	1.373	1.272		0.0185	0.0200	-7.3	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354712/4 Calibration Date: 11/10/2018 10:36
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 12:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 14:42
 Lab File ID: UXM15490.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	0.1945	0.1513		0.0156	0.0200	-22.2	50.0
1,2,4-Trichlorobenzene	Lin1		0.5627		0.0157	0.0200	-21.4	50.0
Hexachlorobutadiene	Lin1		0.1795		0.0124	0.0200	-37.8	50.0
Naphthalene	Ave	2.684	1.857		0.0138	0.0200	-30.8	50.0
1,2,3-Trichlorobenzene	Lin1		0.4383		0.0130	0.0200	-34.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2418	0.2263		0.0187	0.0200	-6.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.2963	0.2764		0.0187	0.0200	-6.7	50.0
Toluene-d8 (Surr)	Ave	1.237	1.119		0.0181	0.0200	-9.5	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4677	0.4124		0.0176	0.0200	-11.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCV 240-354712/5 Calibration Date: 11/10/2018 10:59
 Instrument ID: A3UX16 Calib Start Date: 08/06/2018 16:36
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/06/2018 18:36
 Lab File ID: UXM15491.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
Acetonitrile	Ave	0.0315	0.0274		0.174	0.200	-13.0	50.0
Diisopropyl ether	Ave	0.2413	0.2534		0.0210	0.0200	5.0	50.0
2-Chloro-1,3-butadiene	Ave	0.3496	0.3682		0.0211	0.0200	5.3	50.0
Ethyl tert-butyl ether	Ave	0.7207	0.7305		0.0203	0.0200	1.4	50.0
Ethyl acetate	Ave	0.1951	0.2055		0.0421	0.0400	5.3	50.0
Propionitrile	Ave	0.0345	0.0350		0.203	0.200	1.4	50.0
Methacrylonitrile	Ave	0.1342	0.1350		0.201	0.200	0.6	50.0
Tert-amyl methyl ether	Ave	0.7809	0.8032		0.0206	0.0200	2.9	50.0
n-Butanol	Ave	0.0068	0.0071		0.523	0.500	4.7	50.0
Ethyl acrylate	Ave	0.2653	0.2875		0.0217	0.0200	8.4	50.0
Methyl methacrylate	Ave	0.1737	0.1900		0.0437	0.0400	9.4	50.0
2-Nitropropane	Ave	0.0604	0.0640		0.0424	0.0400	6.1	50.0
n-Butyl acetate	Ave	0.2858	0.3089		0.0216	0.0200	8.1	50.0
1-Chlorohexane	Ave	0.3577	0.3113		0.0174	0.0200	-13.0	50.0
Cyclohexanone	Ave	0.0320	0.0229		0.143	0.200	-28.7	50.0
Pentachloroethane	Ave	0.2168	0.1718		0.0317	0.0400	-20.7	50.0
1,2,3-Trimethylbenzene	Ave	2.503	2.290		0.0183	0.0200	-8.5	50.0
Benzyl chloride	Lin1		0.2863		0.0145	0.0200	-27.5	50.0
1,3,5-Trichlorobenzene	Ave	0.8526	0.5964		0.0140	0.0200	-30.0	50.0
2-Methylnaphthalene	Lin1		0.3290		0.00896	0.0400	-77.6*	50.0

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

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab File ID: BFB8753.D BFB Injection Date: 10/18/2018
 Instrument ID: A3UX8 BFB Injection Time: 01:59
 Analysis Batch No.: 350647

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	36.8	
75	30.0 - 60.0 % of mass 95	51.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.6	
175	5.0 - 9.0 % of mass 174	4.9	(7.5) 1
176	95.0 - 101.0 % of mass 174	64.5	(98.3) 1
177	5.0 - 9.0 % of mass 176	4.0	(6.2) 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
	STDA9 240-350647/4	UX80006.D	10/18/2018	02:52
	STDA9 240-350647/5	UX80007.D	10/18/2018	03:14
	STDA9 240-350647/6	UX80008.D	10/18/2018	03:37
	STDA9 240-350647/7	UX80009.D	10/18/2018	04:00
	STDA9 240-350647/8	UX80010.D	10/18/2018	04:21
	STDA9 240-350647/9	UX80011.D	10/18/2018	04:43
	STDA9 240-350647/10	UX80012.D	10/18/2018	05:05
	STDA9 240-350647/11	UX80013.D	10/18/2018	05:27
	STDA9 240-350647/12	UX80014.D	10/18/2018	05:49

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103714-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-350647/12	UX80014.D
Level 2	STDA9 240-350647/11	UX80013.D
Level 3	STDA9 240-350647/10	UX80012.D
Level 4	STDA9 240-350647/9	UX80011.D
Level 5	STDA9 240-350647/8	UX80010.D
Level 6	STDA9 240-350647/7	UX80009.D
Level 7	STDA9 240-350647/6	UX80008.D
Level 8	STDA9 240-350647/5	UX80007.D
Level 9	STDA9 240-350647/4	UX80006.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Acetonitrile	0.0659 0.0524	0.0585 0.0505	0.0667 0.0482	0.0624 0.0472	0.0562	Ave	0.0564				13.1		15.0				
Diisopropyl ether	0.2104 0.2465	0.2128 0.2517	0.2652 0.2429	0.2705 0.2297	0.2674	Ave	0.2441				9.2		15.0				
2-Chloro-1,3-butadiene	0.7281 0.8227	0.6733 0.8636	0.8699 0.8631	0.8586 0.8358	0.8564	Ave	0.8191				8.6		15.0				
Ethyl tert-butyl ether	1.0204 1.1113	1.0102 1.1142	1.2137 1.1062	1.1919 1.0158	1.1443	Ave	1.1031				6.8		15.0				
Ethyl acetate	0.4472 0.3456	0.4509 0.3591	0.4428 0.3481	0.3995 0.3449	0.3828	Ave	0.3912				11.7		15.0				
Propionitrile	0.0522 0.0477	0.0511 0.0478	0.0622 0.0460	0.0559 0.0437	0.0520	Ave	0.0510				11.0		15.0				
Methacrylonitrile	0.2598 0.2485	0.2458 0.2532	0.3002 0.2450	0.2799 0.2373	0.2748	Ave	0.2605				7.9		15.0				
Tert-amyl methyl ether	0.5374 0.6368	0.5318 0.6409	0.6989 0.6260	0.6746 0.5747	0.6512	Ave	0.6191				9.5		15.0				
n-Butanol	++++ 0.0078	++++ 0.0083	0.0151 0.0083	0.0091 0.0078	0.0075	Lin1	0.5793	0.0078						0.9960		0.9900	
Ethyl acrylate	0.3022 0.3622	0.3199 0.3783	0.4075 0.3636	0.3824 0.3686	0.3911	Ave	0.3640				9.2		15.0				
Methyl methacrylate	0.2925 0.3311	0.3125 0.3447	0.3829 0.3255	0.3644 0.3274	0.3685	Ave	0.3388				8.6		15.0				
2-Nitropropane	0.0299 0.0485	0.0393 0.0596	0.0555 0.0686	0.0522 ++++	0.0479	Qua	-0.036	0.0478	0.0000526					1.0000		0.9900	
n-Butyl acetate	++++ 0.5208	++++ 0.5380	0.7420 0.5055	0.5741 0.5174	0.5316	Ave	0.5613				14.7		15.0				

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.: 240-103714-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1-Chlorohexane	0.3943 0.4521	0.3936 0.4872	0.4454 0.4786	0.4530 0.4782	0.4748	Ave		0.4508			7.8		15.0				
Cyclohexanone	++++ 0.0137	++++ 0.0151	0.0238 0.0156	0.0149 0.0143	0.0121	Lin1	0.1864	0.0146						0.9930		0.9900	
Pentachloroethane	0.2309 0.3683	0.2693 0.4224	0.5213 0.4442	0.3558 0.4051	0.3424	Lin1	-0.423	0.4177						0.9950		0.9900	
1,2,3-Trimethylbenzene	3.3780 3.4782	3.1998 3.6509	4.9367 3.4477	3.9795 3.1789	3.6771	Ave		3.6585			14.8		15.0				
Benzyl chloride	++++ 0.1192	++++ 0.1625	0.1439 0.1932	0.0968 0.1911	0.0927	Qua	-0.965	0.1570	0.0001663					0.9970		0.9900	
1,3,5-Trichlorobenzene	++++ 1.2467	++++ 1.3061	2.0755 1.2098	1.4281 1.1029	1.3188	Lin1	4.1420	1.1538						0.9960		0.9900	
2-Methylnaphthalene	++++ 1.4067	++++ 1.4942	2.2722 1.3322	1.4840 ++++	1.3574	Lin1	6.4375	1.3512						0.9950		0.9900	
1-Chloro-1-fluoroethane TIC	0.6254 0.5744	0.5656 0.5624	0.7066 0.5413	0.6740 0.5249	0.6179	None											

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab File ID: BFB8776.D BFB Injection Date: 11/06/2018
 Instrument ID: A3UX8 BFB Injection Time: 06:11
 Analysis Batch No.: 353820

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	33.3	
75	30.0 - 60.0 % of mass 95	50.5	
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	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	74.8	
175	5.0 - 9.0 % of mass 174	5.6	(7.5) 1
176	95.0 - 101.0 % of mass 174	72.6	(97.0) 1
177	5.0 - 9.0 % of mass 176	4.3	(6.0) 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
	STD8260 240-353820/3	UX80595.D	11/06/2018	06:49
	STD8260 240-353820/4	UX80596.D	11/06/2018	07:11
	STD8260 240-353820/5	UX80597.D	11/06/2018	07:34
	STD8260 240-353820/6	UX80598.D	11/06/2018	07:56
	ICIS 240-353820/7	UX80599.D	11/06/2018	08:18
	STD8260 240-353820/8	UX80600.D	11/06/2018	08:40
	STD8260 240-353820/9	UX80601.D	11/06/2018	09:02
	STD8260 240-353820/10	UX80602.D	11/06/2018	09:24
	STD8260 240-353820/11	UX80603.D	11/06/2018	09:45
	ICV 240-353820/13	UX80605.D	11/06/2018	10:30

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103714-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-353820/11	UX80603.D
Level 2	STD8260 240-353820/10	UX80602.D
Level 3	STD8260 240-353820/9	UX80601.D
Level 4	STD8260 240-353820/8	UX80600.D
Level 5	ICIS 240-353820/7	UX80599.D
Level 6	STD8260 240-353820/6	UX80598.D
Level 7	STD8260 240-353820/5	UX80597.D
Level 8	STD8260 240-353820/4	UX80596.D
Level 9	STD8260 240-353820/3	UX80595.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Dichlorodifluoromethane	0.3664 0.3475	0.4353 0.3350	0.3768 0.3095	0.4143 0.3233	0.3804	Ave	0.3654				11.4	15.0					
Chloromethane	0.7187 0.6261	0.7217 0.6052	0.7097 0.5775	0.7412 0.5865	0.6995	Ave	0.6651			0.1000	9.8	15.0					
Vinyl chloride	0.4368 0.3685	0.4318 0.3529	0.4007 0.3368	0.4289 0.3492	0.4087	Ave	0.3905				10.0	15.0					
Butadiene	0.6116 0.5367	0.6182 0.5197	0.5808 0.5027	0.6380 0.5183	0.5998	Ave	0.5695				8.9	15.0					
Bromomethane	0.2481 0.1886	0.2297 0.1609	0.2332 +++++	0.2358 +++++	0.2205	Ave	0.2167				14.2	15.0					
Chloroethane	0.2958 0.2482	0.2842 0.2301	0.2788 0.2028	0.2971 +++++	0.2734	Ave	0.2638				12.8	15.0					
Dichlorofluoromethane	0.5733 0.5013	0.6076 0.4816	0.5591 0.4563	0.5942 0.4577	0.5602	Ave	0.5324				11.0	15.0					
Trichlorofluoromethane	0.5051 0.4367	0.4821 0.4296	0.5114 0.4097	0.5241 0.4142	0.4896	Ave	0.4669				9.5	15.0					
Ethyl ether	0.3406 0.3208	0.3449 0.2771	0.3598 0.2745	0.3337 0.2726	0.3282	Ave	0.3169				10.6	15.0					
Acrolein	0.0502 0.0529	0.0586 0.0508	0.0593 0.0481	0.0598 0.0478	0.0606	Ave	0.0542				9.8	15.0					
1,1-Dichloroethene	0.2906 0.3059	0.3201 0.2599	0.3282 0.2539	0.3387 0.2567	0.3086	Ave	0.2958				10.9	15.0					
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2181 0.2193	0.2522 0.1900	0.2295 0.1859	0.2436 0.1935	0.2325	Ave	0.2183				11.0	15.0					
Acetone	0.3264 0.1190	0.2145 0.1056	0.1620 0.1030	0.1492 0.1047	0.1406	Lin1	0.5104 0.1048							0.9970		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 Canton Job No.: 240-103714-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Iodomethane	0.5119 0.4732	0.5002 0.4074	0.4885 0.4052	0.5363 0.4056	0.4997	Ave		0.4698			10.8		15.0				
Carbon disulfide	0.7553 0.9415	0.8388 0.8249	0.8500 0.8452	0.9296 0.8558	0.9371	Ave		0.8642			7.1		15.0				
3-Chloro-1-propene	0.1464 0.1859	0.1467 0.1690	0.1695 0.1674	0.1826 0.1692	0.1866	Ave		0.1693			8.8		15.0				
Methyl acetate	0.3303 0.2772	0.3251 0.2631	0.3115 0.2587	0.3318 0.2632	0.3247	Ave		0.2984			10.7		15.0				
Methylene Chloride	++++ 0.3340	0.6410 0.2839	0.4476 0.2758	0.4126 0.2725	0.3693	Lin1	0.9302	0.2762						0.9960		0.9900	
tert-Butyl alcohol	0.0244 0.0234	0.0222 0.0213	0.0245 0.0211	0.0257 0.0209	0.0289	Ave		0.0236			11.1		15.0				
Acrylonitrile	0.1478 0.1242	0.1388 0.1124	0.1366 0.1116	0.1452 0.1121	0.1440	Ave		0.1303			11.7		15.0				
Methyl tert-butyl ether	0.7282 0.6666	0.6756 0.6054	0.6994 0.5961	0.7592 0.5682	0.7296	Ave		0.6698			10.0		15.0				
trans-1,2-Dichloroethene	0.3588 0.3349	0.3517 0.2913	0.3669 0.2881	0.3819 0.2850	0.3565	Ave		0.3350			11.1		15.0				
Hexane	0.0720 0.0848	0.0981 0.0845	0.0910 0.0812	0.0994 0.0876	0.0966	Ave		0.0883			10.1		15.0				
1,1-Dichloroethane	0.7962 0.7024	0.7470 0.6320	0.7665 0.6283	0.7903 0.6284	0.7332	Ave		0.7138		0.1000	9.7		15.0				
Vinyl acetate	0.5807 0.6541	0.5605 0.6477	0.6112 0.6581	0.6326 0.6663	0.6453	Ave		0.6285			5.9		15.0				
2-Butanone (MEK)	++++ 0.1596	++++ 0.1532	0.2063 0.1514	0.1975 0.1524	0.1967	Ave		0.1739			14.3		15.0				
cis-1,2-Dichloroethene	0.4221 0.3556	0.3743 0.3152	0.3783 0.3083	0.3993 0.3036	0.3753	Ave		0.3591			11.7		15.0				
2,2-Dichloropropane	0.3928 0.3567	0.3817 0.3217	0.3535 0.3231	0.3983 0.3135	0.3644	Ave		0.3562			8.8		15.0				
Bromochloromethane	0.1326 0.1416	0.1083 0.1274	0.1419 0.1246	0.1519 0.1237	0.1464	Ave		0.1331			10.2		15.0				
Tetrahydrofuran	0.3787 0.1081	0.2380 0.1006	0.1476 0.0982	0.1339 0.0991	0.1288	Lin1	0.5794	0.0984						0.9990		0.9900	
Chloroform	0.5765 0.5260	0.5489 0.4752	0.5581 0.4770	0.5830 0.4712	0.5527	Ave		0.5298			8.4		15.0				
1,1,1-Trichloroethane	0.3711 0.4733	0.3937 0.4239	0.4495 0.4257	0.5002 0.4231	0.4903	Ave		0.4390			9.9		15.0				
Cyclohexane	0.9909 0.9153	0.8858 0.8154	0.9822 0.8112	1.0097 0.8231	0.9952	Ave		0.9143			9.1		15.0				

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.: 240-103714-1 Analy Batch No.: 353820
 SDG No.: _____
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y
 Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1,1-Dichloropropene	0.4248	0.4194	0.4634	0.4929	0.4328	Ave	0.4284				7.5	15.0					
	0.4267	0.4014	0.3974	0.3970													
Carbon tetrachloride	0.3159	0.3297	0.3768	0.4060	0.4045	Ave	0.3717				8.6	15.0					
	0.4041	0.3645	0.3713	0.3722													
Isobutyl alcohol	0.0135	0.0120	0.0116	0.0135	0.0142	Ave	0.0122				10.3	15.0					
	0.0122	0.0109	0.0109	0.0110													
1,2-Dichloroethane	0.5365	0.4928	0.5363	0.5080	0.4980	Ave	0.4799				9.4	15.0					
	0.4658	0.4272	0.4287	0.4260													
Benzene	1.4341	1.2912	1.4171	1.3767	1.3052	Ave	1.2762				9.4	15.0					
	1.2505	1.1485	1.1341	1.1282													
n-Heptane	0.0701	0.0876	0.0940	0.1011	0.0966	Ave	0.0897				9.6	15.0					
	0.0906	0.0879	0.0876	0.0916													
Trichloroethene	0.4245	0.3310	0.3558	0.3320	0.3175	Ave	0.3280				12.9	15.0					
	0.3159	0.2929	0.2904	0.2915													
Methylcyclohexane	0.4948	0.5769	0.6316	0.6586	0.6392	Ave	0.5781				10.2	15.0					
	0.6088	0.5367	0.5256	0.5312													
1,2-Dichloropropane	0.3855	0.3301	0.3876	0.3863	0.3595	Ave	0.3548				7.6	15.0					
	0.3579	0.3330	0.3269	0.3260													
Dibromomethane	0.1380	0.1280	0.1514	0.1463	0.1457	Ave	0.1373				6.6	15.0					
	0.1404	0.1286	0.1283	0.1294													
1,4-Dioxane	++++	0.0016	0.0021	0.0021	0.0022	Ave	0.0019				11.1	15.0					
	0.0019	0.0018	0.0018	0.0018													
Bromodichloromethane	0.2946	0.2571	0.2909	0.3106	0.3185	Ave	0.3092				8.0	15.0					
	0.3328	0.3175	0.3310	0.3295													
2-Chloroethyl vinyl ether	0.1095	0.1072	0.1237	0.1248	0.1349	Ave	0.1240				7.6	15.0					
	0.1286	0.1293	0.1288	0.1288													
cis-1,3-Dichloropropene	0.3137	0.2334	0.3185	0.3374	0.3598	Ave	0.3419				14.2	15.0					
	0.3806	0.3707	0.3801	0.3824													
4-Methyl-2-pentanone (MIBK)	0.2995	0.3147	0.3354	0.3615	0.3762	Ave	0.3276				8.1	15.0					
	0.3348	0.3123	0.3055	0.3087													
Toluene	1.9927	1.7824	1.9104	1.8497	1.8141	Ave	1.7866				6.8	15.0					
	1.7689	1.6272	1.6700	1.6638													
trans-1,3-Dichloropropene	0.2772	0.2491	0.3305	0.3716	0.3739	Lin1	-0.323	0.4370						0.9990		0.9900	
	0.4161	0.4172	0.4463	0.4421													
Ethyl methacrylate	0.2774	0.2870	0.3275	0.3550	0.3739	Ave	0.3411				10.6	15.0					
	0.3681	0.3646	0.3646	0.3513													
1,1,2-Trichloroethane	0.3464	0.2692	0.2754	0.2899	0.2849	Ave	0.2768				10.8	15.0					
	0.2732	0.2523	0.2507	0.2494													
1,3-Dichloropropane	0.5234	0.4909	0.5187	0.5349	0.5174	Ave	0.4921				6.7	15.0					
	0.4824	0.4548	0.4553	0.4513													

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.: 240-103714-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Tetrachloroethene	0.4142 0.3280	0.3524 0.3088	0.3458 0.3099	0.3585 0.3096	0.3320	Ave		0.3399			9.9		15.0				
2-Hexanone	0.2337 0.3124	0.2538 0.2980	0.3094 0.2938	0.3441 0.2892	0.3564	Ave		0.2990			13.0		15.0				
Dibromochloromethane	0.1395 0.2687	0.1639 0.2676	0.2164 0.2837	0.2372 0.2827	0.2548	Lin1	-0.214	0.2799						0.9990		0.9900	
1,2-Dibromoethane	0.2306 0.2553	0.2189 0.2419	0.2600 0.2420	0.2679 0.2421	0.2551	Ave		0.2460			6.2		15.0				
Chlorobenzene	1.2386 1.0989	1.1532 1.0096	1.2529 1.0203	1.2460 1.0156	1.1408	Ave		1.1306		0.3000	8.9		15.0				
1,1,1,2-Tetrachloroethane	0.2537 0.3665	0.2571 0.3352	0.3481 0.3470	0.3587 0.3417	0.3651	Ave		0.3304			13.2		15.0				
Ethylbenzene	0.6614 0.6132	0.5976 0.5712	0.6552 0.5773	0.6658 0.5711	0.6241	Ave		0.6152			6.3		15.0				
m-Xylene & p-Xylene	0.7759 0.7631	0.7836 0.6995	0.8211 0.7008	0.8099 0.6923	0.7695	Ave		0.7573			6.4		15.0				
o-Xylene	0.7202 0.7486	0.6317 0.6639	0.7862 0.6603	0.8170 0.6421	0.7754	Ave		0.7162			9.6		15.0				
Styrene	0.9270 1.1781	0.8974 1.0966	1.1695 1.1010	1.2244 1.0664	1.1838	Ave		1.0938			10.5		15.0				
Bromoform	++++ 0.1292	0.0841 0.1333	0.0901 0.1451	0.1060 0.1462	0.1209	Lin1	-0.214	0.1431		0.1000				0.9980		0.9900	
Isopropylbenzene	1.6366 2.0169	1.7801 1.8248	2.1084 1.8179	2.1090 1.8059	2.0896	Ave		1.9099			9.1		15.0				
1,1,2,2-Tetrachloroethane	0.5751 0.6495	0.5904 0.6068	0.6468 0.6116	0.7043 0.6088	0.6913	Ave		0.6316		0.3000	7.0		15.0				
Bromobenzene	1.1104 0.8541	0.8439 0.8242	0.9291 0.8221	0.9351 0.8059	0.8810	Ave		0.8895			10.6		15.0				
1,2,3-Trichloropropane	0.2072 0.2040	0.2261 0.1938	0.2571 0.1939	0.2400 0.1892	0.2341	Ave		0.2162			11.1		15.0				
trans-1,4-Dichloro-2-butene	0.1800 0.2825	0.2295 0.2860	0.2758 0.3020	0.2942 0.3030	0.2848	Ave		0.2709			14.9		15.0				
N-Propylbenzene	0.9893 1.1369	0.9999 1.0634	1.1884 1.0810	1.1802 1.0518	1.1888	Ave		1.0977			7.2		15.0				
2-Chlorotoluene	0.9069 0.9373	0.9278 0.9018	1.0143 0.8970	1.0740 0.8828	1.0013	Ave		0.9492			6.9		15.0				
1,3,5-Trimethylbenzene	3.2078 3.5524	2.9287 3.3254	3.7053 3.3220	3.7535 3.2855	3.5808	Ave		3.4068			7.7		15.0				
4-Chlorotoluene	0.9080 0.9484	0.9454 0.9172	1.0556 0.9076	1.0628 0.8846	0.9801	Ave		0.9566			6.7		15.0				

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.: 240-103714-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
tert-Butylbenzene	3.0682	2.7070	3.2686	3.2425	3.1766	Ave		3.0341			6.2		15.0				
	3.1279	2.9233	2.9225	2.8702													
1,2,4-Trimethylbenzene	3.0198	3.0614	3.8105	3.8620	3.7031	Ave		3.4432			9.0		15.0				
	3.5662	3.3391	3.3561	3.2707													
sec-Butylbenzene	4.1781	4.3421	4.9121	5.0382	4.7060	Ave		4.4982			7.4		15.0				
	4.6382	4.2584	4.2401	4.1702													
1,3-Dichlorobenzene	2.0244	1.9514	1.9356	1.9768	1.8298	Ave		1.7963			10.3		15.0				
	1.6962	1.5935	1.5992	1.5596													
p-Isopropyltoluene	3.2018	3.5929	3.8787	4.0470	3.9068	Ave		3.6532			7.2		15.0				
	3.7311	3.5439	3.5227	3.4539													
1,4-Dichlorobenzene	2.3535	2.0534	1.9515	1.9964	1.8176	Ave		1.8528			14.0		15.0				
	1.7117	1.6170	1.6154	1.5583													
n-Butylbenzene	3.0374	3.1236	3.4494	3.5708	3.4639	Ave		3.2723			5.8		15.0				
	3.3593	3.1679	3.1536	3.1245													
1,2-Dichlorobenzene	2.0627	1.7884	1.8879	1.8575	1.6785	Ave		1.6787			14.2		15.0				
	1.5858	1.4342	1.4241	1.3890													
1,2-Dibromo-3-Chloropropane	++++	++++	0.0512	0.0771	0.0749	Lin1	-0.171	0.0861						0.9980		0.9900	
	0.0821	0.0775	0.0850	0.0883													
1,2,4-Trichlorobenzene	1.3241	1.1884	1.1356	1.1047	1.0852	Ave		1.0752			12.2		15.0				
	1.0196	0.9362	0.9520	0.9314													
Hexachlorobutadiene	++++	++++	0.6794	0.7315	0.6512	Ave		0.6026			14.2		15.0				
	0.5828	0.5231	0.5338	0.5167													
Naphthalene	2.2190	1.9473	1.9824	2.2202	2.2344	Ave		2.0464			7.4		15.0				
	2.1136	1.9145	1.9382	1.8484													
1,2,3-Trichlorobenzene	++++	++++	1.0921	1.1088	1.0355	Ave		0.9454			14.1		15.0				
	0.9285	0.8150	0.8370	0.8009													
Dibromofluoromethane (Surr)	0.2333	0.2605	0.2694	0.2595	0.2657	Ave		0.2472			6.6		15.0				
	0.2250	0.2364	0.2363	0.2388													
1,2-Dichloroethane-d4 (Surr)	0.3962	0.3756	0.4161	0.3566	0.3572	Ave		0.3443			13.7		15.0				
	0.2799	0.3024	0.3045	0.3103													
Toluene-d8 (Surr)	1.4502	1.4983	1.5808	1.4646	1.4755	Ave		1.4290			6.1		15.0				
	1.3143	1.3251	1.3784	1.3735													
4-Bromofluorobenzene (Surr)	0.5861	0.6093	0.6154	0.5821	0.5667	Ave		0.5387			12.1		15.0				
	0.4570	0.4755	0.4838	0.4723													

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

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

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab File ID: BFB8793.D BFB Injection Date: 11/13/2018
 Instrument ID: A3UX8 BFB Injection Time: 21:56
 Analysis Batch No.: 355270

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	30.4
75	30.0 - 60.0 % of mass 95	54.4
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	0.2 (0.3) 1
174	50.0 - 120.00 % of mass 95	79.6
175	5.0 - 9.0 % of mass 174	5.8 (7.3) 1
176	95.0 - 101.0 % of mass 174	75.7 (95.1) 1
177	5.0 - 9.0 % of mass 176	4.9 (6.4) 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
	CCV 240-355270/5	UX80898.D	11/13/2018	22:52
	CCVIS 240-355270/6	UX80899.D	11/13/2018	23:15
	LCS 240-355270/7	UX80900.D	11/13/2018	23:37
	MB 240-355270/8	UX80901.D	11/13/2018	23:59
SB-MW135A-2-5.5	240-103714-2	UX80903.D	11/14/2018	00:50
SB-MW135B-12.5-18	240-103714-3	UX80904.D	11/14/2018	01:13
SB-MW136A-1.2-2	240-103714-4	UX80905.D	11/14/2018	01:35
SB-MW136B-15.8-18.5	240-103714-5	UX80906.D	11/14/2018	01:57

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCV 240-355270/5 Calibration Date: 11/13/2018 22:52
 Instrument ID: A3UX8 Calib Start Date: 10/18/2018 02:52
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 10/18/2018 05:49
 Lab File ID: UX80898.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0564	0.0345		0.122	0.200	-38.9	50.0
Diisopropyl ether	Ave	0.2441	0.2327		0.0191	0.0200	-4.7	50.0
2-Chloro-1,3-butadiene	Ave	0.8191	0.6702		0.0164	0.0200	-18.2	50.0
Ethyl tert-butyl ether	Ave	1.103	0.8277		0.0150	0.0200	-25.0	50.0
Ethyl acetate	Ave	0.3912	0.2774		0.0284	0.0400	-29.1	50.0
Propionitrile	Ave	0.0510	0.0319		0.125	0.200	-37.5	50.0
Methacrylonitrile	Ave	0.2605	0.1929		0.148	0.200	-26.0	50.0
Tert-amyl methyl ether	Ave	0.6191	0.5672		0.0183	0.0200	-8.4	50.0
n-Butanol	Lin1		0.0044		0.208	0.500	-58.3*	50.0
Ethyl acrylate	Ave	0.3640	0.2734		0.0150	0.0200	-24.9	50.0
Methyl methacrylate	Ave	0.3388	0.2640		0.0312	0.0400	-22.1	50.0
2-Nitropropane	Qua		0.0381		0.0316	0.0400	-21.1	50.0
n-Butyl acetate	Ave	0.5613	0.3457		0.0123	0.0200	-38.4	50.0
1-Chlorohexane	Ave	0.4508	0.4787		0.0212	0.0200	6.2	50.0
Cyclohexanone	Lin1		0.0073		0.0874	0.200	-56.3*	50.0
Pentachloroethane	Lin1		0.3821		0.0376	0.0400	-6.0	50.0
1,2,3-Trimethylbenzene	Ave	3.659	3.220		0.0176	0.0200	-12.0	50.0
Benzyl chloride	Qua		0.0823		0.0163	0.0200	-18.3	50.0
1,3,5-Trichlorobenzene	Lin1		1.133		0.0161	0.0200	-19.7	50.0
2-Methylnaphthalene	Lin1		0.7973		0.0188	0.0400	-52.9*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-355270/6 Calibration Date: 11/13/2018 23:15
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80899.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3654	0.4679		0.0256	0.0200	28.1	50.0
Chloromethane	Ave	0.6651	0.5270	0.1000	0.0158	0.0200	-20.8	50.0
Vinyl chloride	Ave	0.3905	0.3588		0.0184	0.0200	-8.1	20.0
Butadiene	Ave	0.5695	0.4911		0.0172	0.0200	-13.8	50.0
Bromomethane	Ave	0.2167	0.1880		0.0173	0.0200	-13.3	50.0
Chloroethane	Ave	0.2638	0.2247		0.0170	0.0200	-14.8	50.0
Dichlorofluoromethane	Ave	0.5324	0.4776		0.0179	0.0200	-10.3	50.0
Trichlorofluoromethane	Ave	0.4669	0.4635		0.0199	0.0200	-0.7	50.0
Ethyl ether	Ave	0.3169	0.2606		0.0164	0.0200	-17.8	50.0
Acrolein	Ave	0.0542	0.0339		0.0625	0.100	-37.5	50.0
1,1-Dichloroethene	Ave	0.2958	0.2887		0.0195	0.0200	-2.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2183	0.2319		0.0212	0.0200	6.2	50.0
Acetone	Lin1		0.1084		0.0365	0.0400	-8.7	50.0
Iodomethane	Ave	0.4698	0.4690		0.0200	0.0200	-0.2	50.0
Carbon disulfide	Ave	0.8642	0.8228		0.0190	0.0200	-4.8	50.0
3-Chloro-1-propene	Ave	0.1693	0.1588		0.0188	0.0200	-6.2	50.0
Methyl acetate	Ave	0.2984	0.2108		0.0283	0.0400	-29.3	50.0
Methylene Chloride	Lin1		0.3207		0.0198	0.0200	-0.8	50.0
tert-Butyl alcohol	Ave	0.0236	0.0190		0.161	0.200	-19.4	50.0
Acrylonitrile	Ave	0.1303	0.0928		0.142	0.200	-28.8	50.0
Methyl tert-butyl ether	Ave	0.6698	0.6520		0.0195	0.0200	-2.7	50.0
trans-1,2-Dichloroethene	Ave	0.3350	0.3234		0.0193	0.0200	-3.5	50.0
Hexane	Ave	0.0883	0.0925		0.0209	0.0200	4.7	20.0
1,1-Dichloroethane	Ave	0.7138	0.6290	0.1000	0.0176	0.0200	-11.9	50.0
Vinyl acetate	Ave	0.6285	0.6041		0.0192	0.0200	-3.9	50.0
2-Butanone (MEK)	Ave	0.1739	0.1541		0.0354	0.0400	-11.4	50.0
2,2-Dichloropropane	Ave	0.3562	0.3446		0.0194	0.0200	-3.2	50.0
cis-1,2-Dichloroethene	Ave	0.3591	0.3384		0.0188	0.0200	-5.8	50.0
Bromochloromethane	Ave	0.1331	0.1274		0.0191	0.0200	-4.3	50.0
Chloroform	Ave	0.5298	0.5532		0.0209	0.0200	4.4	20.0
Tetrahydrofuran	Lin1		0.0817		0.0273	0.0400	-31.7	50.0
1,1,1-Trichloroethane	Ave	0.4390	0.4856		0.0221	0.0200	10.6	50.0
Cyclohexane	Ave	0.9143	0.7637		0.0167	0.0200	-16.5	50.0
1,1-Dichloropropene	Ave	0.4284	0.4526		0.0211	0.0200	5.6	50.0
Carbon tetrachloride	Ave	0.3717	0.4049		0.0218	0.0200	8.9	50.0
Isobutyl alcohol	Ave	0.0122	0.0108		0.441	0.500	-11.7	50.0
1,2-Dichloroethane	Ave	0.4799	0.4708		0.0196	0.0200	-1.9	50.0
Benzene	Ave	1.276	1.257		0.0197	0.0200	-1.5	50.0
n-Heptane	Ave	0.0897	0.1013		0.0226	0.0200	13.0	50.0
Trichloroethene	Ave	0.3280	0.3123		0.0190	0.0200	-4.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-355270/6 Calibration Date: 11/13/2018 23:15
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80899.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3548	0.3109		0.0175	0.0200	-12.4	20.0
Methylcyclohexane	Ave	0.5781	0.6064		0.0210	0.0200	4.9	50.0
1,4-Dioxane	Ave	0.0019	0.0022		0.462	0.400	15.4	50.0
Dibromomethane	Ave	0.1373	0.1387		0.0202	0.0200	1.0	50.0
Bromodichloromethane	Ave	0.3092	0.3205		0.0207	0.0200	3.7	50.0
2-Chloroethyl vinyl ether	Ave	0.1240	0.1004		0.0324	0.0400	-19.0	50.0
cis-1,3-Dichloropropene	Ave	0.3419	0.3293		0.0193	0.0200	-3.7	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3276	0.2714		0.0331	0.0400	-17.2	50.0
Toluene	Ave	1.787	1.887		0.0211	0.0200	5.6	20.0
trans-1,3-Dichloropropene	Lin1		0.3814		0.0182	0.0200	-9.0	50.0
Ethyl methacrylate	Ave	0.3411	0.3533		0.0207	0.0200	3.6	50.0
1,1,2-Trichloroethane	Ave	0.2768	0.2777		0.0201	0.0200	0.3	50.0
1,3-Dichloropropane	Ave	0.4921	0.5244		0.0213	0.0200	6.5	50.0
Tetrachloroethene	Ave	0.3399	0.3915		0.0230	0.0200	15.2	50.0
2-Hexanone	Ave	0.2990	0.2674		0.0358	0.0400	-10.6	50.0
Dibromochloromethane	Lin1		0.2418		0.0180	0.0200	-9.8	50.0
1,2-Dibromoethane	Ave	0.2460	0.2489		0.0202	0.0200	1.2	50.0
Chlorobenzene	Ave	1.131	1.133	0.3000	0.0200	0.0200	0.2	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3304	0.3537		0.0214	0.0200	7.1	50.0
Ethylbenzene	Ave	0.6152	0.6383		0.0208	0.0200	3.8	20.0
m-Xylene & p-Xylene	Ave	0.7573	0.8150		0.0215	0.0200	7.6	50.0
o-Xylene	Ave	0.7162	0.7469		0.0209	0.0200	4.3	50.0
Styrene	Ave	1.094	1.181		0.0216	0.0200	8.0	50.0
Bromoform	Lin1		0.1112	0.1000	0.0170	0.0200	-14.8	50.0
Isopropylbenzene	Ave	1.910	2.151		0.0225	0.0200	12.6	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6316	0.5975	0.3000	0.0189	0.0200	-5.4	50.0
Bromobenzene	Ave	0.8895	0.9136		0.0205	0.0200	2.7	50.0
1,2,3-Trichloropropane	Ave	0.2162	0.2143		0.0198	0.0200	-0.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2709	0.2060		0.0152	0.0200	-23.9	50.0
N-Propylbenzene	Ave	1.098	1.160		0.0211	0.0200	5.6	50.0
2-Chlorotoluene	Ave	0.9492	0.9513		0.0200	0.0200	0.2	50.0
1,3,5-Trimethylbenzene	Ave	3.407	3.611		0.0212	0.0200	6.0	50.0
4-Chlorotoluene	Ave	0.9566	0.9776		0.0204	0.0200	2.2	50.0
tert-Butylbenzene	Ave	3.034	3.510		0.0231	0.0200	15.7	50.0
1,2,4-Trimethylbenzene	Ave	3.443	3.670		0.0213	0.0200	6.6	50.0
sec-Butylbenzene	Ave	4.498	4.573		0.0203	0.0200	1.7	50.0
1,3-Dichlorobenzene	Ave	1.796	1.860		0.0207	0.0200	3.5	50.0
p-Isopropyltoluene	Ave	3.653	3.925		0.0215	0.0200	7.5	50.0
1,4-Dichlorobenzene	Ave	1.853	1.880		0.0203	0.0200	1.5	50.0
n-Butylbenzene	Ave	3.272	3.481		0.0213	0.0200	6.4	50.0
1,2-Dichlorobenzene	Ave	1.679	1.669		0.0199	0.0200	-0.6	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103714-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-355270/6 Calibration Date: 11/13/2018 23:15
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80899.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.0524		0.0142	0.0200	-29.2	50.0
1,2,4-Trichlorobenzene	Ave	1.075	0.9867		0.0184	0.0200	-8.2	50.0
Hexachlorobutadiene	Ave	0.6026	0.5997		0.0199	0.0200	-0.5	50.0
Naphthalene	Ave	2.046	1.576		0.0154	0.0200	-23.0	50.0
1,2,3-Trichlorobenzene	Ave	0.9454	0.8485		0.0179	0.0200	-10.3	50.0
Dibromofluoromethane (Surr)	Ave	0.2472	0.2230		0.0451	0.0500	-9.8	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3443	0.2981		0.0433	0.0500	-13.4	50.0
Toluene-d8 (Surr)	Ave	1.429	1.317		0.0461	0.0500	-7.9	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5387	0.5014		0.0465	0.0500	-6.9	50.0

ANALYTICAL REPORT

Job Number: 240-103610-1

Job Description: MRC Block F Deepwell

For:
Tetra Tech, Inc.
20251 Century Blvd
Suite 200
Germantown, MD 20874
Attention: Mike Martin



Approved for release.
John McFadden
Project Manager I
11/13/2018 2:02 PM

John McFadden, Project Manager I
4101 Shuffel Street NW, North Canton, OH, 44720
(330)497-9396
john.mcfadden@testamericainc.com
11/13/2018

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.

TestAmerica Laboratories, Inc.

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Table of Contents

Cover Title Page	1
Data Summaries	4
Definitions	4
Case Narrative	5
Detection Summary	7
Client Sample Results	8
Default Detection Limits	16
Surrogate Summary	19
QC Sample Results	20
QC Association	31
Chronicle	32
Certification Summary	34
Method Summary	35
Sample Summary	36
Manual Integration Summary	37
Reagent Traceability	40
Organic Sample Data	70
GC/MS VOA	70
Method 8260B	70
Method 8260B QC Summary	71
Method 8260B Sample Data	92
Standards Data	107
Method 8260B ICAL Data	107
Method 8260B CCAL Data	135
Raw QC Data	151
Method 8260B Blank Data	151

Table of Contents

Method 8260B LCS/LCSD Data	158
Method 8260B MS/MSD Data	164
Method 8260B Run Logs	170
Method 8260B Prep Data	175
Inorganic Sample Data	183
General Chemistry Data	183
Gen Chem Cover Page	184
Gen Chem MDL	185
Gen Chem Analysis Run Log	187
Gen Chem Prep Data	189
Shipping and Receiving Documents	190
Client Chain of Custody	191

Definitions/Glossary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.
*	LCS or LCSD is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

GC/MS VOA TICs

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

Glossary

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

CASE NARRATIVE

Client: Tetra Tech, Inc.

Project: MRC Block F Deepwell

Report Number: 240-103610-1

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.

All solid sample results are reported on an "as received" basis unless otherwise indicated by the presence of a % solids value in the method header.

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

RECEIPT

The samples were received on 10/31/2018 10:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.1° C.

VOLATILE ORGANIC COMPOUNDS (GCMS)

Samples SB-SEMW-10D-10-15 (240-103610-2), SB-SEMW-10D-20-28 (240-103610-3) and SB-SEMW-10D-DUP (240-103610-4) were analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The samples were prepared and analyzed on 11/07/2018.

1,2,3-Trichlorobenzene was detected in method blank MB 240-354032/7 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.

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

VOLATILE ORGANIC COMPOUNDS (GCMS)

Sample TB-102918 (240-103610-1) was analyzed for volatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8260B. The sample was analyzed on 11/09/2018.

The laboratory control sample (LCS) for 354546 recovered outside control limits for the following analytes: Chlorobromomethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported. TB-102918 (240-103610-1) and (LCS 240-354546/4)

2-Chloroethyl vinyl ether cannot be reliably recovered in an acid preserved sample. The following sample was received in hydrochloric preserved vials: TB-102918 (240-103610-1)

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

PERCENT SOLIDS

Samples SB-SEMW-10D-10-15 (240-103610-2), SB-SEMW-10D-20-28 (240-103610-3) and SB-SEMW-10D-DUP (240-103610-4) were analyzed for percent solids in accordance with ASTM Method D2216-80. The samples were analyzed on 11/01/2018.

No 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: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: TB-102918

Lab Sample ID: 240-103610-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Acetone	20		10	5.4	ug/L	1		8260B	Total/NA
tert-Butyl alcohol	38	J	50	1.7	ug/L	1		8260B	Total/NA

Client Sample ID: SB-SEMW-10D-10-15

Lab Sample ID: 240-103610-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	1.4	J	5.7	0.74	ug/Kg	1	☒	8260B	Total/NA
Trichloroethene	110		5.7	0.72	ug/Kg	1	☒	8260B	Total/NA

Client Sample ID: SB-SEMW-10D-20-28

Lab Sample ID: 240-103610-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	7.3		6.0	0.76	ug/Kg	1	☒	8260B	Total/NA

Client Sample ID: SB-SEMW-10D-DUP

Lab Sample ID: 240-103610-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Trichloroethene	49	F1	5.8	0.74	ug/Kg	1	☒	8260B	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Canton

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: TB-102918

Lab Sample ID: 240-103610-1

Date Collected: 10/29/18 00:00

Matrix: Water

Date Received: 10/31/18 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	20		10	5.4	ug/L			11/09/18 17:52	1
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			11/09/18 17:52	1
Benzene	0.13	U	1.0	0.13	ug/L			11/09/18 17:52	1
Bromodichloromethane	0.17	U	1.0	0.17	ug/L			11/09/18 17:52	1
Bromoform	0.76	U	1.0	0.76	ug/L			11/09/18 17:52	1
Bromomethane	0.42	U	1.0	0.42	ug/L			11/09/18 17:52	1
2-Butanone (MEK)	1.2	U	10	1.2	ug/L			11/09/18 17:52	1
Carbon disulfide	0.28	U	1.0	0.28	ug/L			11/09/18 17:52	1
Carbon tetrachloride	0.26	U	1.0	0.26	ug/L			11/09/18 17:52	1
Chlorobenzene	0.14	U	1.0	0.14	ug/L			11/09/18 17:52	1
Chloroethane	0.83	U	1.0	0.83	ug/L			11/09/18 17:52	1
Chloroform	0.13	U	1.0	0.13	ug/L			11/09/18 17:52	1
1,1-Dichloropropene	0.14	U	1.0	0.14	ug/L			11/09/18 17:52	1
Chloromethane	0.20	U	1.0	0.20	ug/L			11/09/18 17:52	1
1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L			11/09/18 17:52	1
1,2,3-Trichlorobenzene	0.54	U	1.0	0.54	ug/L			11/09/18 17:52	1
1,2,3-Trichloropropane	0.24	U	1.0	0.24	ug/L			11/09/18 17:52	1
1,2-Dichloroethane	0.21	U	1.0	0.21	ug/L			11/09/18 17:52	1
1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L			11/09/18 17:52	1
1,2,3-Trimethylbenzene	0.14	U	5.0	0.14	ug/L			11/09/18 17:52	1
1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L			11/09/18 17:52	1
1,2,4-Trimethylbenzene	0.070	U	1.0	0.070	ug/L			11/09/18 17:52	1
cis-1,3-Dichloropropene	0.61	U	1.0	0.61	ug/L			11/09/18 17:52	1
trans-1,3-Dichloropropene	0.67	U	1.0	0.67	ug/L			11/09/18 17:52	1
Ethylbenzene	0.11	U	1.0	0.11	ug/L			11/09/18 17:52	1
2-Hexanone	0.54	U	10	0.54	ug/L			11/09/18 17:52	1
Methylene Chloride	2.6	U	5.0	2.6	ug/L			11/09/18 17:52	1
4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42	ug/L			11/09/18 17:52	1
Styrene	0.10	U	1.0	0.10	ug/L			11/09/18 17:52	1
1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13	ug/L			11/09/18 17:52	1
Tetrachloroethene	0.15	U	1.0	0.15	ug/L			11/09/18 17:52	1
Toluene	0.14	U	1.0	0.14	ug/L			11/09/18 17:52	1
Trichloroethene	0.10	U	1.0	0.10	ug/L			11/09/18 17:52	1
Vinyl chloride	0.20	U	1.0	0.20	ug/L			11/09/18 17:52	1
Xylenes, Total	0.15	U	2.0	0.15	ug/L			11/09/18 17:52	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			11/09/18 17:52	1
1,3-Dichloropropane	0.21	U	1.0	0.21	ug/L			11/09/18 17:52	1
1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91	ug/L			11/09/18 17:52	1
1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L			11/09/18 17:52	1
Dichlorodifluoromethane	0.35	U	1.0	0.35	ug/L			11/09/18 17:52	1
cis-1,2-Dichloroethene	0.16	U	1.0	0.16	ug/L			11/09/18 17:52	1
trans-1,2-Dichloroethene	0.19	U	1.0	0.19	ug/L			11/09/18 17:52	1
Isopropylbenzene	0.090	U	1.0	0.090	ug/L			11/09/18 17:52	1
Methyl tert-butyl ether	0.070	U	1.0	0.070	ug/L			11/09/18 17:52	1
1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41	ug/L			11/09/18 17:52	1
1,2,4-Trichlorobenzene	0.26	U	1.0	0.26	ug/L			11/09/18 17:52	1
2,2-Dichloropropane	0.31	U	1.0	0.31	ug/L			11/09/18 17:52	1
1,2-Dichlorobenzene	0.15	U	1.0	0.15	ug/L			11/09/18 17:52	1
1,3-Dichlorobenzene	0.15	U	1.0	0.15	ug/L			11/09/18 17:52	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: TB-102918

Lab Sample ID: 240-103610-1

Date Collected: 10/29/18 00:00

Matrix: Water

Date Received: 10/31/18 10:00

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dichlorobenzene	0.16	U	1.0	0.16	ug/L			11/09/18 17:52	1
2-Chloroethyl vinyl ether	0.26	U	10	0.26	ug/L			11/09/18 17:52	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			11/09/18 17:52	1
2-Chlorotoluene	0.15	U	1.0	0.15	ug/L			11/09/18 17:52	1
Chlorodibromomethane	0.39	U	1.0	0.39	ug/L			11/09/18 17:52	1
Bromobenzene	0.12	U	1.0	0.12	ug/L			11/09/18 17:52	1
Bromochloromethane	0.14	U *	1.0	0.14	ug/L			11/09/18 17:52	1
4-Chlorotoluene	0.090	U	1.0	0.090	ug/L			11/09/18 17:52	1
4-Isopropyltoluene	0.13	U	1.0	0.13	ug/L			11/09/18 17:52	1
Hexachlorobutadiene	0.83	U	1.0	0.83	ug/L			11/09/18 17:52	1
Dibromomethane	0.090	U	1.0	0.090	ug/L			11/09/18 17:52	1
Diisopropyl ether	0.17	U	10	0.17	ug/L			11/09/18 17:52	1
Naphthalene	0.32	U	1.0	0.32	ug/L			11/09/18 17:52	1
n-Butylbenzene	0.14	U	1.0	0.14	ug/L			11/09/18 17:52	1
N-Propylbenzene	0.15	U	1.0	0.15	ug/L			11/09/18 17:52	1
sec-Butylbenzene	0.13	U	1.0	0.13	ug/L			11/09/18 17:52	1
Tert-amyl methyl ether	0.11	U	5.0	0.11	ug/L			11/09/18 17:52	1
Ethyl tert-butyl ether	0.15	U	5.0	0.15	ug/L			11/09/18 17:52	1
tert-Butylbenzene	0.14	U	1.0	0.14	ug/L			11/09/18 17:52	1
Vinyl acetate	0.19	U	2.0	0.19	ug/L			11/09/18 17:52	1
tert-Butyl alcohol	38	J	50	1.7	ug/L			11/09/18 17:52	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	108		70 - 121		11/09/18 17:52	1
4-Bromofluorobenzene (Surr)	79		59 - 120		11/09/18 17:52	1
Toluene-d8 (Surr)	77		70 - 123		11/09/18 17:52	1
Dibromofluoromethane (Surr)	123		75 - 128		11/09/18 17:52	1

Client Sample ID: SB-SEMW-10D-10-15

Lab Sample ID: 240-103610-2

Date Collected: 10/29/18 11:20

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	3.4	U	5.7	3.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,1,1-Trichloroethane	0.93	U	5.7	0.93	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,1,2,2-Tetrachloroethane	1.6	U	5.7	1.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	5.7	1.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,1-Dichloroethane	0.79	U	5.7	0.79	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,1-Dichloroethene	1.0	U	5.7	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,1-Dichloropropene	1.1	U	5.7	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2,3-Trichlorobenzene	0.65	U	5.7	0.65	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2,3-Trichloropropane	1.8	U	5.7	1.8	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2,3-Trimethylbenzene	2.1	U	5.7	2.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2,4-Trichlorobenzene	0.65	U	5.7	0.65	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2,4-Trimethylbenzene	1.1	U	5.7	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2-Dibromo-3-Chloropropane	4.1	U	11	4.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2-Dichlorobenzene	1.3	U	5.7	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2-Dichloroethane	0.88	U	5.7	0.88	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2-Dichloropropane	0.97	U	5.7	0.97	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1

TestAmerica Canton

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: SB-SEMW-10D-10-15

Lab Sample ID: 240-103610-2

Date Collected: 10/29/18 11:20

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Dichlorobenzene	0.93	U	5.7	0.93	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,3-Dichloropropane	1.1	U	5.7	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,4-Dichlorobenzene	1.0	U	5.7	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
2,2-Dichloropropane	1.4	U	5.7	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
2-Chloroethyl vinyl ether	10	U	57	10	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
2-Chlorotoluene	1.1	U	5.7	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
2-Hexanone	4.6	U	23	4.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Bromobenzene	1.3	U	5.7	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Bromochloromethane	0.67	U	5.7	0.67	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
4-Chlorotoluene	0.98	U	5.7	0.98	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
p-Isopropyltoluene	3.3	U	5.7	3.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Acetone	24	U	28	24	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Benzene	0.79	U	5.7	0.79	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Bromoform	2.7	U	5.7	2.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Bromomethane	1.1	U	5.7	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Carbon disulfide	1.3	U	5.7	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Carbon tetrachloride	3.7	U	5.7	3.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Chlorobenzene	1.0	U	5.7	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Chloroethane	1.4	U	5.7	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Chloroform	0.89	U	5.7	0.89	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Chloromethane	1.2	U	5.7	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
cis-1,2-Dichloroethene	1.4	J	5.7	0.74	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
cis-1,3-Dichloropropene	1.6	U	5.7	1.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Hexachlorobutadiene	4.2	U	5.7	4.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Dibromomethane	0.76	U	5.7	0.76	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Bromodichloromethane	0.77	U	5.7	0.77	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Dichlorodifluoromethane	1.1	U	5.7	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Ethylbenzene	1.2	U	5.7	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
1,2-Dibromoethane	0.87	U	5.7	0.87	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Diisopropyl ether	0.86	U	11	0.86	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Naphthalene	3.1	U	5.7	3.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
m-Xylene & p-Xylene	0.89	U	11	0.89	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
n-Butylbenzene	3.9	U	5.7	3.9	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Isopropylbenzene	0.94	U	5.7	0.94	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
N-Propylbenzene	0.83	U	5.7	0.83	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
2-Butanone (MEK)	4.0	U	23	4.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
4-Methyl-2-pentanone (MIBK)	4.2	U	23	4.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
sec-Butylbenzene	0.98	U	5.7	0.98	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Methyl tert-butyl ether	0.93	U	5.7	0.93	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Tert-amyl methyl ether	2.6	U	5.7	2.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Methylene Chloride	14	U	28	14	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
o-Xylene	0.98	U	5.7	0.98	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Styrene	1.3	U	5.7	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Ethyl tert-butyl ether	2.6	U	5.7	2.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
tert-Butylbenzene	1.0	U	5.7	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Tetrachloroethene	0.83	U	5.7	0.83	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Toluene	0.88	U	5.7	0.88	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
trans-1,2-Dichloroethene	0.53	U	5.7	0.53	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
trans-1,3-Dichloropropene	1.2	U	5.7	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: SB-SEMW-10D-10-15

Lab Sample ID: 240-103610-2

Date Collected: 10/29/18 11:20

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.7

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Trichloroethene	110		5.7	0.72	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Trichlorofluoromethane	1.2	U	5.7	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Vinyl acetate	2.4	U	11	2.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Vinyl chloride	0.95	U	5.7	0.95	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
tert-Butyl alcohol	19	U	230	19	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Xylenes, Total	1.8	U	11	1.8	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1
Dibromochloromethane	3.2	U	5.7	3.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:12	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	17	T J	ug/Kg	☼	3.32		11/07/18 06:51	11/07/18 15:12	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	82		48 - 123	11/07/18 06:51	11/07/18 15:12	1
4-Bromofluorobenzene (Surr)	75		49 - 141	11/07/18 06:51	11/07/18 15:12	1
Toluene-d8 (Surr)	88		62 - 135	11/07/18 06:51	11/07/18 15:12	1
Dibromofluoromethane (Surr)	84		49 - 132	11/07/18 06:51	11/07/18 15:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.7		0.1	0.1	%			11/01/18 15:42	1
Percent Moisture	17.3		0.1	0.1	%			11/01/18 15:42	1

Client Sample ID: SB-SEMW-10D-20-28

Lab Sample ID: 240-103610-3

Date Collected: 10/29/18 12:30

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	3.6	U	6.0	3.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,1,1-Trichloroethane	0.98	U	6.0	0.98	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,1,2,2-Tetrachloroethane	1.7	U	6.0	1.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	6.0	1.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,1-Dichloroethane	0.83	U	6.0	0.83	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,1-Dichloroethene	1.1	U	6.0	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,1-Dichloropropene	1.2	U	6.0	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2,3-Trichlorobenzene	0.68	U	6.0	0.68	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2,3-Trichloropropane	1.9	U	6.0	1.9	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2,3-Trimethylbenzene	2.2	U	6.0	2.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2,4-Trichlorobenzene	0.68	U	6.0	0.68	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2,4-Trimethylbenzene	1.2	U	6.0	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2-Dibromo-3-Chloropropane	4.3	U	12	4.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2-Dichlorobenzene	1.3	U	6.0	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2-Dichloroethane	0.92	U	6.0	0.92	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2-Dichloropropane	1.0	U	6.0	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,3-Dichlorobenzene	0.97	U	6.0	0.97	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,3-Dichloropropane	1.2	U	6.0	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,4-Dichlorobenzene	1.1	U	6.0	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
2,2-Dichloropropane	1.4	U	6.0	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
2-Chloroethyl vinyl ether	11	U	60	11	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
2-Chlorotoluene	1.1	U	6.0	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1

TestAmerica Canton

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: SB-SEMW-10D-20-28

Lab Sample ID: 240-103610-3

Date Collected: 10/29/18 12:30

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
2-Hexanone	4.9	U	24	4.9	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Bromobenzene	1.4	U	6.0	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Bromochloromethane	0.71	U	6.0	0.71	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
4-Chlorotoluene	1.0	U	6.0	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
p-Isopropyltoluene	3.5	U	6.0	3.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Acetone	25	U	30	25	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Benzene	0.83	U	6.0	0.83	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Bromoform	2.9	U	6.0	2.9	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Bromomethane	1.2	U	6.0	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Carbon disulfide	1.4	U	6.0	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Carbon tetrachloride	3.9	U	6.0	3.9	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Chlorobenzene	1.1	U	6.0	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Chloroethane	1.5	U	6.0	1.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Chloroform	0.94	U	6.0	0.94	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Chloromethane	1.2	U	6.0	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
cis-1,2-Dichloroethene	0.78	U	6.0	0.78	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
cis-1,3-Dichloropropene	1.7	U	6.0	1.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Hexachlorobutadiene	4.5	U	6.0	4.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Dibromomethane	0.80	U	6.0	0.80	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Bromodichloromethane	0.81	U	6.0	0.81	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Dichlorodifluoromethane	1.1	U	6.0	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Ethylbenzene	1.3	U	6.0	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
1,2-Dibromoethane	0.92	U	6.0	0.92	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Diisopropyl ether	0.90	U	12	0.90	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Naphthalene	3.2	U	6.0	3.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
m-Xylene & p-Xylene	0.94	U	12	0.94	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
n-Butylbenzene	4.1	U	6.0	4.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Isopropylbenzene	0.99	U	6.0	0.99	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
N-Propylbenzene	0.87	U	6.0	0.87	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
2-Butanone (MEK)	4.2	U	24	4.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
4-Methyl-2-pentanone (MIBK)	4.4	U	24	4.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
sec-Butylbenzene	1.0	U	6.0	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Methyl tert-butyl ether	0.98	U	6.0	0.98	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Tert-amyl methyl ether	2.7	U	6.0	2.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Methylene Chloride	14	U	30	14	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
o-Xylene	1.0	U	6.0	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Styrene	1.4	U	6.0	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Ethyl tert-butyl ether	2.7	U	6.0	2.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
tert-Butylbenzene	1.1	U	6.0	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Tetrachloroethene	0.87	U	6.0	0.87	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Toluene	0.92	U	6.0	0.92	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
trans-1,2-Dichloroethene	0.56	U	6.0	0.56	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
trans-1,3-Dichloropropene	1.2	U	6.0	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Trichloroethene	7.3		6.0	0.76	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Trichlorofluoromethane	1.3	U	6.0	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Vinyl acetate	2.5	U	12	2.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Vinyl chloride	1.0	U	6.0	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
tert-Butyl alcohol	20	U	240	20	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
Xylenes, Total	1.9	U	12	1.9	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: SB-SEMW-10D-20-28

Lab Sample ID: 240-103610-3

Date Collected: 10/29/18 12:30

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dibromochloromethane	3.3	U	6.0	3.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:33	1
<i>Tentatively Identified Compound</i>	<i>Est. Result</i>	<i>Qualifier</i>	<i>Unit</i>	<i>D</i>	<i>RT</i>	<i>CAS No.</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
Unknown	19	T J	ug/Kg	☼	3.31		11/07/18 06:51	11/07/18 15:33	1
Unknown	21	T J	ug/Kg	☼	4.23		11/07/18 06:51	11/07/18 15:33	1
<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>				<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	84		48 - 123				11/07/18 06:51	11/07/18 15:33	1
4-Bromofluorobenzene (Surr)	80		49 - 141				11/07/18 06:51	11/07/18 15:33	1
Toluene-d8 (Surr)	89		62 - 135				11/07/18 06:51	11/07/18 15:33	1
Dibromofluoromethane (Surr)	86		49 - 132				11/07/18 06:51	11/07/18 15:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.6		0.1	0.1	%			11/01/18 15:42	1
Percent Moisture	17.4		0.1	0.1	%			11/01/18 15:42	1

Client Sample ID: SB-SEMW-10D-DUP

Lab Sample ID: 240-103610-4

Date Collected: 10/29/18 00:00

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	3.5	U	5.8	3.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,1,1-Trichloroethane	0.96	U	5.8	0.96	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,1,2,2-Tetrachloroethane	1.7	U	5.8	1.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	5.8	1.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,1-Dichloroethane	0.81	U	5.8	0.81	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,1-Dichloroethene	1.1	U	5.8	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,1-Dichloropropene	1.2	U	5.8	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2,3-Trichlorobenzene	0.67	U	5.8	0.67	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2,3-Trichloropropane	1.8	U	5.8	1.8	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2,3-Trimethylbenzene	2.1	U	5.8	2.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2,4-Trichlorobenzene	0.67	U	5.8	0.67	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2,4-Trimethylbenzene	1.2	U	5.8	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2-Dibromo-3-Chloropropane	4.2	U	12	4.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2-Dichlorobenzene	1.3	U	5.8	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2-Dichloroethane	0.90	U	5.8	0.90	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2-Dichloropropane	0.99	U	5.8	0.99	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,3-Dichlorobenzene	0.95	U	5.8	0.95	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,3-Dichloropropane	1.2	U	5.8	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,4-Dichlorobenzene	1.0	U	5.8	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
2,2-Dichloropropane	1.4	U	5.8	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
2-Chloroethyl vinyl ether	10	U	58	10	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
2-Chlorotoluene	1.1	U	5.8	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
2-Hexanone	4.8	U	23	4.8	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Bromobenzene	1.4	U	5.8	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Bromochloromethane	0.69	U	5.8	0.69	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
4-Chlorotoluene	1.0	U	5.8	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
p-Isopropyltoluene	3.4	U	5.8	3.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1

TestAmerica Canton

Client Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: SB-SEMW-10D-DUP

Lab Sample ID: 240-103610-4

Date Collected: 10/29/18 00:00

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.6

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

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetone	25	U	29	25	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Benzene	0.82	U	5.8	0.82	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Bromoform	2.8	U	5.8	2.8	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Bromomethane	1.2	U	5.8	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Carbon disulfide	1.4	U	5.8	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Carbon tetrachloride	3.8	U	5.8	3.8	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Chlorobenzene	1.1	U	5.8	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Chloroethane	1.4	U	5.8	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Chloroform	0.92	U	5.8	0.92	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Chloromethane	1.2	U	5.8	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
cis-1,2-Dichloroethene	0.76	U	5.8	0.76	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
cis-1,3-Dichloropropene	1.7	U	5.8	1.7	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Hexachlorobutadiene	4.4	U	5.8	4.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Dibromomethane	0.78	U	5.8	0.78	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Bromodichloromethane	0.79	U	5.8	0.79	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Dichlorodifluoromethane	1.1	U	5.8	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Ethylbenzene	1.2	U	5.8	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
1,2-Dibromoethane	0.90	U	5.8	0.90	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Diisopropyl ether	0.88	U	12	0.88	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Naphthalene	3.2	U	5.8	3.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
m-Xylene & p-Xylene	0.91	U	12	0.91	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
n-Butylbenzene	4.1	U	5.8	4.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Isopropylbenzene	0.97	U	5.8	0.97	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
N-Propylbenzene	0.86	U	5.8	0.86	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
2-Butanone (MEK)	4.2	U	23	4.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
4-Methyl-2-pentanone (MIBK)	4.3	U	23	4.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
sec-Butylbenzene	1.0	U	5.8	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Methyl tert-butyl ether	0.96	U	5.8	0.96	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Tert-amyl methyl ether	2.6	U	5.8	2.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Methylene Chloride	14	U	29	14	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
o-Xylene	1.0	U	5.8	1.0	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Styrene	1.4	U	5.8	1.4	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Ethyl tert-butyl ether	2.6	U	5.8	2.6	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
tert-Butylbenzene	1.1	U	5.8	1.1	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Tetrachloroethene	0.85	U	5.8	0.85	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Toluene	0.90	U	5.8	0.90	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
trans-1,2-Dichloroethene	0.54	U	5.8	0.54	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
trans-1,3-Dichloropropene	1.2	U	5.8	1.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Trichloroethene	49	F1	5.8	0.74	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Trichlorofluoromethane	1.3	U	5.8	1.3	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Vinyl acetate	2.5	U	12	2.5	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Vinyl chloride	0.98	U	5.8	0.98	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
tert-Butyl alcohol	19	U	230	19	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Xylenes, Total	1.9	U	12	1.9	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1
Dibromochloromethane	3.2	U	5.8	3.2	ug/Kg	☼	11/07/18 06:51	11/07/18 15:54	1

Tentatively Identified Compound	Est. Result	Qualifier	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
Unknown	18	TJ	ug/Kg	☼	3.32		11/07/18 06:51	11/07/18 15:54	1

Client Sample Results

Client: Tetra Tech, Inc.
 Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: SB-SEMW-10D-DUP

Lab Sample ID: 240-103610-4

Date Collected: 10/29/18 00:00

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.6

<i>Surrogate</i>	<i>%Recovery</i>	<i>Qualifier</i>	<i>Limits</i>	<i>Prepared</i>	<i>Analyzed</i>	<i>Dil Fac</i>
1,2-Dichloroethane-d4 (Surr)	83		48 - 123	11/07/18 06:51	11/07/18 15:54	1
4-Bromofluorobenzene (Surr)	78		49 - 141	11/07/18 06:51	11/07/18 15:54	1
Toluene-d8 (Surr)	87		62 - 135	11/07/18 06:51	11/07/18 15:54	1
Dibromofluoromethane (Surr)	85		49 - 132	11/07/18 06:51	11/07/18 15:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	82.6		0.1	0.1	%			11/01/18 15:42	1
Percent Moisture	17.4		0.1	0.1	%			11/01/18 15:42	1

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	1.0	0.14	ug/L	8260B
1,1,1-Trichloroethane	1.0	0.24	ug/L	8260B
1,1,2,2-Tetrachloroethane	1.0	0.13	ug/L	8260B
1,1,2-Trichlorotrifluoroethane	1.0	0.41	ug/L	8260B
1,1-Dichloroethane	1.0	0.17	ug/L	8260B
1,1-Dichloroethene	1.0	0.19	ug/L	8260B
1,1-Dichloropropene	1.0	0.14	ug/L	8260B
1,2,3-Trichlorobenzene	1.0	0.54	ug/L	8260B
1,2,3-Trichloropropane	1.0	0.24	ug/L	8260B
1,2,3-Trimethylbenzene	5.0	0.14	ug/L	8260B
1,2,4-Trichlorobenzene	1.0	0.26	ug/L	8260B
1,2,4-Trimethylbenzene	1.0	0.070	ug/L	8260B
1,2-Dibromo-3-Chloropropane	2.0	0.91	ug/L	8260B
1,2-Dibromoethane	1.0	0.12	ug/L	8260B
1,2-Dichlorobenzene	1.0	0.15	ug/L	8260B
1,2-Dichloroethane	1.0	0.21	ug/L	8260B
1,2-Dichloropropane	1.0	0.15	ug/L	8260B
1,3-Dichlorobenzene	1.0	0.15	ug/L	8260B
1,3-Dichloropropane	1.0	0.21	ug/L	8260B
1,4-Dichlorobenzene	1.0	0.16	ug/L	8260B
2,2-Dichloropropane	1.0	0.31	ug/L	8260B
2-Butanone (MEK)	10	1.2	ug/L	8260B
2-Chloroethyl vinyl ether	10	0.26	ug/L	8260B
2-Chlorotoluene	1.0	0.15	ug/L	8260B
2-Hexanone	10	0.54	ug/L	8260B
4-Chlorotoluene	1.0	0.090	ug/L	8260B
4-Isopropyltoluene	1.0	0.13	ug/L	8260B
4-Methyl-2-pentanone (MIBK)	10	0.42	ug/L	8260B
Acetone	10	5.4	ug/L	8260B
Benzene	1.0	0.13	ug/L	8260B
Bromobenzene	1.0	0.12	ug/L	8260B
Bromochloromethane	1.0	0.14	ug/L	8260B
Bromodichloromethane	1.0	0.17	ug/L	8260B
Bromoform	1.0	0.76	ug/L	8260B
Bromomethane	1.0	0.42	ug/L	8260B
Carbon disulfide	1.0	0.28	ug/L	8260B
Carbon tetrachloride	1.0	0.26	ug/L	8260B
Chlorobenzene	1.0	0.14	ug/L	8260B
Chlorodibromomethane	1.0	0.39	ug/L	8260B
Chloroethane	1.0	0.83	ug/L	8260B
Chloroform	1.0	0.13	ug/L	8260B
Chloromethane	1.0	0.20	ug/L	8260B
cis-1,2-Dichloroethene	1.0	0.16	ug/L	8260B
cis-1,3-Dichloropropene	1.0	0.61	ug/L	8260B
Dibromomethane	1.0	0.090	ug/L	8260B
Dichlorodifluoromethane	1.0	0.35	ug/L	8260B
Diisopropyl ether	10	0.17	ug/L	8260B
Ethyl tert-butyl ether	5.0	0.15	ug/L	8260B
Ethylbenzene	1.0	0.11	ug/L	8260B
Hexachlorobutadiene	1.0	0.83	ug/L	8260B
Isopropylbenzene	1.0	0.090	ug/L	8260B
Methyl tert-butyl ether	1.0	0.070	ug/L	8260B

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Analyte	RL	MDL	Units	Method
Methylene Chloride	5.0	2.6	ug/L	8260B
Naphthalene	1.0	0.32	ug/L	8260B
n-Butylbenzene	1.0	0.14	ug/L	8260B
N-Propylbenzene	1.0	0.15	ug/L	8260B
sec-Butylbenzene	1.0	0.13	ug/L	8260B
Styrene	1.0	0.10	ug/L	8260B
Tert-amyl methyl ether	5.0	0.11	ug/L	8260B
tert-Butyl alcohol	50	1.7	ug/L	8260B
tert-Butylbenzene	1.0	0.14	ug/L	8260B
Tetrachloroethene	1.0	0.15	ug/L	8260B
Toluene	1.0	0.14	ug/L	8260B
trans-1,2-Dichloroethene	1.0	0.19	ug/L	8260B
trans-1,3-Dichloropropene	1.0	0.67	ug/L	8260B
Trichloroethene	1.0	0.10	ug/L	8260B
Trichlorofluoromethane	1.0	0.45	ug/L	8260B
Vinyl acetate	2.0	0.19	ug/L	8260B
Vinyl chloride	1.0	0.20	ug/L	8260B
Xylenes, Total	2.0	0.15	ug/L	8260B

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

Prep: 5030A

Analyte	RL	MDL	Units	Method
1,1,1,2-Tetrachloroethane	5.0	3.0	ug/Kg	8260B
1,1,1-Trichloroethane	5.0	0.82	ug/Kg	8260B
1,1,2,2-Tetrachloroethane	5.0	1.4	ug/Kg	8260B
1,1,2-Trichloro-1,2,2-trifluoroethane	5.0	1.3	ug/Kg	8260B
1,1-Dichloroethane	5.0	0.69	ug/Kg	8260B
1,1-Dichloroethene	5.0	0.90	ug/Kg	8260B
1,1-Dichloropropene	5.0	0.99	ug/Kg	8260B
1,2,3-Trichlorobenzene	5.0	0.57	ug/Kg	8260B
1,2,3-Trichloropropane	5.0	1.6	ug/Kg	8260B
1,2,3-Trimethylbenzene	5.0	1.8	ug/Kg	8260B
1,2,4-Trichlorobenzene	5.0	0.57	ug/Kg	8260B
1,2,4-Trimethylbenzene	5.0	1.0	ug/Kg	8260B
1,2-Dibromo-3-Chloropropane	10	3.6	ug/Kg	8260B
1,2-Dibromoethane	5.0	0.77	ug/Kg	8260B
1,2-Dichlorobenzene	5.0	1.1	ug/Kg	8260B
1,2-Dichloroethane	5.0	0.77	ug/Kg	8260B
1,2-Dichloropropane	5.0	0.85	ug/Kg	8260B
1,3-Dichlorobenzene	5.0	0.82	ug/Kg	8260B
1,3-Dichloropropane	5.0	0.99	ug/Kg	8260B
1,4-Dichlorobenzene	5.0	0.88	ug/Kg	8260B
2,2-Dichloropropane	5.0	1.2	ug/Kg	8260B
2-Butanone (MEK)	20	3.6	ug/Kg	8260B
2-Chloroethyl vinyl ether	50	8.9	ug/Kg	8260B
2-Chlorotoluene	5.0	0.95	ug/Kg	8260B
2-Hexanone	20	4.1	ug/Kg	8260B
4-Chlorotoluene	5.0	0.86	ug/Kg	8260B
4-Methyl-2-pentanone (MIBK)	20	3.7	ug/Kg	8260B
Acetone	25	21	ug/Kg	8260B
Benzene	5.0	0.70	ug/Kg	8260B

Default Detection Limits

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Prep: 5030A

Analyte	RL	MDL	Units	Method
Bromobenzene	5.0	1.2	ug/Kg	8260B
Bromochloromethane	5.0	0.59	ug/Kg	8260B
Bromodichloromethane	5.0	0.68	ug/Kg	8260B
Bromoform	5.0	2.4	ug/Kg	8260B
Bromomethane	5.0	0.99	ug/Kg	8260B
Carbon disulfide	5.0	1.2	ug/Kg	8260B
Carbon tetrachloride	5.0	3.3	ug/Kg	8260B
Chlorobenzene	5.0	0.92	ug/Kg	8260B
Chloroethane	5.0	1.2	ug/Kg	8260B
Chloroform	5.0	0.79	ug/Kg	8260B
Chloromethane	5.0	1.0	ug/Kg	8260B
cis-1,2-Dichloroethene	5.0	0.65	ug/Kg	8260B
cis-1,3-Dichloropropene	5.0	1.4	ug/Kg	8260B
Dibromochloromethane	5.0	2.8	ug/Kg	8260B
Dibromomethane	5.0	0.67	ug/Kg	8260B
Dichlorodifluoromethane	5.0	0.94	ug/Kg	8260B
Diisopropyl ether	10	0.76	ug/Kg	8260B
Ethyl tert-butyl ether	5.0	2.3	ug/Kg	8260B
Ethylbenzene	5.0	1.0	ug/Kg	8260B
Hexachlorobutadiene	5.0	3.7	ug/Kg	8260B
Isopropylbenzene	5.0	0.83	ug/Kg	8260B
Methyl tert-butyl ether	5.0	0.82	ug/Kg	8260B
Methylene Chloride	25	12	ug/Kg	8260B
m-Xylene & p-Xylene	10	0.78	ug/Kg	8260B
Naphthalene	5.0	2.7	ug/Kg	8260B
n-Butylbenzene	5.0	3.5	ug/Kg	8260B
N-Propylbenzene	5.0	0.73	ug/Kg	8260B
o-Xylene	5.0	0.86	ug/Kg	8260B
p-Isopropyltoluene	5.0	2.9	ug/Kg	8260B
sec-Butylbenzene	5.0	0.86	ug/Kg	8260B
Styrene	5.0	1.2	ug/Kg	8260B
Tert-amyl methyl ether	5.0	2.2	ug/Kg	8260B
tert-Butyl alcohol	200	17	ug/Kg	8260B
tert-Butylbenzene	5.0	0.91	ug/Kg	8260B
Tetrachloroethene	5.0	0.73	ug/Kg	8260B
Toluene	5.0	0.77	ug/Kg	8260B
trans-1,2-Dichloroethene	5.0	0.47	ug/Kg	8260B
trans-1,3-Dichloropropene	5.0	1.0	ug/Kg	8260B
Trichloroethene	5.0	0.63	ug/Kg	8260B
Trichlorofluoromethane	5.0	1.1	ug/Kg	8260B
Vinyl acetate	10	2.1	ug/Kg	8260B
Vinyl chloride	5.0	0.84	ug/Kg	8260B
Xylenes, Total	10	1.6	ug/Kg	8260B

General Chemistry

Analyte	RL	MDL	Units	Method
Percent Moisture	0.1	0.1	%	Moisture
Percent Solids	0.1	0.1	%	Moisture

Surrogate Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Matrix: Solid

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (48-123)	BFB (49-141)	TOL (62-135)	DBFM (49-132)
240-103610-2	SB-SEMW-10D-10-15	82	75	88	84
240-103610-3	SB-SEMW-10D-20-28	84	80	89	86
240-103610-4	SB-SEMW-10D-DUP	83	78	87	85
240-103610-4 MS	SB-SEMW-10D-DUP	79	83	88	83
240-103610-4 MSD	SB-SEMW-10D-DUP	81	83	87	88
LCS 240-354032/6	Lab Control Sample	82	82	88	91
MB 240-354032/7	Method Blank	87	80	86	89

Surrogate Legend

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

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

Matrix: Water

Prep Type: Total/NA

Lab Sample ID	Client Sample ID	Percent Surrogate Recovery (Acceptance Limits)			
		DCA (70-121)	BFB (59-120)	TOL (70-123)	DBFM (75-128)
240-103610-1	TB-102918	108	79	77	123
LCS 240-354546/4	Lab Control Sample	98	89	84	113
MB 240-354546/6	Method Blank	111	78	79	120

Surrogate Legend

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

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: MB 240-354032/7

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	3.0	U	5.0	3.0	ug/Kg			11/07/18 06:24	1
1,1-Dichloropropene	0.99	U	5.0	0.99	ug/Kg			11/07/18 06:24	1
1,1-Dichloroethane	0.69	U	5.0	0.69	ug/Kg			11/07/18 06:24	1
1,2,3-Trichlorobenzene	0.581	J	5.0	0.57	ug/Kg			11/07/18 06:24	1
1,2,3-Trichloropropane	1.6	U	5.0	1.6	ug/Kg			11/07/18 06:24	1
1,2-Dichloroethane	0.77	U	5.0	0.77	ug/Kg			11/07/18 06:24	1
1,1-Dichloroethene	0.90	U	5.0	0.90	ug/Kg			11/07/18 06:24	1
1,2,3-Trimethylbenzene	1.8	U	5.0	1.8	ug/Kg			11/07/18 06:24	1
1,2-Dichloropropane	0.85	U	5.0	0.85	ug/Kg			11/07/18 06:24	1
1,2,4-Trimethylbenzene	1.0	U	5.0	1.0	ug/Kg			11/07/18 06:24	1
2-Hexanone	4.1	U	20	4.1	ug/Kg			11/07/18 06:24	1
1,1,2,2-Tetrachloroethane	1.4	U	5.0	1.4	ug/Kg			11/07/18 06:24	1
Acetone	21	U	25	21	ug/Kg			11/07/18 06:24	1
Benzene	0.70	U	5.0	0.70	ug/Kg			11/07/18 06:24	1
Bromoform	2.4	U	5.0	2.4	ug/Kg			11/07/18 06:24	1
Bromomethane	0.99	U	5.0	0.99	ug/Kg			11/07/18 06:24	1
Carbon disulfide	1.2	U	5.0	1.2	ug/Kg			11/07/18 06:24	1
Carbon tetrachloride	3.3	U	5.0	3.3	ug/Kg			11/07/18 06:24	1
1,1,1-Trichloroethane	0.82	U	5.0	0.82	ug/Kg			11/07/18 06:24	1
Chlorobenzene	0.92	U	5.0	0.92	ug/Kg			11/07/18 06:24	1
1,3-Dichloropropane	0.99	U	5.0	0.99	ug/Kg			11/07/18 06:24	1
Chloroethane	1.2	U	5.0	1.2	ug/Kg			11/07/18 06:24	1
1,2-Dibromo-3-Chloropropane	3.6	U	10	3.6	ug/Kg			11/07/18 06:24	1
Chloroform	0.79	U	5.0	0.79	ug/Kg			11/07/18 06:24	1
Chloromethane	1.0	U	5.0	1.0	ug/Kg			11/07/18 06:24	1
cis-1,2-Dichloroethene	0.65	U	5.0	0.65	ug/Kg			11/07/18 06:24	1
cis-1,3-Dichloropropene	1.4	U	5.0	1.4	ug/Kg			11/07/18 06:24	1
Bromodichloromethane	0.68	U	5.0	0.68	ug/Kg			11/07/18 06:24	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.3	U	5.0	1.3	ug/Kg			11/07/18 06:24	1
Dichlorodifluoromethane	0.94	U	5.0	0.94	ug/Kg			11/07/18 06:24	1
1,2,4-Trichlorobenzene	0.57	U	5.0	0.57	ug/Kg			11/07/18 06:24	1
Ethylbenzene	1.0	U	5.0	1.0	ug/Kg			11/07/18 06:24	1
1,2-Dibromoethane	0.77	U	5.0	0.77	ug/Kg			11/07/18 06:24	1
2,2-Dichloropropane	1.2	U	5.0	1.2	ug/Kg			11/07/18 06:24	1
1,2-Dichlorobenzene	1.1	U	5.0	1.1	ug/Kg			11/07/18 06:24	1
1,3-Dichlorobenzene	0.82	U	5.0	0.82	ug/Kg			11/07/18 06:24	1
1,4-Dichlorobenzene	0.88	U	5.0	0.88	ug/Kg			11/07/18 06:24	1
2-Chloroethyl vinyl ether	8.9	U	50	8.9	ug/Kg			11/07/18 06:24	1
Isopropylbenzene	0.83	U	5.0	0.83	ug/Kg			11/07/18 06:24	1
2-Chlorotoluene	0.95	U	5.0	0.95	ug/Kg			11/07/18 06:24	1
2-Butanone (MEK)	3.6	U	20	3.6	ug/Kg			11/07/18 06:24	1
4-Methyl-2-pentanone (MIBK)	3.7	U	20	3.7	ug/Kg			11/07/18 06:24	1
Bromobenzene	1.2	U	5.0	1.2	ug/Kg			11/07/18 06:24	1
Methyl tert-butyl ether	0.82	U	5.0	0.82	ug/Kg			11/07/18 06:24	1
Bromochloromethane	0.59	U	5.0	0.59	ug/Kg			11/07/18 06:24	1
Methylene Chloride	12	U	25	12	ug/Kg			11/07/18 06:24	1
4-Chlorotoluene	0.86	U	5.0	0.86	ug/Kg			11/07/18 06:24	1
p-Isopropyltoluene	2.9	U	5.0	2.9	ug/Kg			11/07/18 06:24	1

TestAmerica Canton

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: MB 240-354032/7

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Styrene	1.2	U	5.0	1.2	ug/Kg			11/07/18 06:24	1
m-Xylene & p-Xylene	0.78	U	10	0.78	ug/Kg			11/07/18 06:24	1
o-Xylene	0.86	U	5.0	0.86	ug/Kg			11/07/18 06:24	1
Hexachlorobutadiene	3.7	U	5.0	3.7	ug/Kg			11/07/18 06:24	1
Tetrachloroethene	0.73	U	5.0	0.73	ug/Kg			11/07/18 06:24	1
Dibromomethane	0.67	U	5.0	0.67	ug/Kg			11/07/18 06:24	1
Toluene	0.77	U	5.0	0.77	ug/Kg			11/07/18 06:24	1
Diisopropyl ether	0.76	U	10	0.76	ug/Kg			11/07/18 06:24	1
Naphthalene	2.7	U	5.0	2.7	ug/Kg			11/07/18 06:24	1
trans-1,2-Dichloroethene	0.47	U	5.0	0.47	ug/Kg			11/07/18 06:24	1
n-Butylbenzene	3.5	U	5.0	3.5	ug/Kg			11/07/18 06:24	1
trans-1,3-Dichloropropene	1.0	U	5.0	1.0	ug/Kg			11/07/18 06:24	1
N-Propylbenzene	0.73	U	5.0	0.73	ug/Kg			11/07/18 06:24	1
Trichloroethene	0.63	U	5.0	0.63	ug/Kg			11/07/18 06:24	1
sec-Butylbenzene	0.86	U	5.0	0.86	ug/Kg			11/07/18 06:24	1
Trichlorofluoromethane	1.1	U	5.0	1.1	ug/Kg			11/07/18 06:24	1
Tert-amyl methyl ether	2.2	U	5.0	2.2	ug/Kg			11/07/18 06:24	1
Ethyl tert-butyl ether	2.3	U	5.0	2.3	ug/Kg			11/07/18 06:24	1
tert-Butylbenzene	0.91	U	5.0	0.91	ug/Kg			11/07/18 06:24	1
Vinyl chloride	0.84	U	5.0	0.84	ug/Kg			11/07/18 06:24	1
Vinyl acetate	2.1	U	10	2.1	ug/Kg			11/07/18 06:24	1
tert-Butyl alcohol	17	U	200	17	ug/Kg			11/07/18 06:24	1
Xylenes, Total	1.6	U	10	1.6	ug/Kg			11/07/18 06:24	1
Dibromochloromethane	2.8	U	5.0	2.8	ug/Kg			11/07/18 06:24	1

Tentatively Identified Compound	MB	MB	Unit	D	RT	CAS No.	Prepared	Analyzed	Dil Fac
	Est. Result	Qualifier							
Tentatively Identified Compound	None		ug/Kg					11/07/18 06:24	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	87		48 - 123		11/07/18 06:24	1
4-Bromofluorobenzene (Surr)	80		49 - 141		11/07/18 06:24	1
Toluene-d8 (Surr)	86		62 - 135		11/07/18 06:24	1
Dibromofluoromethane (Surr)	89		49 - 132		11/07/18 06:24	1

Lab Sample ID: LCS 240-354032/6

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec Limits
		Result	Qualifier				
1,1,1,2-Tetrachloroethane	25.0	26.1		ug/Kg		104	73 - 124
1,1-Dichloropropene	25.0	24.8		ug/Kg		99	72 - 127
1,1-Dichloroethane	25.0	25.2		ug/Kg		101	72 - 122
1,2,3-Trichlorobenzene	25.0	22.4		ug/Kg		90	59 - 120
1,2,3-Trichloropropane	25.0	24.2		ug/Kg		97	68 - 128
1,2-Dichloroethane	25.0	24.0		ug/Kg		96	64 - 126
1,1-Dichloroethene	25.0	27.6		ug/Kg		110	57 - 139
1,2-Dichloropropane	25.0	24.3		ug/Kg		97	78 - 122

TestAmerica Canton

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: LCS 240-354032/6

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,2,4-Trimethylbenzene	25.0	24.6		ug/Kg		98	75 - 121
2-Hexanone	50.0	48.1		ug/Kg		96	52 - 145
1,1,2,2-Tetrachloroethane	25.0	24.2		ug/Kg		97	68 - 128
Acetone	50.0	54.2		ug/Kg		108	43 - 159
Benzene	25.0	23.7		ug/Kg		95	74 - 123
Bromoform	25.0	20.9		ug/Kg		83	46 - 137
Bromomethane	25.0	24.7		ug/Kg		99	10 - 152
Carbon disulfide	25.0	26.5		ug/Kg		106	29 - 153
Carbon tetrachloride	25.0	26.6		ug/Kg		106	56 - 139
1,1,1-Trichloroethane	25.0	27.7		ug/Kg		111	64 - 135
Chlorobenzene	25.0	23.4		ug/Kg		94	80 - 120
1,3-Dichloropropane	25.0	23.4		ug/Kg		94	76 - 120
Chloroethane	25.0	25.5		ug/Kg		102	15 - 155
1,2-Dibromo-3-Chloropropane	25.0	21.9		ug/Kg		88	38 - 135
Chloroform	25.0	25.1		ug/Kg		101	72 - 124
Chloromethane	25.0	25.1		ug/Kg		100	45 - 128
cis-1,2-Dichloroethene	25.0	24.6		ug/Kg		98	74 - 123
cis-1,3-Dichloropropene	25.0	24.1		ug/Kg		97	63 - 137
Bromodichloromethane	25.0	24.3		ug/Kg		97	63 - 132
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.3		ug/Kg		105	56 - 138
Dichlorodifluoromethane	25.0	22.8		ug/Kg		91	26 - 138
1,2,4-Trichlorobenzene	25.0	20.5		ug/Kg		82	54 - 120
Ethylbenzene	25.0	23.6		ug/Kg		94	76 - 120
1,2-Dibromoethane	25.0	24.1		ug/Kg		96	76 - 120
2,2-Dichloropropane	25.0	25.5		ug/Kg		102	42 - 143
1,2-Dichlorobenzene	25.0	23.0		ug/Kg		92	73 - 120
1,3-Dichlorobenzene	25.0	22.9		ug/Kg		92	70 - 120
1,4-Dichlorobenzene	25.0	22.4		ug/Kg		89	71 - 120
2-Chloroethyl vinyl ether	25.0	22.3	J	ug/Kg		89	58 - 154
Isopropylbenzene	25.0	25.3		ug/Kg		101	77 - 124
2-Chlorotoluene	25.0	24.0		ug/Kg		96	75 - 120
2-Butanone (MEK)	50.0	48.7		ug/Kg		97	45 - 148
4-Methyl-2-pentanone (MIBK)	50.0	49.5		ug/Kg		99	53 - 139
Bromobenzene	25.0	22.7		ug/Kg		91	75 - 120
Methyl tert-butyl ether	25.0	25.1		ug/Kg		101	66 - 127
Bromochloromethane	25.0	26.5		ug/Kg		106	72 - 124
Methylene Chloride	25.0	27.2		ug/Kg		109	62 - 137
4-Chlorotoluene	25.0	24.5		ug/Kg		98	74 - 121
p-Isopropyltoluene	25.0	25.4		ug/Kg		101	74 - 124
Styrene	25.0	24.2		ug/Kg		97	76 - 121
m-Xylene & p-Xylene	25.0	24.2		ug/Kg		97	77 - 120
o-Xylene	25.0	24.6		ug/Kg		98	79 - 120
Hexachlorobutadiene	25.0	23.2		ug/Kg		93	58 - 122
Tetrachloroethene	25.0	23.3		ug/Kg		93	76 - 120
Dibromomethane	25.0	23.7		ug/Kg		95	71 - 122
Toluene	25.0	23.9		ug/Kg		95	76 - 120
Naphthalene	25.0	21.3		ug/Kg		85	51 - 120

TestAmerica Canton

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: LCS 240-354032/6
Matrix: Solid
Analysis Batch: 354032

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	25.0	26.5		ug/Kg		106	71 - 133
n-Butylbenzene	25.0	25.0		ug/Kg		100	64 - 133
trans-1,3-Dichloropropene	25.0	20.3		ug/Kg		81	55 - 121
N-Propylbenzene	25.0	24.7		ug/Kg		99	73 - 129
Trichloroethene	25.0	23.4		ug/Kg		94	73 - 126
sec-Butylbenzene	25.0	24.6		ug/Kg		98	73 - 126
Trichlorofluoromethane	25.0	26.4		ug/Kg		106	47 - 146
tert-Butylbenzene	25.0	24.2		ug/Kg		97	73 - 122
Vinyl chloride	25.0	28.8		ug/Kg		115	52 - 130
Vinyl acetate	25.0	24.4		ug/Kg		98	43 - 144
tert-Butyl alcohol	250	231		ug/Kg		92	41 - 139
Xylenes, Total	50.0	48.8		ug/Kg		98	79 - 120

Surrogate	LCS %Recovery	LCS Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	82		48 - 123
4-Bromofluorobenzene (Surr)	82		49 - 141
Toluene-d8 (Surr)	88		62 - 135
Dibromofluoromethane (Surr)	91		49 - 132

Lab Sample ID: 240-103610-4 MS
Matrix: Solid
Analysis Batch: 354032

Client Sample ID: SB-SEMW-10D-DUP
Prep Type: Total/NA
Prep Batch: 354057

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1,2-Tetrachloroethane	3.5	U	27.9	23.1		ug/Kg	☼	83	16 - 137
1,1-Dichloropropene	1.2	U	27.9	22.4		ug/Kg	☼	80	30 - 138
1,1-Dichloroethane	0.81	U	27.9	23.3		ug/Kg	☼	84	50 - 133
1,2,3-Trichlorobenzene	0.67	U	27.9	16.6		ug/Kg	☼	59	10 - 120
1,2,3-Trichloropropane	1.8	U	27.9	22.8		ug/Kg	☼	82	10 - 178
1,2-Dichloroethane	0.90	U	27.9	22.7		ug/Kg	☼	81	42 - 127
1,1-Dichloroethene	1.1	U	27.9	23.7		ug/Kg	☼	85	36 - 150
1,2-Dichloropropane	0.99	U	27.9	24.7		ug/Kg	☼	88	51 - 128
1,2,4-Trimethylbenzene	1.2	U	27.9	22.0		ug/Kg	☼	79	10 - 149
2-Hexanone	4.8	U	55.8	43.5		ug/Kg	☼	78	15 - 147
1,1,1,2-Tetrachloroethane	1.7	U	27.9	23.2		ug/Kg	☼	83	16 - 178
Acetone	25	U	55.8	46.0		ug/Kg	☼	82	10 - 160
Benzene	0.82	U	27.9	23.3		ug/Kg	☼	84	39 - 133
Bromoform	2.8	U	27.9	17.2		ug/Kg	☼	62	18 - 120
Bromomethane	1.2	U	27.9	21.7		ug/Kg	☼	78	10 - 159
Carbon disulfide	1.4	U	27.9	22.0		ug/Kg	☼	79	16 - 145
Carbon tetrachloride	3.8	U	27.9	22.1		ug/Kg	☼	79	22 - 142
1,1,1-Trichloroethane	0.96	U	27.9	24.3		ug/Kg	☼	87	38 - 143
Chlorobenzene	1.1	U	27.9	22.6		ug/Kg	☼	81	21 - 131
1,3-Dichloropropane	1.2	U	27.9	23.3		ug/Kg	☼	83	34 - 121
Chloroethane	1.4	U	27.9	21.5		ug/Kg	☼	77	17 - 162
1,2-Dibromo-3-Chloropropane	4.2	U	27.9	15.9		ug/Kg	☼	57	10 - 141
Chloroform	0.92	U	27.9	23.0		ug/Kg	☼	82	51 - 130
Chloromethane	1.2	U	27.9	22.8		ug/Kg	☼	82	26 - 149

TestAmerica Canton

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: 240-103610-4 MS

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: SB-SEMW-10D-DUP

Prep Type: Total/NA

Prep Batch: 354057

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
cis-1,2-Dichloroethene	0.76	U	27.9	24.6		ug/Kg	☼	88	50 - 128
cis-1,3-Dichloropropene	1.7	U	27.9	22.3		ug/Kg	☼	80	15 - 132
Bromodichloromethane	0.79	U	27.9	22.7		ug/Kg	☼	81	32 - 129
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	27.9	23.3		ug/Kg	☼	83	37 - 147
Dichlorodifluoromethane	1.1	U	27.9	19.5		ug/Kg	☼	70	15 - 150
1,2,4-Trichlorobenzene	0.67	U	27.9	14.8		ug/Kg	☼	53	10 - 120
Ethylbenzene	1.2	U	27.9	22.5		ug/Kg	☼	81	20 - 135
1,2-Dibromoethane	0.90	U	27.9	22.9		ug/Kg	☼	82	36 - 125
2,2-Dichloropropane	1.4	U	27.9	19.7		ug/Kg	☼	71	20 - 141
1,2-Dichlorobenzene	1.3	U	27.9	20.6		ug/Kg	☼	74	10 - 130
1,3-Dichlorobenzene	0.95	U	27.9	20.6		ug/Kg	☼	74	10 - 131
1,4-Dichlorobenzene	1.0	U	27.9	19.9		ug/Kg	☼	71	10 - 130
2-Chloroethyl vinyl ether	10	U	27.9	17.9	J	ug/Kg	☼	64	10 - 134
Isopropylbenzene	0.97	U	27.9	22.6		ug/Kg	☼	81	20 - 138
2-Chlorotoluene	1.1	U	27.9	22.4		ug/Kg	☼	80	10 - 179
2-Butanone (MEK)	4.2	U	55.8	43.8		ug/Kg	☼	78	20 - 148
4-Methyl-2-pentanone (MIBK)	4.3	U	55.8	44.2		ug/Kg	☼	79	29 - 143
Bromobenzene	1.4	U	27.9	22.0		ug/Kg	☼	79	10 - 164
Methyl tert-butyl ether	0.96	U	27.9	22.3		ug/Kg	☼	80	48 - 134
Bromochloromethane	0.69	U	27.9	23.4		ug/Kg	☼	84	36 - 147
Methylene Chloride	14	U	27.9	24.5	J	ug/Kg	☼	88	39 - 145
4-Chlorotoluene	1.0	U	27.9	22.6		ug/Kg	☼	81	10 - 158
p-Isopropyltoluene	3.4	U	27.9	21.4		ug/Kg	☼	77	10 - 142
Styrene	1.4	U	27.9	22.8		ug/Kg	☼	82	10 - 134
m-Xylene & p-Xylene	0.91	U	27.9	22.1		ug/Kg	☼	79	16 - 137
o-Xylene	1.0	U	27.9	23.0		ug/Kg	☼	82	21 - 138
Hexachlorobutadiene	4.4	U	27.9	15.7		ug/Kg	☼	56	10 - 120
Tetrachloroethene	0.85	U	27.9	21.9		ug/Kg	☼	78	20 - 151
Dibromomethane	0.78	U	27.9	22.5		ug/Kg	☼	80	37 - 138
Toluene	0.90	U	27.9	23.6		ug/Kg	☼	85	29 - 141
Naphthalene	3.2	U	27.9	15.3		ug/Kg	☼	55	10 - 120
trans-1,2-Dichloroethene	0.54	U	27.9	24.1		ug/Kg	☼	86	44 - 141
n-Butylbenzene	4.1	U	27.9	19.4		ug/Kg	☼	69	10 - 149
trans-1,3-Dichloropropene	1.2	U	27.9	18.4		ug/Kg	☼	66	15 - 120
N-Propylbenzene	0.86	U	27.9	22.3		ug/Kg	☼	80	10 - 162
Trichloroethene	49	F1	27.9	129	F1	ug/Kg	☼	288	25 - 148
sec-Butylbenzene	1.0	U	27.9	21.5		ug/Kg	☼	77	10 - 156
Trichlorofluoromethane	1.3	U	27.9	21.9		ug/Kg	☼	78	38 - 149
tert-Butylbenzene	1.1	U	27.9	22.0		ug/Kg	☼	79	10 - 148
Vinyl chloride	0.98	U	27.9	24.3		ug/Kg	☼	87	31 - 148
Vinyl acetate	2.5	U	27.9	22.7		ug/Kg	☼	81	10 - 120
tert-Butyl alcohol	19	U	27.9	201	J	ug/Kg	☼	72	59 - 128
Xylenes, Total	1.9	U	55.8	45.1		ug/Kg	☼	81	19 - 137

Surrogate	MS	MS	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	79		48 - 123
4-Bromofluorobenzene (Surr)	83		49 - 141

TestAmerica Canton

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: 240-103610-4 MS

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: SB-SEMW-10D-DUP

Prep Type: Total/NA

Prep Batch: 354057

Surrogate	MS %Recovery	MS Qualifier	Limits
Toluene-d8 (Surr)	88		62 - 135
Dibromofluoromethane (Surr)	83		49 - 132

Lab Sample ID: 240-103610-4 MSD

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: SB-SEMW-10D-DUP

Prep Type: Total/NA

Prep Batch: 354057

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
1,1,1,2-Tetrachloroethane	3.5	U	30.1	27.2		ug/Kg	☼	90	16 - 137	16	40
1,1-Dichloropropene	1.2	U	30.1	26.3		ug/Kg	☼	87	30 - 138	16	36
1,1-Dichloroethane	0.81	U	30.1	27.7		ug/Kg	☼	92	50 - 133	17	40
1,2,3-Trichlorobenzene	0.67	U	30.1	16.7		ug/Kg	☼	56	10 - 120	1	40
1,2,3-Trichloropropane	1.8	U	30.1	27.8		ug/Kg	☼	92	10 - 178	20	40
1,2-Dichloroethane	0.90	U	30.1	26.0		ug/Kg	☼	86	42 - 127	13	34
1,1-Dichloroethene	1.1	U	30.1	28.8		ug/Kg	☼	96	36 - 150	20	40
1,2-Dichloropropane	0.99	U	30.1	27.5		ug/Kg	☼	91	51 - 128	11	36
1,2,4-Trimethylbenzene	1.2	U	30.1	25.3		ug/Kg	☼	84	10 - 149	14	40
2-Hexanone	4.8	U	60.3	50.2		ug/Kg	☼	83	15 - 147	14	40
1,1,2,2-Tetrachloroethane	1.7	U	30.1	26.7		ug/Kg	☼	89	16 - 178	14	40
Acetone	25	U	60.3	60.0		ug/Kg	☼	100	10 - 160	26	39
Benzene	0.82	U	30.1	26.8		ug/Kg	☼	89	39 - 133	14	40
Bromoform	2.8	U	30.1	20.8		ug/Kg	☼	69	18 - 120	19	40
Bromomethane	1.2	U	30.1	27.3		ug/Kg	☼	91	10 - 159	23	40
Carbon disulfide	1.4	U	30.1	28.1		ug/Kg	☼	93	16 - 145	24	40
Carbon tetrachloride	3.8	U	30.1	27.4		ug/Kg	☼	91	22 - 142	21	40
1,1,1-Trichloroethane	0.96	U	30.1	28.9		ug/Kg	☼	96	38 - 143	17	40
Chlorobenzene	1.1	U	30.1	25.6		ug/Kg	☼	85	21 - 131	12	40
1,3-Dichloropropane	1.2	U	30.1	25.8		ug/Kg	☼	85	34 - 121	10	40
Chloroethane	1.4	U	30.1	29.8		ug/Kg	☼	99	17 - 162	32	40
1,2-Dibromo-3-Chloropropane	4.2	U	30.1	18.4		ug/Kg	☼	61	10 - 141	14	40
Chloroform	0.92	U	30.1	28.1		ug/Kg	☼	93	51 - 130	20	32
Chloromethane	1.2	U	30.1	29.2		ug/Kg	☼	97	26 - 149	24	37
cis-1,2-Dichloroethene	0.76	U	30.1	29.6		ug/Kg	☼	98	50 - 128	18	40
cis-1,3-Dichloropropene	1.7	U	30.1	25.9		ug/Kg	☼	86	15 - 132	15	40
Bromodichloromethane	0.79	U	30.1	26.0		ug/Kg	☼	86	32 - 129	13	39
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	30.1	27.7		ug/Kg	☼	92	37 - 147	17	37
Dichlorodifluoromethane	1.1	U	30.1	23.7		ug/Kg	☼	79	15 - 150	19	31
1,2,4-Trichlorobenzene	0.67	U	30.1	15.1		ug/Kg	☼	50	10 - 120	2	40
Ethylbenzene	1.2	U	30.1	26.1		ug/Kg	☼	87	20 - 135	15	40
1,2-Dibromoethane	0.90	U	30.1	25.4		ug/Kg	☼	84	36 - 125	10	40
2,2-Dichloropropane	1.4	U	30.1	25.0		ug/Kg	☼	83	20 - 141	24	40
1,2-Dichlorobenzene	1.3	U	30.1	20.4		ug/Kg	☼	68	10 - 130	1	40
1,3-Dichlorobenzene	0.95	U	30.1	23.9		ug/Kg	☼	79	10 - 131	15	40
1,4-Dichlorobenzene	1.0	U	30.1	22.9		ug/Kg	☼	76	10 - 130	14	40
2-Chloroethyl vinyl ether	10	U	30.1	20.3	J	ug/Kg	☼	67	10 - 134	13	40
Isopropylbenzene	0.97	U	30.1	26.8		ug/Kg	☼	89	20 - 138	17	40
2-Chlorotoluene	1.1	U	30.1	24.6		ug/Kg	☼	82	10 - 179	9	40

TestAmerica Canton

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: 240-103610-4 MSD

Matrix: Solid

Analysis Batch: 354032

Client Sample ID: SB-SEMW-10D-DUP

Prep Type: Total/NA

Prep Batch: 354057

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
2-Butanone (MEK)	4.2	U	60.3	50.8		ug/Kg	☼	84		20 - 148	15	36
4-Methyl-2-pentanone (MIBK)	4.3	U	60.3	51.5		ug/Kg	☼	85		29 - 143	15	40
Bromobenzene	1.4	U	30.1	23.9		ug/Kg	☼	79		10 - 164	8	40
Methyl tert-butyl ether	0.96	U	30.1	26.9		ug/Kg	☼	89		48 - 134	19	34
Bromochloromethane	0.69	U	30.1	28.7		ug/Kg	☼	95		36 - 147	20	40
Methylene Chloride	14	U	30.1	30.7		ug/Kg	☼	102		39 - 145	22	40
4-Chlorotoluene	1.0	U	30.1	24.9		ug/Kg	☼	83		10 - 158	9	40
p-Isopropyltoluene	3.4	U	30.1	25.1		ug/Kg	☼	83		10 - 142	16	40
Styrene	1.4	U	30.1	26.6		ug/Kg	☼	88		10 - 134	16	40
m-Xylene & p-Xylene	0.91	U	30.1	25.4		ug/Kg	☼	84		16 - 137	14	40
o-Xylene	1.0	U	30.1	26.8		ug/Kg	☼	89		21 - 138	15	40
Hexachlorobutadiene	4.4	U	30.1	16.0		ug/Kg	☼	53		10 - 120	2	40
Tetrachloroethene	0.85	U	30.1	24.8		ug/Kg	☼	82		20 - 151	13	40
Dibromomethane	0.78	U	30.1	26.7		ug/Kg	☼	89		37 - 138	17	30
Toluene	0.90	U	30.1	25.5		ug/Kg	☼	85		29 - 141	8	40
Naphthalene	3.2	U	30.1	15.9		ug/Kg	☼	53		10 - 120	4	40
trans-1,2-Dichloroethene	0.54	U	30.1	29.1		ug/Kg	☼	96		44 - 141	19	40
n-Butylbenzene	4.1	U	30.1	20.2		ug/Kg	☼	67		10 - 149	4	40
trans-1,3-Dichloropropene	1.2	U	30.1	19.7		ug/Kg	☼	65		15 - 120	7	40
N-Propylbenzene	0.86	U	30.1	24.9		ug/Kg	☼	83		10 - 162	11	40
Trichloroethene	49	F1	30.1	171	F1	ug/Kg	☼	404		25 - 148	28	40
sec-Butylbenzene	1.0	U	30.1	25.3		ug/Kg	☼	84		10 - 156	16	40
Trichlorofluoromethane	1.3	U	30.1	28.6		ug/Kg	☼	95		38 - 149	26	39
tert-Butylbenzene	1.1	U	30.1	25.1		ug/Kg	☼	83		10 - 148	13	40
Vinyl chloride	0.98	U	30.1	31.8		ug/Kg	☼	105		31 - 148	27	37
Vinyl acetate	2.5	U	30.1	25.5		ug/Kg	☼	85		10 - 120	12	40
tert-Butyl alcohol	19	U	301	244		ug/Kg	☼	81		59 - 128	19	39
Xylenes, Total	1.9	U	60.3	52.2		ug/Kg	☼	87		19 - 137	15	40

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	81		48 - 123
4-Bromofluorobenzene (Surr)	83		49 - 141
Toluene-d8 (Surr)	87		62 - 135
Dibromofluoromethane (Surr)	88		49 - 132

Lab Sample ID: MB 240-354546/6

Matrix: Water

Analysis Batch: 354546

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14	ug/L			11/09/18 11:14	1
1,1-Dichloropropene	0.14	U	1.0	0.14	ug/L			11/09/18 11:14	1
1,1-Dichloroethane	0.17	U	1.0	0.17	ug/L			11/09/18 11:14	1
1,2,3-Trichlorobenzene	0.54	U	1.0	0.54	ug/L			11/09/18 11:14	1
1,2,3-Trichloropropane	0.24	U	1.0	0.24	ug/L			11/09/18 11:14	1
1,2-Dichloroethane	0.21	U	1.0	0.21	ug/L			11/09/18 11:14	1
1,1-Dichloroethene	0.19	U	1.0	0.19	ug/L			11/09/18 11:14	1
1,2,3-Trimethylbenzene	0.14	U	5.0	0.14	ug/L			11/09/18 11:14	1

TestAmerica Canton

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: MB 240-354546/6
Matrix: Water
Analysis Batch: 354546

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

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
1,2-Dichloropropane	0.15	U	1.0	0.15	ug/L			11/09/18 11:14	1
1,2,4-Trimethylbenzene	0.070	U	1.0	0.070	ug/L			11/09/18 11:14	1
2-Hexanone	0.54	U	10	0.54	ug/L			11/09/18 11:14	1
1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13	ug/L			11/09/18 11:14	1
Acetone	5.4	U	10	5.4	ug/L			11/09/18 11:14	1
Benzene	0.13	U	1.0	0.13	ug/L			11/09/18 11:14	1
Bromoform	0.76	U	1.0	0.76	ug/L			11/09/18 11:14	1
Bromomethane	0.42	U	1.0	0.42	ug/L			11/09/18 11:14	1
Carbon disulfide	0.28	U	1.0	0.28	ug/L			11/09/18 11:14	1
Carbon tetrachloride	0.26	U	1.0	0.26	ug/L			11/09/18 11:14	1
1,1,1-Trichloroethane	0.24	U	1.0	0.24	ug/L			11/09/18 11:14	1
Chlorobenzene	0.14	U	1.0	0.14	ug/L			11/09/18 11:14	1
1,3-Dichloropropane	0.21	U	1.0	0.21	ug/L			11/09/18 11:14	1
Chloroethane	0.83	U	1.0	0.83	ug/L			11/09/18 11:14	1
1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91	ug/L			11/09/18 11:14	1
Chloroform	0.13	U	1.0	0.13	ug/L			11/09/18 11:14	1
Chloromethane	0.20	U	1.0	0.20	ug/L			11/09/18 11:14	1
cis-1,2-Dichloroethene	0.16	U	1.0	0.16	ug/L			11/09/18 11:14	1
cis-1,3-Dichloropropene	0.61	U	1.0	0.61	ug/L			11/09/18 11:14	1
Bromodichloromethane	0.17	U	1.0	0.17	ug/L			11/09/18 11:14	1
1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41	ug/L			11/09/18 11:14	1
Dichlorodifluoromethane	0.35	U	1.0	0.35	ug/L			11/09/18 11:14	1
1,2,4-Trichlorobenzene	0.26	U	1.0	0.26	ug/L			11/09/18 11:14	1
Ethylbenzene	0.11	U	1.0	0.11	ug/L			11/09/18 11:14	1
1,2-Dibromoethane	0.12	U	1.0	0.12	ug/L			11/09/18 11:14	1
2,2-Dichloropropane	0.31	U	1.0	0.31	ug/L			11/09/18 11:14	1
1,2-Dichlorobenzene	0.15	U	1.0	0.15	ug/L			11/09/18 11:14	1
1,3-Dichlorobenzene	0.15	U	1.0	0.15	ug/L			11/09/18 11:14	1
1,4-Dichlorobenzene	0.16	U	1.0	0.16	ug/L			11/09/18 11:14	1
2-Chloroethyl vinyl ether	0.26	U	10	0.26	ug/L			11/09/18 11:14	1
Isopropylbenzene	0.090	U	1.0	0.090	ug/L			11/09/18 11:14	1
2-Chlorotoluene	0.15	U	1.0	0.15	ug/L			11/09/18 11:14	1
2-Butanone (MEK)	1.2	U	10	1.2	ug/L			11/09/18 11:14	1
4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42	ug/L			11/09/18 11:14	1
Bromobenzene	0.12	U	1.0	0.12	ug/L			11/09/18 11:14	1
Methyl tert-butyl ether	0.070	U	1.0	0.070	ug/L			11/09/18 11:14	1
Bromochloromethane	0.14	U	1.0	0.14	ug/L			11/09/18 11:14	1
Methylene Chloride	2.6	U	5.0	2.6	ug/L			11/09/18 11:14	1
4-Chlorotoluene	0.090	U	1.0	0.090	ug/L			11/09/18 11:14	1
4-Isopropyltoluene	0.13	U	1.0	0.13	ug/L			11/09/18 11:14	1
Styrene	0.10	U	1.0	0.10	ug/L			11/09/18 11:14	1
m-Xylene & p-Xylene	0.080	U	2.0	0.080	ug/L			11/09/18 11:14	1
o-Xylene	0.090	U	1.0	0.090	ug/L			11/09/18 11:14	1
Hexachlorobutadiene	0.83	U	1.0	0.83	ug/L			11/09/18 11:14	1
Tetrachloroethene	0.15	U	1.0	0.15	ug/L			11/09/18 11:14	1
Dibromomethane	0.090	U	1.0	0.090	ug/L			11/09/18 11:14	1
Toluene	0.14	U	1.0	0.14	ug/L			11/09/18 11:14	1
Diisopropyl ether	0.17	U	10	0.17	ug/L			11/09/18 11:14	1

QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: MB 240-354546/6

Matrix: Water

Analysis Batch: 354546

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Naphthalene	0.32	U	1.0	0.32	ug/L			11/09/18 11:14	1
trans-1,2-Dichloroethene	0.19	U	1.0	0.19	ug/L			11/09/18 11:14	1
n-Butylbenzene	0.14	U	1.0	0.14	ug/L			11/09/18 11:14	1
trans-1,3-Dichloropropene	0.67	U	1.0	0.67	ug/L			11/09/18 11:14	1
N-Propylbenzene	0.15	U	1.0	0.15	ug/L			11/09/18 11:14	1
Trichloroethene	0.10	U	1.0	0.10	ug/L			11/09/18 11:14	1
sec-Butylbenzene	0.13	U	1.0	0.13	ug/L			11/09/18 11:14	1
Trichlorofluoromethane	0.45	U	1.0	0.45	ug/L			11/09/18 11:14	1
Tert-amyl methyl ether	0.11	U	5.0	0.11	ug/L			11/09/18 11:14	1
Ethyl tert-butyl ether	0.15	U	5.0	0.15	ug/L			11/09/18 11:14	1
tert-Butylbenzene	0.14	U	1.0	0.14	ug/L			11/09/18 11:14	1
Vinyl chloride	0.20	U	1.0	0.20	ug/L			11/09/18 11:14	1
Vinyl acetate	0.19	U	2.0	0.19	ug/L			11/09/18 11:14	1
tert-Butyl alcohol	1.7	U	50	1.7	ug/L			11/09/18 11:14	1
Xylenes, Total	0.15	U	2.0	0.15	ug/L			11/09/18 11:14	1
Chlorodibromomethane	0.39	U	1.0	0.39	ug/L			11/09/18 11:14	1

Surrogate	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier				
1,2-Dichloroethane-d4 (Surr)	111		70 - 121		11/09/18 11:14	1
4-Bromofluorobenzene (Surr)	78		59 - 120		11/09/18 11:14	1
Toluene-d8 (Surr)	79		70 - 123		11/09/18 11:14	1
Dibromofluoromethane (Surr)	120		75 - 128		11/09/18 11:14	1

Lab Sample ID: LCS 240-354546/4

Matrix: Water

Analysis Batch: 354546

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1-Dichloropropene	10.0	10.0		ug/L		100	78 - 126
1,1-Dichloroethane	10.0	10.2		ug/L		102	75 - 133
1,2,3-Trichlorobenzene	10.0	9.81		ug/L		98	39 - 138
1,2,3-Trichloropropane	10.0	8.70		ug/L		87	66 - 139
1,2-Dichloroethane	10.0	10.3		ug/L		103	71 - 135
1,1-Dichloroethene	10.0	9.84		ug/L		98	65 - 139
1,2-Dichloropropane	10.0	9.09		ug/L		91	78 - 133
1,2,4-Trimethylbenzene	10.0	7.79		ug/L		78	74 - 120
2-Hexanone	20.0	13.3		ug/L		67	43 - 148
1,1,2,2-Tetrachloroethane	10.0	7.50		ug/L		75	65 - 139
Acetone	20.0	19.7		ug/L		99	21 - 162
Benzene	10.0	9.37		ug/L		94	80 - 123
Bromoform	10.0	12.1		ug/L		121	49 - 141
Bromomethane	10.0	8.42		ug/L		84	41 - 175
Carbon disulfide	10.0	9.49		ug/L		95	60 - 138
Carbon tetrachloride	10.0	12.4		ug/L		124	63 - 140
1,1,1-Trichloroethane	10.0	11.8		ug/L		118	69 - 134
Chlorobenzene	10.0	9.76		ug/L		98	80 - 121
1,3-Dichloropropane	10.0	8.19		ug/L		82	72 - 134

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: LCS 240-354546/4

Matrix: Water

Analysis Batch: 354546

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloroethane	10.0	7.26		ug/L		73	33 - 173
1,2-Dibromo-3-Chloropropane	10.0	8.63		ug/L		86	46 - 132
Chloroform	10.0	11.6		ug/L		116	79 - 127
Chloromethane	10.0	8.56		ug/L		86	54 - 143
cis-1,2-Dichloroethene	10.0	10.5		ug/L		105	76 - 128
cis-1,3-Dichloropropene	10.0	8.17		ug/L		82	64 - 132
Bromodichloromethane	10.0	10.3		ug/L		103	77 - 125
1,1,2-Trichlorotrifluoroethane	10.0	11.8		ug/L		118	50 - 156
Dichlorodifluoromethane	10.0	13.0		ug/L		130	29 - 148
1,2,4-Trichlorobenzene	10.0	9.07		ug/L		91	42 - 133
Ethylbenzene	10.0	9.01		ug/L		90	80 - 120
1,2-Dibromoethane	10.0	8.65		ug/L		87	77 - 123
2,2-Dichloropropane	10.0	10.6		ug/L		106	42 - 150
1,2-Dichlorobenzene	10.0	9.54		ug/L		95	78 - 120
1,3-Dichlorobenzene	10.0	9.54		ug/L		95	78 - 120
1,4-Dichlorobenzene	10.0	9.35		ug/L		93	78 - 120
2-Chloroethyl vinyl ether	10.0	5.89	J	ug/L		59	55 - 137
Isopropylbenzene	10.0	9.10		ug/L		91	74 - 120
2-Chlorotoluene	10.0	9.42		ug/L		94	78 - 123
2-Butanone (MEK)	20.0	13.3		ug/L		66	39 - 163
4-Methyl-2-pentanone (MIBK)	20.0	14.6		ug/L		73	49 - 143
Bromobenzene	10.0	9.88		ug/L		99	74 - 129
Methyl tert-butyl ether	10.0	9.55		ug/L		95	51 - 133
Bromochloromethane	10.0	13.3	*	ug/L		133	74 - 130
Methylene Chloride	10.0	11.5		ug/L		115	70 - 134
4-Chlorotoluene	10.0	8.99		ug/L		90	77 - 125
4-Isopropyltoluene	10.0	7.86		ug/L		79	69 - 122
Styrene	10.0	9.03		ug/L		90	79 - 120
m-Xylene & p-Xylene	10.0	9.16		ug/L		92	80 - 120
o-Xylene	10.0	9.22		ug/L		92	80 - 120
Hexachlorobutadiene	10.0	8.59		ug/L		86	38 - 136
Tetrachloroethene	10.0	11.3		ug/L		113	74 - 130
Dibromomethane	10.0	9.53		ug/L		95	74 - 124
Toluene	10.0	8.72		ug/L		87	78 - 129
Naphthalene	10.0	6.89		ug/L		69	28 - 141
trans-1,2-Dichloroethene	10.0	10.8		ug/L		108	78 - 133
n-Butylbenzene	10.0	6.96		ug/L		70	57 - 126
trans-1,3-Dichloropropene	10.0	7.76		ug/L		78	55 - 128
N-Propylbenzene	10.0	8.02		ug/L		80	77 - 123
Trichloroethene	10.0	10.9		ug/L		109	76 - 125
sec-Butylbenzene	10.0	7.37		ug/L		74	68 - 123
Trichlorofluoromethane	10.0	9.84		ug/L		98	51 - 164
tert-Butylbenzene	10.0	7.25		ug/L		72	70 - 121
Vinyl chloride	10.0	8.62		ug/L		86	58 - 143
Vinyl acetate	10.0	6.74		ug/L		67	45 - 151
tert-Butyl alcohol	100	110		ug/L		110	10 - 161
Xylenes, Total	20.0	18.4		ug/L		92	80 - 120

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QC Sample Results

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

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

Lab Sample ID: LCS 240-354546/4
Matrix: Water
Analysis Batch: 354546

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

<i>Surrogate</i>	<i>LCS LCS</i>		<i>Limits</i>
	<i>%Recovery</i>	<i>Qualifier</i>	
<i>1,2-Dichloroethane-d4 (Surr)</i>	98		<i>70 - 121</i>
<i>4-Bromofluorobenzene (Surr)</i>	89		<i>59 - 120</i>
<i>Toluene-d8 (Surr)</i>	84		<i>70 - 123</i>
<i>Dibromofluoromethane (Surr)</i>	113		<i>75 - 128</i>

Method: Moisture - Percent Moisture

Lab Sample ID: 240-103610-3 DU
Matrix: Solid
Analysis Batch: 353192

Client Sample ID: SB-SEMW-10D-20-28
Prep Type: Total/NA

<i>Analyte</i>	<i>Sample Result</i>	<i>Sample Qualifier</i>	<i>DU DU</i>		<i>Unit</i>	<i>D</i>	<i>RPD</i>	<i>RPD</i>	<i>Limit</i>
			<i>Result</i>	<i>Qualifier</i>					
Percent Solids	82.6		83.0		%		0.5		20
Percent Moisture	17.4		17.0		%		2		20

QC Association Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

GC/MS VOA

Analysis Batch: 354032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-103610-2	SB-SEMW-10D-10-15	Total/NA	Solid	8260B	354057
240-103610-3	SB-SEMW-10D-20-28	Total/NA	Solid	8260B	354057
240-103610-4	SB-SEMW-10D-DUP	Total/NA	Solid	8260B	354057
MB 240-354032/7	Method Blank	Total/NA	Solid	8260B	
LCS 240-354032/6	Lab Control Sample	Total/NA	Solid	8260B	
240-103610-4 MS	SB-SEMW-10D-DUP	Total/NA	Solid	8260B	354057
240-103610-4 MSD	SB-SEMW-10D-DUP	Total/NA	Solid	8260B	354057

Prep Batch: 354057

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-103610-2	SB-SEMW-10D-10-15	Total/NA	Solid	5030A	
240-103610-3	SB-SEMW-10D-20-28	Total/NA	Solid	5030A	
240-103610-4	SB-SEMW-10D-DUP	Total/NA	Solid	5030A	
240-103610-4 MS	SB-SEMW-10D-DUP	Total/NA	Solid	5030A	
240-103610-4 MSD	SB-SEMW-10D-DUP	Total/NA	Solid	5030A	

Analysis Batch: 354546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-103610-1	TB-102918	Total/NA	Water	8260B	
MB 240-354546/6	Method Blank	Total/NA	Water	8260B	
LCS 240-354546/4	Lab Control Sample	Total/NA	Water	8260B	

General Chemistry

Analysis Batch: 353192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-103610-2	SB-SEMW-10D-10-15	Total/NA	Solid	Moisture	
240-103610-3	SB-SEMW-10D-20-28	Total/NA	Solid	Moisture	
240-103610-4	SB-SEMW-10D-DUP	Total/NA	Solid	Moisture	
240-103610-3 DU	SB-SEMW-10D-20-28	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: TB-102918
Date Collected: 10/29/18 00:00
Date Received: 10/31/18 10:00

Lab Sample ID: 240-103610-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	354546	11/09/18 17:52	LEE	TAL CAN

Client Sample ID: SB-SEMW-10D-10-15
Date Collected: 10/29/18 11:20
Date Received: 10/31/18 10:00

Lab Sample ID: 240-103610-2
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	353192	11/01/18 15:42	JWW	TAL CAN

Client Sample ID: SB-SEMW-10D-10-15
Date Collected: 10/29/18 11:20
Date Received: 10/31/18 10:00

Lab Sample ID: 240-103610-2
Matrix: Solid
Percent Solids: 82.7

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			354057	11/07/18 06:51	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	354032	11/07/18 15:12	TJL2	TAL CAN

Client Sample ID: SB-SEMW-10D-20-28
Date Collected: 10/29/18 12:30
Date Received: 10/31/18 10:00

Lab Sample ID: 240-103610-3
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	353192	11/01/18 15:42	JWW	TAL CAN

Client Sample ID: SB-SEMW-10D-20-28
Date Collected: 10/29/18 12:30
Date Received: 10/31/18 10:00

Lab Sample ID: 240-103610-3
Matrix: Solid
Percent Solids: 82.6

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	5030A			354057	11/07/18 06:51	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	354032	11/07/18 15:33	TJL2	TAL CAN

Client Sample ID: SB-SEMW-10D-DUP
Date Collected: 10/29/18 00:00
Date Received: 10/31/18 10:00

Lab Sample ID: 240-103610-4
Matrix: Solid

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Moisture		1	353192	11/01/18 15:42	JWW	TAL CAN

TestAmerica Canton

Lab Chronicle

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Client Sample ID: SB-SEMW-10D-DUP

Lab Sample ID: 240-103610-4

Date Collected: 10/29/18 00:00

Matrix: Solid

Date Received: 10/31/18 10:00

Percent Solids: 82.6

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total/NA	Prep	5030A			354057	11/07/18 06:51	TJL2	TAL CAN
Total/NA	Analysis	8260B		1	354032	11/07/18 15:54	TJL2	TAL CAN

Laboratory References:

TAL CAN = TestAmerica Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Laboratory: TestAmerica Canton

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

Authority	Program	EPA Region	Identification Number	Expiration Date
California	State Program	9	2927	02-23-19
Connecticut	State Program	1	PH-0590	12-31-19
Florida	NELAP	4	E87225	06-30-19
Illinois	NELAP	5	200004	07-31-19
Kansas	NELAP	7	E-10336	01-31-19
Kentucky (UST)	State Program	4	58	02-23-19
Kentucky (WW)	State Program	4	98016	12-31-18 *
Minnesota	NELAP	5	039-999-348	12-31-18 *
Minnesota (Petrofund)	State Program	1	3506	07-31-19
Nevada	State Program	9	OH00048	07-31-19
New Jersey	NELAP	2	OH001	06-30-19
New York	NELAP	2	10975	03-31-19
Ohio VAP	State Program	5	CL0024	09-06-19
Oregon	NELAP	10	4062	02-23-19
Pennsylvania	NELAP	3	68-00340	08-31-19 *
Texas	NELAP	6	T104704517-17-9	08-31-19
USDA	Federal		P330-16-00404	12-28-19
Virginia	NELAP	3	460175	09-14-19
Washington	State Program	10	C971	01-12-19
West Virginia DEP	State Program	3	210	12-31-18 *

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

Method Summary

Client: Tetra Tech, Inc.
Project/Site: MRC Block F Deepwell

TestAmerica Job ID: 240-103610-1

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL CAN
Moisture	Percent Moisture	EPA	TAL CAN
5030A	Purge and Trap	SW846	TAL CAN
5030B	Purge and Trap	SW846	TAL CAN

Protocol References:

EPA = US Environmental Protection Agency

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

Laboratory References:

TAL 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 F Deepwell

TestAmerica Job ID: 240-103610-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-103610-1	TB-102918	Water	10/29/18 00:00	10/31/18 10:00
240-103610-2	SB-SEMW-10D-10-15	Solid	10/29/18 11:20	10/31/18 10:00
240-103610-3	SB-SEMW-10D-20-28	Solid	10/29/18 12:30	10/31/18 10:00
240-103610-4	SB-SEMW-10D-DUP	Solid	10/29/18 00:00	10/31/18 10:00

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX11 Analysis Batch Number: 339715Lab Sample ID: STD8260 240-339715/5 IC Client Sample ID: _____Date Analyzed: 08/07/18 11:26 Lab File ID: UXJ3443.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Trichlorofluoromethane	1.82	Split Peak	evansle	08/07/18 12:59
Iodomethane	2.35	Split Peak	evansle	08/07/18 12:59

Lab Sample ID: STD8260 240-339715/7 IC Client Sample ID: _____Date Analyzed: 08/07/18 12:10 Lab File ID: UXJ3445.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Dichlorodifluoromethane	1.14	Peak assignment corrected	evansle	08/07/18 13:40

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX8 Analysis Batch Number: 350647Lab Sample ID: STDA9 240-350647/11 IC Client Sample ID: _____Date Analyzed: 10/18/18 05:27 Lab File ID: UX80013.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1-Chloro-1-fluoroethane TIC	2.20	Peak assignment corrected	latat	10/18/18 05:59
n-Butyl acetate	7.11	Peak assignment corrected	latat	10/18/18 05:58
Cyclohexanone	8.71	Peak assignment corrected	latat	10/18/18 05:58

Lab Sample ID: STDA9 240-350647/12 IC Client Sample ID: _____Date Analyzed: 10/18/18 05:49 Lab File ID: UX80014.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1-Chloro-1-fluoroethane TIC	2.21	Peak assignment corrected	latat	10/18/18 06:29
Ethyl acetate	4.32	Peak assignment corrected	latat	10/18/18 06:29
2-Nitropropane	6.00	Peak assignment corrected	latat	10/18/18 06:29
n-Butyl acetate	7.12	Peak assignment corrected	latat	10/18/18 06:29
Cyclohexanone	8.71	Peak assignment corrected	latat	10/18/18 06:29
Pentachloroethane	9.51	Peak assignment corrected	latat	10/18/18 06:29

GC/MS VOA MANUAL INTEGRATION SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX8 Analysis Batch Number: 353820Lab Sample ID: STD8260 240-353820/3 IC Client Sample ID: _____Date Analyzed: 11/06/18 06:49 Lab File ID: UX80595.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Chlorobenzene-d5	7.69	Peak assignment corrected	latat	11/07/18 04:25

Lab Sample ID: STD8260 240-353820/9 IC Client Sample ID: _____Date Analyzed: 11/06/18 09:02 Lab File ID: UX80601.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromoethane	7.29	Peak assignment corrected	latat	11/07/18 03:39

Lab Sample ID: STD8260 240-353820/10 I Client Sample ID: _____Date Analyzed: 11/06/18 09:24 Lab File ID: UX80602.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dibromoethane	7.28	Peak assignment corrected	latat	11/07/18 03:40
Bromoform	8.46	Peak assignment corrected	latat	11/07/18 03:40

Lab Sample ID: STD8260 240-353820/11 I Client Sample ID: _____Date Analyzed: 11/06/18 09:45 Lab File ID: UX80603.D GC Column: DB-624 ID: 0.18 (mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,2-Dichloroethane-d4 (Surr)	4.90	Peak assignment corrected	latat	11/07/18 03:41
1,2-Dibromoethane	7.28	Peak assignment corrected	latat	11/07/18 03:41

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
VM50IS_00073	05/01/19	11/01/18	MEOH, Lot 177891	50 mL	VM568718_00013	10 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.VM568718_00013	12/31/22		restek, Lot A0133525		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
vm50is_stk_A_00001	11/14/18	05/14/18	MEOH, Lot 191720	50 mL	vm30241_00007	1 mL	1,4-Dichlorobenzene-d4	50 ug/mL
							Chlorobenzene-d5	50 ug/mL
							Fluorobenzene	50 ug/mL
.vm30241_00007	01/31/23		restek, Lot A0134242		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2500 ug/mL
							Chlorobenzene-d5	2500 ug/mL
							Fluorobenzene	2500 ug/mL
vm50ss_00341	11/09/18	11/02/18	MEOH, Lot na	4 mL	vm50ss_stk_00078	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.vm50ss_stk_00078	12/20/18	06/20/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
..VM567650_00029	01/31/22		Restek, Lot A0124069		(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
vm50ss_stk_00077	09/27/18	03/27/18	MEOH, Lot 0000136118	200 mL	VM567650_00027	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00027	07/31/21		Restek, Lot A0120212		(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
vm50ss_stk_00078	12/20/18	06/20/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00029	01/31/22		Restek, Lot A0124069		(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
vm50ss_stk_00079	05/07/19	11/07/18	MEOH, Lot 178178	200 mL	VM567650_00029	4 mL	1,2-Dichloroethane-d4 (Surr)	50 ug/mL
							4-Bromofluorobenzene (Surr)	50 ug/mL
							Dibromofluoromethane (Surr)	50 ug/mL
							Toluene-d8 (Surr)	50 ug/mL
.VM567650_00029	01/31/22		Restek, Lot A0124069		(Purchased Reagent)		1,2-Dichloroethane-d4 (Surr)	2500 ug/mL
							4-Bromofluorobenzene (Surr)	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromofluoromethane (Surr)	2500 ug/mL
							Toluene-d8 (Surr)	2500 ug/mL
VM568718_00010	01/31/22		restek, Lot A0124343		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VM568718_00012	05/31/22		restek, Lot A0127975		(Purchased Reagent)		1,4-Dichlorobenzene-d4	250 ug/mL
							Chlorobenzene-d5	250 ug/mL
							Fluorobenzene	250 ug/mL
VMAROLISTDW_00258	08/11/18	08/04/18	MEOH, Lot na	4 mL	VMACROLSTD_00062	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00062	08/31/18	06/01/18	MEOH, Lot 178178	100 mL	VM568720_00028	1.25 mL	Acrolein	250 ug/mL
..VM568720_00028	08/31/18		restek, Lot A0135693		(Purchased Reagent)		Acrolein	20000 ug/mL
VMAROLISTDW_00271	11/08/18	11/01/18	MEOH, Lot na	4 mL	VMACROLSTD_00065	4 mL	Acrolein	250 ug/mL
.VMACROLSTD_00065	11/30/18	10/31/18	MEOH, Lot 0000196628	20 mL	VM568720_00030	0.25 mL	Acrolein	250 ug/mL
..VM568720_00030	01/31/19		restek, Lot A0139537		(Purchased Reagent)		Acrolein	20000 ug/mL
vmbfb_00020							1,2-Dichloroethene, Total	
							1,3-Dichloropropene, Total	
							Total BTEX	
							Trihalomethanes, Total	
							Unknown	
							Xylenes, Total	
.vm30026_00002	07/31/21		restek, Lot A0120567		vm30026_00002	1.25 mL	BFB	50 ug/mL
					(Purchased Reagent)		BFB	2000 ug/mL
VMFASA9W_00196	08/11/18	08/04/18	MEOH, Lot NA	4 mL	VMFASA9_00013	4 mL	1,2,3-Trimethylbenzene	50 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl tert-butyl ether	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMFASA9_00013	09/30/18	05/01/18	MEOH, Lot 0000177891	100 mL	VM570808S_00004	2 mL	1,2,3-Trimethylbenzene	50 ug/mL
					VM571993S_00002	2 mL	Diisopropyl ether	50 ug/mL
							Ethyl tert-butyl ether	50 ug/mL
							Tert-amyl methyl ether	50 ug/mL
..VM570808S_00004	09/30/18		Restek, Lot A0126195		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
..VM571993S_00002	12/31/18		restek, Lot A0123771		(Purchased Reagent)		Diisopropyl ether	2500 ug/mL
							Ethyl tert-butyl ether	2500 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
VMFASAW_00255	11/12/18	11/05/18	MEOH, Lot NA	4 mL	VMFASA_00046	4 mL	Acrolein	250 ug/mL
.VMFASA_00046	12/26/18	09/26/18	MEOH, Lot 0000196626	100 mL	VM568720S_00028	1.25 mL	Acrolein	250 ug/mL
..VM568720S_00028	01/31/19		restek, Lot A0135992		(Purchased Reagent)		Acrolein	20000 ug/mL
VMFASGW_00269	08/12/18	08/06/18	MEOH, Lot NA	4 mL	VMFASG_00073	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00073	08/12/18	07/12/18	MEOH, Lot 178178	100 mL	vm569722S_00004	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00004	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
VMFASGW_00281	11/07/18	10/31/18	MEOH, Lot NA	4 mL	VMFASG_00076	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00076	11/15/18	10/15/18	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(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
VMFASGW_00282	11/15/18	11/08/18	MEOH, Lot NA	4 mL	VMFASG_00076	4 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.VMFASG_00076	11/15/18	10/15/18	MEOH, Lot 0000196628	100 mL	vm569722S_00005	2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
..vm569722S_00005	01/31/20		Restek, Lot A0124116		(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
VMFASPW_00261	08/10/18	08/03/18	MEOH, Lot n/a	4 mL	VMRFASP_00049	4 mL	2-Butanone (MEK)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00049	10/31/18	07/18/18	MEOH, Lot 0000196626	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00006	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00019	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00002	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013		(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
..VM569723S_00006	11/30/18		Restek, Lot A0115500		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00019	10/31/18		Restek, Lot A0137486		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992S_00002	12/31/18		Restek, Lot A0123775		(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-trifluoroethane	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

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dibromoethane	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
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	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
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	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-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	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
VMFASPW_00274	11/09/18	11/02/18	MEOH, Lot n/a	4 mL	VMRFASP_00051	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	50 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

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	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
.VMRFASP_00051	11/30/18	10/23/18	MEOH, Lot 0000196628	100 mL	VM569721S_00003	0.8 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723S_00006	2 mL	2-Chloroethyl vinyl ether	50 ug/mL
					VM569724S_00020	1 mL	Vinyl acetate	50 ug/mL
					VM571992S_00001	2 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							Total BTEX	250 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721S_00003	03/31/19		Restek, Lot A0108013			(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
..VM569723S_00006	11/30/18		Restek, Lot A0115500			(Purchased Reagent)	2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724S_00020	02/28/19		Restek, Lot A0140470			(Purchased Reagent)	Vinyl acetate	5000 ug/mL
..VM571992S_00001	12/31/18		Restek, Lot A0123775			(Purchased Reagent)	1,1,1,2-Tetrachloroethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,1-Trichloroethane	2500 ug/mL
							1,1,2,2-Tetrachloroethane	2500 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	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-Dibromoethane	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
							1,3-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
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Acrylonitrile	25000 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	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-Dichloropropane	2500 ug/mL
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isobutyl alcohol	62500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl acetate	5000 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	2500 ug/mL
							N-Propylbenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Naphthalene	2500 ug/mL
							o-Xylene	2500 ug/mL
							sec-Butylbenzene	2500 ug/mL
							Styrene	2500 ug/mL
							tert-Butyl alcohol	25000 ug/mL
							tert-Butylbenzene	2500 ug/mL
							Tetrachloroethene	2500 ug/mL
							Tetrahydrofuran	5000 ug/mL
							Toluene	2500 ug/mL
							Total BTEX	12500 ug/mL
							trans-1,2-Dichloroethene	2500 ug/mL
							trans-1,3-Dichloropropene	2500 ug/mL
							Trichloroethene	2500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL
VMRA9W_00260	08/07/18	07/31/18	MEOH, Lot NA	4 mL	VMRA9_00024	4 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
							Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl tert-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMRA9_00024	12/17/18	06/17/18	MEOH, Lot 173605TF	50 mL	Freon 151_00003	1 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
					VM569727_00002	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00003	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00003	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00004	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butanol	1250 ug/mL
					VM570809_00005	1 mL	Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
							n-Butyl acetate	50 ug/mL
					VM571993_00001	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl tert-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
..Freon 151_00003	12/17/18	06/17/18	MEOH, Lot 173605TF	20 mL	Freon 151_00001	0.5 mL	1-Chloro-1-fluoroethane TIC	2500 ug/mL
...Freon 151_00001	06/18/19	SynQuest	Laboratories, Inc, Lot 270800		(Purchased Reagent)		1-Chloro-1-fluoroethane TIC	10 %
..VM569727_00002	03/31/19		RESTEK, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806_00003	04/30/22		Restek, Lot A0126447		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00003	02/28/22		Restek, Lot A0125050		(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00004	05/31/19		Restek, Lot A0132816		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00005	04/30/19		Restek, Lot A0131668		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
..VM571993_00001	12/31/18		restek, Lot A0123796		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl tert-butyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
VMRA9W_00269	10/19/18	10/12/18	MEOH, Lot NA	4 mL	VMRA9_00024	4 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
							Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl tert-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMRA9_00024	12/17/18	06/17/18	MEOH, Lot 173605TF	50 mL	Freon 151_00003	1 mL	1-Chloro-1-fluoroethane TIC	50 ug/mL
					VM569727_00002	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00003	2 mL	Pentachloroethane	100 ug/mL
					vm570807_00003	2 mL	2-Methylnaphthalene	100 ug/mL
					VM570808_00004	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1,3,5-Trichlorobenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Chloro-1,3-butadiene	50 ug/mL
							2-Nitropropane	100 ug/mL
							Benzyl chloride	50 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00005	1 mL	Ethyl acetate	100 ug/mL
							Ethyl acrylate	50 ug/mL
							Methyl methacrylate	100 ug/mL
					VM571993_00001	1 mL	n-Butyl acetate	50 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
Ethyl tert-butyl ether	50 ug/mL							
Propionitrile	500 ug/mL							
Tert-amyl methyl ether	50 ug/mL							
..Freon 151_00003	12/17/18	06/17/18	MEOH, Lot 173605TF	20 mL	Freon 151_00001	0.5 mL	1-Chloro-1-fluoroethane TIC	2500 ug/mL
..Freon 151_00001	06/18/19		SynQuest Laboratories , Inc, Lot 270800		(Purchased Reagent)		1-Chloro-1-fluoroethane TIC	10 %
..VM569727_00002	03/31/19		RESTEK, Lot A0118487		(Purchased Reagent)		Cyclohexanone	25000 ug/mL
..vm570806_00003	04/30/22		Restek, Lot A0126447		(Purchased Reagent)		Pentachloroethane	2500 ug/mL
..vm570807_00003	02/28/22		Restek, Lot A0125050		(Purchased Reagent)		2-Methylnaphthalene	2500 ug/mL
..VM570808_00004	05/31/19		Restek, Lot A0132816		(Purchased Reagent)		1,2,3-Trimethylbenzene	2500 ug/mL
							1,3,5-Trichlorobenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Chloro-1,3-butadiene	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Benzyl chloride	2500 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00005	04/30/19		Restek, Lot A0131668		(Purchased Reagent)		Ethyl acetate	5000 ug/mL
							Ethyl acrylate	2500 ug/mL
							Methyl methacrylate	5000 ug/mL
							n-Butyl acetate	2500 ug/mL
..VM571993_00001	12/31/18		restek, Lot A0123796		(Purchased Reagent)		Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl tert-butyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Tert-amyl methyl ether	2500 ug/mL
VMRA9W_00272	11/12/18	11/05/18	MEOH, Lot NA	4 mL	VMRA9_00024	4 mL	Cyclohexanone	500 ug/mL
							Pentachloroethane	100 ug/mL
							1,2,3-Trimethylbenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
							Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
							Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl tert-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
.VMRA9_00024	12/17/18	06/17/18	MEOH, Lot 173605TF	50 mL	VM569727_00002	1 mL	Cyclohexanone	500 ug/mL
					vm570806_00003	2 mL	Pentachloroethane	100 ug/mL
					VM570808_00004	1 mL	1,2,3-Trimethylbenzene	50 ug/mL
							1-Chlorohexane	50 ug/mL
							2-Nitropropane	100 ug/mL
							Methacrylonitrile	500 ug/mL
							n-Butanol	1250 ug/mL
					VM570809_00005	1 mL	Ethyl acetate	100 ug/mL
							Methyl methacrylate	100 ug/mL
					VM571993_00001	1 mL	Acetonitrile	500 ug/mL
							Diisopropyl ether	50 ug/mL
							Ethyl tert-butyl ether	50 ug/mL
							Propionitrile	500 ug/mL
							Tert-amyl methyl ether	50 ug/mL
..VM569727_00002	03/31/19		RESTEK, Lot A0118487			(Purchased Reagent)	Cyclohexanone	25000 ug/mL
..vm570806_00003	04/30/22		Restek, Lot A0126447			(Purchased Reagent)	Pentachloroethane	2500 ug/mL
..VM570808_00004	05/31/19		Restek, Lot A0132816			(Purchased Reagent)	1,2,3-Trimethylbenzene	2500 ug/mL
							1-Chlorohexane	2500 ug/mL
							2-Nitropropane	5000 ug/mL
							Methacrylonitrile	25000 ug/mL
							n-Butanol	62500 ug/mL
..VM570809_00005	04/30/19		Restek, Lot A0131668			(Purchased Reagent)	Ethyl acetate	5000 ug/mL
							Methyl methacrylate	5000 ug/mL
..VM571993_00001	12/31/18		restek, Lot A0123796			(Purchased Reagent)	Acetonitrile	25000 ug/mL
							Diisopropyl ether	2500 ug/mL
							Ethyl tert-butyl ether	2500 ug/mL
							Propionitrile	25000 ug/mL
							Tert-amyl methyl ether	2500 ug/mL
VMRGAS_00256	08/07/18	07/31/18	MEOH, Lot 0000196626	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502			(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
VMRGAS_00268	11/08/18	11/01/18	MEOH, Lot 0000196628	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Butadiene	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Dichlorofluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502			(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
VMRGAS_00269	11/15/18	11/08/18	MEOH, Lot 0000196628	10 mL	vm569722_00011	0.2 mL	Bromomethane	50 ug/mL
							Chloroethane	50 ug/mL
							Chloromethane	50 ug/mL
							Dichlorodifluoromethane	50 ug/mL
							Trichlorofluoromethane	50 ug/mL
							Vinyl chloride	50 ug/mL
.vm569722_00011	10/31/20		Restek, Lot A0131502			(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
VMRPRIMW_00295	08/13/18	08/06/18	MEOH, Lot NA	4 mL	VMRPRIM_00029	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00029	10/31/18	07/28/18	MEOH, Lot 0000196626	50 mL	VM569721_00004	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00004	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00016	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
..VM569721_00004	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
..VM569723_00004	11/30/18		restek, Lot A0115628			(Purchased Reagent)	2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00016	10/31/18		Restek, Lot A0137562			(Purchased Reagent)	Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711			(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-trifluoroethane	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-Trichloropropene	2500 ug/mL
							1,2,4-Trichlorobenzene	2500 ug/mL
							1,2,4-Trimethylbenzene	2500 ug/mL
							1,2-Dibromo-3-Chloropropene	2500 ug/mL
							1,2-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropene	2500 ug/mL
							1,3,5-Trimethylbenzene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropene	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							1,4-Dioxane	50000 ug/mL
							2,2-Dichloropropene	2500 ug/mL
							2-Chlorotoluene	2500 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
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	2500 ug/mL
							Bromoform	2500 ug/mL
							Carbon disulfide	2500 ug/mL
							Carbon tetrachloride	2500 ug/mL
							Chlorobenzene	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							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
							Ethyl ether	2500 ug/mL
							Ethyl methacrylate	2500 ug/mL
							Ethylbenzene	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	5000 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-Butyl alcohol	25000 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
VMRPRIMW_00307	11/08/18	11/01/18	MEOH, Lot NA	4 mL	VMRPRIM_00031	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluor oethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Tetrahydrofuran	100 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							trans-1,4-Dichloro-2-butene	50 ug/mL
							Trichloroethene	50 ug/mL
.VMRPRIM_00031	11/30/18	10/31/18	MEOH, Lot 0000196628	50 mL	VM569721_00003	0.4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
					VM569723_00004	2 mL	2-Chloroethyl vinyl ether	100 ug/mL
					VM569724_00017	0.5 mL	Vinyl acetate	50 ug/mL
					VM571992_00001	1 mL	1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1,2-Trichloroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3,5-Trimethylbenzene	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							1,4-Dioxane	1000 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
..VM569721_00003	11/30/18		Restek, Lot A0115554			(Purchased Reagent)	3-Chloro-1-propene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Acrylonitrile	500 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Cyclohexane	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethyl ether	50 ug/mL
							Ethyl methacrylate	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Hexane	50 ug/mL
							Iodomethane	50 ug/mL
							Isobutyl alcohol	1250 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl acetate	100 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylcyclohexane	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							n-Heptane	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
Tetrachloroethene	50 ug/mL							
Tetrahydrofuran	100 ug/mL							
Toluene	50 ug/mL							
trans-1,2-Dichloroethene	50 ug/mL							
trans-1,3-Dichloropropene	50 ug/mL							
trans-1,4-Dichloro-2-butene	50 ug/mL							
Trichloroethene	50 ug/mL							
							2-Butanone (MEK)	12500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Hexanone	12500 ug/mL
							4-Methyl-2-pentanone (MIBK)	12500 ug/mL
							Acetone	12500 ug/mL
..VM569723_00004	11/30/18		restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00017	02/28/19		Restek, Lot A0140258		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(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-trifluoroethane	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-Dibromoethane	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
							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
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	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
							Dibromomethane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

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
							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	5000 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-Butyl alcohol	25000 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
VMRPRIMW_00307	11/08/18	11/01/18	MEOH, Lot NA	4 mL	VMRPRIM_00031	4 mL	Total BTEX	250 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
.VMRPRIM_00031	11/30/18	10/31/18	MEOH, Lot 0000196628	50 mL	VM571992_00001	1 mL	Total BTEX	250 ug/mL
							Trihalomethanes, Total	200 ug/mL
							Xylenes, Total	100 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(Purchased Reagent)		Total BTEX	12500 ug/mL
							Trihalomethanes, Total	10000 ug/mL
							Xylenes, Total	5000 ug/mL
VMRPRIMW_00308	11/15/18	11/08/18	MEOH, Lot NA	4 mL	VMRPRIM_00031	4 mL	2-Butanone (MEK)	100 ug/mL
							2-Hexanone	100 ug/mL
							4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropane	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropane	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
							1,2-Dichloropropane	50 ug/mL
							1,3-Dichlorobenzene	50 ug/mL
							1,3-Dichloropropane	50 ug/mL
							1,4-Dichlorobenzene	50 ug/mL
							2,2-Dichloropropane	50 ug/mL
							2-Chlorotoluene	50 ug/mL
							4-Chlorotoluene	50 ug/mL
							4-Isopropyltoluene	50 ug/mL
							Benzene	50 ug/mL
							Bromobenzene	50 ug/mL
							Bromochloromethane	50 ug/mL
							Bromodichloromethane	50 ug/mL
							Bromoform	50 ug/mL
							Carbon disulfide	50 ug/mL
							Carbon tetrachloride	50 ug/mL
							Chlorobenzene	50 ug/mL
							Chlorodibromomethane	50 ug/mL
							Chloroform	50 ug/mL
							cis-1,2-Dichloroethene	50 ug/mL
							cis-1,3-Dichloropropene	50 ug/mL
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.VMRPRIM_00031	11/30/18	10/31/18	MEOH, Lot 0000196628	50 mL	VM569721_00003	0.4 mL	Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
					Xylenes, Total	100 ug/mL		
					VM569723_00004	2 mL	2-Butanone (MEK)	100 ug/mL
					VM569724_00017	0.5 mL	2-Hexanone	100 ug/mL
					VM571992_00001	1 mL	4-Methyl-2-pentanone (MIBK)	100 ug/mL
							Acetone	100 ug/mL
							2-Chloroethyl vinyl ether	100 ug/mL
							Vinyl acetate	50 ug/mL
							1,1,1,2-Tetrachloroethane	50 ug/mL
							1,1,1-Trichloroethane	50 ug/mL
							1,1,2,2-Tetrachloroethane	50 ug/mL
							1,1,2-Trichloro-1,2,2-trifluoroethane	50 ug/mL
							1,1-Dichloroethane	50 ug/mL
							1,1-Dichloroethene	50 ug/mL
							1,1-Dichloropropene	50 ug/mL
							1,2,3-Trichlorobenzene	50 ug/mL
							1,2,3-Trichloropropene	50 ug/mL
							1,2,4-Trichlorobenzene	50 ug/mL
							1,2,4-Trimethylbenzene	50 ug/mL
							1,2-Dibromo-3-Chloropropene	50 ug/mL
							1,2-Dibromoethane	50 ug/mL
							1,2-Dichlorobenzene	50 ug/mL
							1,2-Dichloroethane	50 ug/mL
1,2-Dichloropropene	50 ug/mL							
1,3-Dichlorobenzene	50 ug/mL							
1,3-Dichloropropene	50 ug/mL							
1,4-Dichlorobenzene	50 ug/mL							
2,2-Dichloropropene	50 ug/mL							
2-Chlorotoluene	50 ug/mL							
4-Chlorotoluene	50 ug/mL							
4-Isopropyltoluene	50 ug/mL							
Benzene	50 ug/mL							
Bromobenzene	50 ug/mL							
Bromochloromethane	50 ug/mL							
Bromodichloromethane	50 ug/mL							
Bromoform	50 ug/mL							
Carbon disulfide	50 ug/mL							
Carbon tetrachloride	50 ug/mL							
Chlorobenzene	50 ug/mL							
Chlorodibromomethane	50 ug/mL							
Chloroform	50 ug/mL							
cis-1,2-Dichloroethene	50 ug/mL							
cis-1,3-Dichloropropene	50 ug/mL							

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Dibromomethane	50 ug/mL
							Ethylbenzene	50 ug/mL
							Hexachlorobutadiene	50 ug/mL
							Isopropylbenzene	50 ug/mL
							m-Xylene & p-Xylene	50 ug/mL
							Methyl tert-butyl ether	50 ug/mL
							Methylene Chloride	50 ug/mL
							n-Butylbenzene	50 ug/mL
							N-Propylbenzene	50 ug/mL
							Naphthalene	50 ug/mL
							o-Xylene	50 ug/mL
							sec-Butylbenzene	50 ug/mL
							Styrene	50 ug/mL
							tert-Butyl alcohol	500 ug/mL
							tert-Butylbenzene	50 ug/mL
							Tetrachloroethene	50 ug/mL
							Toluene	50 ug/mL
							trans-1,2-Dichloroethene	50 ug/mL
							trans-1,3-Dichloropropene	50 ug/mL
							Trichloroethene	50 ug/mL
							Xylenes, Total	100 ug/mL
..VM569721_00003	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
..VM569723_00004	11/30/18		restek, Lot A0115628		(Purchased Reagent)		2-Chloroethyl vinyl ether	2500 ug/mL
..VM569724_00017	02/28/19		Restek, Lot A0140258		(Purchased Reagent)		Vinyl acetate	5000 ug/mL
..VM571992_00001	12/31/18		Restek, Lot A0123711		(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-trifluoroethane	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-Dibromoethane	2500 ug/mL
							1,2-Dichlorobenzene	2500 ug/mL
							1,2-Dichloroethane	2500 ug/mL
							1,2-Dichloropropene	2500 ug/mL
							1,3-Dichlorobenzene	2500 ug/mL
							1,3-Dichloropropane	2500 ug/mL
							1,4-Dichlorobenzene	2500 ug/mL
							2,2-Dichloropropane	2500 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorotoluene	2500 ug/mL
							4-Chlorotoluene	2500 ug/mL
							4-Isopropyltoluene	2500 ug/mL
							Benzene	2500 ug/mL
							Bromobenzene	2500 ug/mL
							Bromochloromethane	2500 ug/mL
							Bromodichloromethane	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
							Dibromomethane	2500 ug/mL
							Ethylbenzene	2500 ug/mL
							Hexachlorobutadiene	2500 ug/mL
							Isopropylbenzene	2500 ug/mL
							m-Xylene & p-Xylene	2500 ug/mL
							Methyl tert-butyl ether	2500 ug/mL
							Methylene Chloride	2500 ug/mL
							n-Butylbenzene	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-Butyl alcohol	2500 ug/mL
							tert-Butylbenzene	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
VMUX8SS_00029	11/30/18	05/31/18	MEOH, Lot 178178	100 mL	VM567650_00028	8.66 mL	1,2-Dichloroethane-d4 (Surr)	216.5 ug/mL
							4-Bromofluorobenzene (Surr)	216.5 ug/mL
							Dibromofluoromethane (Surr)	216.5 ug/mL
							Toluene-d8 (Surr)	216.5 ug/mL
.VM567650_00028	01/31/22		Restek, Lot A0124069		(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

Method 8260B

Volatile Organic Compounds (GC/MS)
by Method 8260B

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Matrix: Solid Level: Low
 GC Column (1): DB-624 ID: 0.18 (mm)

Client Sample ID	Lab Sample ID	DBFM #	DCA #	TOL #	BFB #
SB-SEMW-10D-10-15	240-103610-2	84	82	88	75
SB-SEMW-10D-20-28	240-103610-3	86	84	89	80
SB-SEMW-10D-DUP	240-103610-4	85	83	87	78
	MB 240-354032/7	89	87	86	80
	LCS 240-354032/6	91	82	88	82
SB-SEMW-10D-DUP MS	240-103610-4 MS	83	79	88	83
SB-SEMW-10D-DUP MSD	240-103610-4 MSD	88	81	87	83

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

QC LIMITS
 49-132
 48-123
 62-135
 49-141

Column to be used to flag recovery values

FORM II
GC/MS VOA SURROGATE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 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-102918	240-103610-1	123	108	77	79
	MB 240-354546/6	120	111	79	78
	LCS 240-354546/4	113	98	84	89

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

QC LIMITS
 75-128
 70-121
 70-123
 59-120

Column to be used to flag recovery values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: UX80627.D

Lab ID: LCS 240-354032/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	25.0	26.1	104	73-124	
1,1-Dichloropropene	25.0	24.8	99	72-127	
1,1-Dichloroethane	25.0	25.2	101	72-122	
1,2,3-Trichlorobenzene	25.0	22.4	90	59-120	
1,2,3-Trichloropropane	25.0	24.2	97	68-128	
1,2-Dichloroethane	25.0	24.0	96	64-126	
1,1-Dichloroethene	25.0	27.6	110	57-139	
1,2-Dichloropropane	25.0	24.3	97	78-122	
1,2,4-Trimethylbenzene	25.0	24.6	98	75-121	
2-Hexanone	50.0	48.1	96	52-145	
1,1,2,2-Tetrachloroethane	25.0	24.2	97	68-128	
Acetone	50.0	54.2	108	43-159	
Benzene	25.0	23.7	95	74-123	
Bromoform	25.0	20.9	83	46-137	
Bromomethane	25.0	24.7	99	10-152	
Carbon disulfide	25.0	26.5	106	29-153	
Carbon tetrachloride	25.0	26.6	106	56-139	
1,1,1-Trichloroethane	25.0	27.7	111	64-135	
Chlorobenzene	25.0	23.4	94	80-120	
1,3-Dichloropropane	25.0	23.4	94	76-120	
Chloroethane	25.0	25.5	102	15-155	
1,2-Dibromo-3-Chloropropane	25.0	21.9	88	38-135	
Chloroform	25.0	25.1	101	72-124	
Chloromethane	25.0	25.1	100	45-128	
cis-1,2-Dichloroethene	25.0	24.6	98	74-123	
cis-1,3-Dichloropropene	25.0	24.1	97	63-137	
Bromodichloromethane	25.0	24.3	97	63-132	
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	26.3	105	56-138	
Dichlorodifluoromethane	25.0	22.8	91	26-138	
1,2,4-Trichlorobenzene	25.0	20.5	82	54-120	
Ethylbenzene	25.0	23.6	94	76-120	
1,2-Dibromoethane	25.0	24.1	96	76-120	
2,2-Dichloropropane	25.0	25.5	102	42-143	
1,2-Dichlorobenzene	25.0	23.0	92	73-120	
1,3-Dichlorobenzene	25.0	22.9	92	70-120	
1,4-Dichlorobenzene	25.0	22.4	89	71-120	
2-Chloroethyl vinyl ether	25.0	22.3 J	89	58-154	
Isopropylbenzene	25.0	25.3	101	77-124	
2-Chlorotoluene	25.0	24.0	96	75-120	
2-Butanone (MEK)	50.0	48.7	97	45-148	
4-Methyl-2-pentanone (MIBK)	50.0	49.5	99	53-139	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low Lab File ID: UX80627.D

Lab ID: LCS 240-354032/6 Client ID: _____

COMPOUND	SPIKE ADDED (ug/Kg)	LCS CONCENTRATION (ug/Kg)	LCS % REC	QC LIMITS REC	#
Bromobenzene	25.0	22.7	91	75-120	
Methyl tert-butyl ether	25.0	25.1	101	66-127	
Bromochloromethane	25.0	26.5	106	72-124	
Methylene Chloride	25.0	27.2	109	62-137	
4-Chlorotoluene	25.0	24.5	98	74-121	
p-Isopropyltoluene	25.0	25.4	101	74-124	
Styrene	25.0	24.2	97	76-121	
m-Xylene & p-Xylene	25.0	24.2	97	77-120	
o-Xylene	25.0	24.6	98	79-120	
Hexachlorobutadiene	25.0	23.2	93	58-122	
Tetrachloroethene	25.0	23.3	93	76-120	
Dibromomethane	25.0	23.7	95	71-122	
Toluene	25.0	23.9	95	76-120	
Naphthalene	25.0	21.3	85	51-120	
trans-1,2-Dichloroethene	25.0	26.5	106	71-133	
n-Butylbenzene	25.0	25.0	100	64-133	
trans-1,3-Dichloropropene	25.0	20.3	81	55-121	
N-Propylbenzene	25.0	24.7	99	73-129	
Trichloroethene	25.0	23.4	94	73-126	
sec-Butylbenzene	25.0	24.6	98	73-126	
Trichlorofluoromethane	25.0	26.4	106	47-146	
tert-Butylbenzene	25.0	24.2	97	73-122	
Vinyl chloride	25.0	28.8	115	52-130	
Vinyl acetate	25.0	24.4	98	43-144	
tert-Butyl alcohol	250	231	92	41-139	
Xylenes, Total	50.0	48.8	98	79-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Water Level: Low

Lab File ID: UXJ6205.D

Lab ID: LCS 240-354546/4

Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	10.0	11.5	115	80-124	
1,1-Dichloropropene	10.0	10.0	100	78-126	
1,1-Dichloroethane	10.0	10.2	102	75-133	
1,2,3-Trichlorobenzene	10.0	9.81	98	39-138	
1,2,3-Trichloropropane	10.0	8.70	87	66-139	
1,2-Dichloroethane	10.0	10.3	103	71-135	
1,1-Dichloroethene	10.0	9.84	98	65-139	
1,2-Dichloropropane	10.0	9.09	91	78-133	
1,2,4-Trimethylbenzene	10.0	7.79	78	74-120	
2-Hexanone	20.0	13.3	67	43-148	
1,1,2,2-Tetrachloroethane	10.0	7.50	75	65-139	
Acetone	20.0	19.7	99	21-162	
Benzene	10.0	9.37	94	80-123	
Bromoform	10.0	12.1	121	49-141	
Bromomethane	10.0	8.42	84	41-175	
Carbon disulfide	10.0	9.49	95	60-138	
Carbon tetrachloride	10.0	12.4	124	63-140	
1,1,1-Trichloroethane	10.0	11.8	118	69-134	
Chlorobenzene	10.0	9.76	98	80-121	
1,3-Dichloropropane	10.0	8.19	82	72-134	
Chloroethane	10.0	7.26	73	33-173	
1,2-Dibromo-3-Chloropropane	10.0	8.63	86	46-132	
Chloroform	10.0	11.6	116	79-127	
Chloromethane	10.0	8.56	86	54-143	
cis-1,2-Dichloroethene	10.0	10.5	105	76-128	
cis-1,3-Dichloropropene	10.0	8.17	82	64-132	
Bromodichloromethane	10.0	10.3	103	77-125	
1,1,2-Trichlorotrifluoroethane	10.0	11.8	118	50-156	
Dichlorodifluoromethane	10.0	13.0	130	29-148	
1,2,4-Trichlorobenzene	10.0	9.07	91	42-133	
Ethylbenzene	10.0	9.01	90	80-120	
1,2-Dibromoethane	10.0	8.65	87	77-123	
2,2-Dichloropropane	10.0	10.6	106	42-150	
1,2-Dichlorobenzene	10.0	9.54	95	78-120	
1,3-Dichlorobenzene	10.0	9.54	95	78-120	
1,4-Dichlorobenzene	10.0	9.35	93	78-120	
2-Chloroethyl vinyl ether	10.0	5.89 J	59	55-137	
Isopropylbenzene	10.0	9.10	91	74-120	
2-Chlorotoluene	10.0	9.42	94	78-123	
2-Butanone (MEK)	20.0	13.3	66	39-163	
4-Methyl-2-pentanone (MIBK)	20.0	14.6	73	49-143	
Bromobenzene	10.0	9.88	99	74-129	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Matrix: Water Level: Low Lab File ID: UXJ6205.D
 Lab ID: LCS 240-354546/4 Client ID: _____

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
Methyl tert-butyl ether	10.0	9.55	95	51-133	
Bromochloromethane	10.0	13.3	133	74-130	*
Methylene Chloride	10.0	11.5	115	70-134	
4-Chlorotoluene	10.0	8.99	90	77-125	
4-Isopropyltoluene	10.0	7.86	79	69-122	
Styrene	10.0	9.03	90	79-120	
m-Xylene & p-Xylene	10.0	9.16	92	80-120	
o-Xylene	10.0	9.22	92	80-120	
Hexachlorobutadiene	10.0	8.59	86	38-136	
Tetrachloroethene	10.0	11.3	113	74-130	
Dibromomethane	10.0	9.53	95	74-124	
Toluene	10.0	8.72	87	78-129	
Naphthalene	10.0	6.89	69	28-141	
trans-1,2-Dichloroethene	10.0	10.8	108	78-133	
n-Butylbenzene	10.0	6.96	70	57-126	
trans-1,3-Dichloropropene	10.0	7.76	78	55-128	
N-Propylbenzene	10.0	8.02	80	77-123	
Trichloroethene	10.0	10.9	109	76-125	
sec-Butylbenzene	10.0	7.37	74	68-123	
Trichlorofluoromethane	10.0	9.84	98	51-164	
tert-Butylbenzene	10.0	7.25	72	70-121	
Vinyl chloride	10.0	8.62	86	58-143	
Vinyl acetate	10.0	6.74	67	45-151	
tert-Butyl alcohol	100	110	110	10-161	
Xylenes, Total	20.0	18.4	92	80-120	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: UX80655.D

Lab ID: 240-103610-4 MS

Client ID: SB-SEMW-10D-DUP MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
1,1,1,2-Tetrachloroethane	27.9	3.5 U	23.1	83	16-137	
1,1-Dichloropropene	27.9	1.2 U	22.4	80	30-138	
1,1-Dichloroethane	27.9	0.81 U	23.3	84	50-133	
1,2,3-Trichlorobenzene	27.9	0.67 U	16.6	59	10-120	
1,2,3-Trichloropropane	27.9	1.8 U	22.8	82	10-178	
1,2-Dichloroethane	27.9	0.90 U	22.7	81	42-127	
1,1-Dichloroethene	27.9	1.1 U	23.7	85	36-150	
1,2-Dichloropropane	27.9	0.99 U	24.7	88	51-128	
1,2,4-Trimethylbenzene	27.9	1.2 U	22.0	79	10-149	
2-Hexanone	55.8	4.8 U	43.5	78	15-147	
1,1,2,2-Tetrachloroethane	27.9	1.7 U	23.2	83	16-178	
Acetone	55.8	25 U	46.0	82	10-160	
Benzene	27.9	0.82 U	23.3	84	39-133	
Bromoform	27.9	2.8 U	17.2	62	18-120	
Bromomethane	27.9	1.2 U	21.7	78	10-159	
Carbon disulfide	27.9	1.4 U	22.0	79	16-145	
Carbon tetrachloride	27.9	3.8 U	22.1	79	22-142	
1,1,1-Trichloroethane	27.9	0.96 U	24.3	87	38-143	
Chlorobenzene	27.9	1.1 U	22.6	81	21-131	
1,3-Dichloropropane	27.9	1.2 U	23.3	83	34-121	
Chloroethane	27.9	1.4 U	21.5	77	17-162	
1,2-Dibromo-3-Chloropropane	27.9	4.2 U	15.9	57	10-141	
Chloroform	27.9	0.92 U	23.0	82	51-130	
Chloromethane	27.9	1.2 U	22.8	82	26-149	
cis-1,2-Dichloroethene	27.9	0.76 U	24.6	88	50-128	
cis-1,3-Dichloropropene	27.9	1.7 U	22.3	80	15-132	
Bromodichloromethane	27.9	0.79 U	22.7	81	32-129	
1,1,2-Trichloro-1,2,2-trifluor oethane	27.9	1.5 U	23.3	83	37-147	
Dichlorodifluoromethane	27.9	1.1 U	19.5	70	15-150	
1,2,4-Trichlorobenzene	27.9	0.67 U	14.8	53	10-120	
Ethylbenzene	27.9	1.2 U	22.5	81	20-135	
1,2-Dibromoethane	27.9	0.90 U	22.9	82	36-125	
2,2-Dichloropropane	27.9	1.4 U	19.7	71	20-141	
1,2-Dichlorobenzene	27.9	1.3 U	20.6	74	10-130	
1,3-Dichlorobenzene	27.9	0.95 U	20.6	74	10-131	
1,4-Dichlorobenzene	27.9	1.0 U	19.9	71	10-130	
2-Chloroethyl vinyl ether	27.9	10 U	17.9 J	64	10-134	
Isopropylbenzene	27.9	0.97 U	22.6	81	20-138	
2-Chlorotoluene	27.9	1.1 U	22.4	80	10-179	
2-Butanone (MEK)	55.8	4.2 U	43.8	78	20-148	
4-Methyl-2-pentanone (MIBK)	55.8	4.3 U	44.2	79	29-143	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: UX80655.D

Lab ID: 240-103610-4 MS

Client ID: SB-SEMW-10D-DUP MS

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC	QC LIMITS REC	#
Bromobenzene	27.9	1.4 U	22.0	79	10-164	
Methyl tert-butyl ether	27.9	0.96 U	22.3	80	48-134	
Bromochloromethane	27.9	0.69 U	23.4	84	36-147	
Methylene Chloride	27.9	14 U	24.5 J	88	39-145	
4-Chlorotoluene	27.9	1.0 U	22.6	81	10-158	
p-Isopropyltoluene	27.9	3.4 U	21.4	77	10-142	
Styrene	27.9	1.4 U	22.8	82	10-134	
m-Xylene & p-Xylene	27.9	0.91 U	22.1	79	16-137	
o-Xylene	27.9	1.0 U	23.0	82	21-138	
Hexachlorobutadiene	27.9	4.4 U	15.7	56	10-120	
Tetrachloroethene	27.9	0.85 U	21.9	78	20-151	
Dibromomethane	27.9	0.78 U	22.5	80	37-138	
Toluene	27.9	0.90 U	23.6	85	29-141	
Naphthalene	27.9	3.2 U	15.3	55	10-120	
trans-1,2-Dichloroethene	27.9	0.54 U	24.1	86	44-141	
n-Butylbenzene	27.9	4.1 U	19.4	69	10-149	
trans-1,3-Dichloropropene	27.9	1.2 U	18.4	66	15-120	
N-Propylbenzene	27.9	0.86 U	22.3	80	10-162	
Trichloroethene	27.9	49	129	288	25-148	F1
sec-Butylbenzene	27.9	1.0 U	21.5	77	10-156	
Trichlorofluoromethane	27.9	1.3 U	21.9	78	38-149	
tert-Butylbenzene	27.9	1.1 U	22.0	79	10-148	
Vinyl chloride	27.9	0.98 U	24.3	87	31-148	
Vinyl acetate	27.9	2.5 U	22.7	81	10-120	
tert-Butyl alcohol	279	19 U	201 J	72	59-128	
Xylenes, Total	55.8	1.9 U	45.1	81	19-137	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: UX80656.D

Lab ID: 240-103610-4 MSD

Client ID: SB-SEMW-10D-DUP MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
1,1,1,2-Tetrachloroethane	30.1	27.2	90	16	40	16-137	
1,1-Dichloropropene	30.1	26.3	87	16	36	30-138	
1,1-Dichloroethane	30.1	27.7	92	17	40	50-133	
1,2,3-Trichlorobenzene	30.1	16.7	56	1	40	10-120	
1,2,3-Trichloropropane	30.1	27.8	92	20	40	10-178	
1,2-Dichloroethane	30.1	26.0	86	13	34	42-127	
1,1-Dichloroethene	30.1	28.8	96	20	40	36-150	
1,2-Dichloropropane	30.1	27.5	91	11	36	51-128	
1,2,4-Trimethylbenzene	30.1	25.3	84	14	40	10-149	
2-Hexanone	60.3	50.2	83	14	40	15-147	
1,1,2,2-Tetrachloroethane	30.1	26.7	89	14	40	16-178	
Acetone	60.3	60.0	100	26	39	10-160	
Benzene	30.1	26.8	89	14	40	39-133	
Bromoform	30.1	20.8	69	19	40	18-120	
Bromomethane	30.1	27.3	91	23	40	10-159	
Carbon disulfide	30.1	28.1	93	24	40	16-145	
Carbon tetrachloride	30.1	27.4	91	21	40	22-142	
1,1,1-Trichloroethane	30.1	28.9	96	17	40	38-143	
Chlorobenzene	30.1	25.6	85	12	40	21-131	
1,3-Dichloropropane	30.1	25.8	85	10	40	34-121	
Chloroethane	30.1	29.8	99	32	40	17-162	
1,2-Dibromo-3-Chloropropane	30.1	18.4	61	14	40	10-141	
Chloroform	30.1	28.1	93	20	32	51-130	
Chloromethane	30.1	29.2	97	24	37	26-149	
cis-1,2-Dichloroethene	30.1	29.6	98	18	40	50-128	
cis-1,3-Dichloropropene	30.1	25.9	86	15	40	15-132	
Bromodichloromethane	30.1	26.0	86	13	39	32-129	
1,1,2-Trichloro-1,2,2-trifluoroethane	30.1	27.7	92	17	37	37-147	
Dichlorodifluoromethane	30.1	23.7	79	19	31	15-150	
1,2,4-Trichlorobenzene	30.1	15.1	50	2	40	10-120	
Ethylbenzene	30.1	26.1	87	15	40	20-135	
1,2-Dibromoethane	30.1	25.4	84	10	40	36-125	
2,2-Dichloropropane	30.1	25.0	83	24	40	20-141	
1,2-Dichlorobenzene	30.1	20.4	68	1	40	10-130	
1,3-Dichlorobenzene	30.1	23.9	79	15	40	10-131	
1,4-Dichlorobenzene	30.1	22.9	76	14	40	10-130	
2-Chloroethyl vinyl ether	30.1	20.3 J	67	13	40	10-134	
Isopropylbenzene	30.1	26.8	89	17	40	20-138	
2-Chlorotoluene	30.1	24.6	82	9	40	10-179	
2-Butanone (MEK)	60.3	50.8	84	15	36	20-148	
4-Methyl-2-pentanone (MIBK)	60.3	51.5	85	15	40	29-143	

Column to be used to flag recovery and RPD values

FORM III
GC/MS VOA MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

SDG No.: _____

Matrix: Solid Level: Low

Lab File ID: UX80656.D

Lab ID: 240-103610-4 MSD

Client ID: SB-SEMW-10D-DUP MSD

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC	% RPD	QC LIMITS		#
					RPD	REC	
Bromobenzene	30.1	23.9	79	8	40	10-164	
Methyl tert-butyl ether	30.1	26.9	89	19	34	48-134	
Bromochloromethane	30.1	28.7	95	20	40	36-147	
Methylene Chloride	30.1	30.7	102	22	40	39-145	
4-Chlorotoluene	30.1	24.9	83	9	40	10-158	
p-Isopropyltoluene	30.1	25.1	83	16	40	10-142	
Styrene	30.1	26.6	88	16	40	10-134	
m-Xylene & p-Xylene	30.1	25.4	84	14	40	16-137	
o-Xylene	30.1	26.8	89	15	40	21-138	
Hexachlorobutadiene	30.1	16.0	53	2	40	10-120	
Tetrachloroethene	30.1	24.8	82	13	40	20-151	
Dibromomethane	30.1	26.7	89	17	30	37-138	
Toluene	30.1	25.5	85	8	40	29-141	
Naphthalene	30.1	15.9	53	4	40	10-120	
trans-1,2-Dichloroethene	30.1	29.1	96	19	40	44-141	
n-Butylbenzene	30.1	20.2	67	4	40	10-149	
trans-1,3-Dichloropropene	30.1	19.7	65	7	40	15-120	
N-Propylbenzene	30.1	24.9	83	11	40	10-162	
Trichloroethene	30.1	171	404	28	40	25-148	F1
sec-Butylbenzene	30.1	25.3	84	16	40	10-156	
Trichlorofluoromethane	30.1	28.6	95	26	39	38-149	
tert-Butylbenzene	30.1	25.1	83	13	40	10-148	
Vinyl chloride	30.1	31.8	105	27	37	31-148	
Vinyl acetate	30.1	25.5	85	12	40	10-120	
tert-Butyl alcohol	301	244	81	19	39	59-128	
Xylenes, Total	60.3	52.2	87	15	40	19-137	

Column to be used to flag recovery and RPD values

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: UX80628.D Lab Sample ID: MB 240-354032/7
 Matrix: Solid Heated Purge: (Y/N) Y
 Instrument ID: A3UX8 Date Analyzed: 11/07/2018 06:24
 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 240-354032/6	UX80627.D	11/07/2018 06:02
SB-SEMW-10D-10-15	240-103610-2	UX80652.D	11/07/2018 15:12
SB-SEMW-10D-20-28	240-103610-3	UX80653.D	11/07/2018 15:33
SB-SEMW-10D-DUP	240-103610-4	UX80654.D	11/07/2018 15:54
SB-SEMW-10D-DUP MS	240-103610-4 MS	UX80655.D	11/07/2018 16:16
SB-SEMW-10D-DUP MSD	240-103610-4 MSD	UX80656.D	11/07/2018 16:38

FORM IV
GC/MS VOA METHOD BLANK SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: UXJ6208.D Lab Sample ID: MB 240-354546/6
 Matrix: Water Heated Purge: (Y/N) N
 Instrument ID: A3UX11 Date Analyzed: 11/09/2018 11:14
 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 240-354546/4	UXJ6205.D	11/09/2018 10:07
TB-102918	240-103610-1	UXJ6226.D	11/09/2018 17:52

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: J80807A.D BFB Injection Date: 08/07/2018
 Instrument ID: A3UX11 BFB Injection Time: 09:44
 Analysis Batch No.: 339715

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	20.7	
75	30.0 - 60.0 % of mass 95	52.7	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	5.8	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	83.4	
175	5.0 - 9.0 % of mass 174	6.5	(7.8) 1
176	95.0 - 101.0 % of mass 174	80.3	(96.3) 1
177	5.0 - 9.0 % of mass 176	5.3	(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 240-339715/2	UXJ3440.D	08/07/2018	10:19
	STD8260 240-339715/3	UXJ3441.D	08/07/2018	10:41
	STD8260 240-339715/4	UXJ3442.D	08/07/2018	11:03
	STD8260 240-339715/5	UXJ3443.D	08/07/2018	11:26
	STD8260 240-339715/6	UXJ3444.D	08/07/2018	11:48
	STD8260 240-339715/7	UXJ3445.D	08/07/2018	12:10
	ICV 240-339715/14	UXJ3446.D	08/07/2018	12:33
	STD6 240-339715/8	UXJ3447.D	08/07/2018	12:55
	STD5 240-339715/9	UXJ3448.D	08/07/2018	13:17
	STD4 240-339715/10	UXJ3449.D	08/07/2018	13:39
	STD3 240-339715/11	UXJ3450.D	08/07/2018	14:02
	STD2 240-339715/12	UXJ3451.D	08/07/2018	14:24
	STD1 240-339715/13	UXJ3452.D	08/07/2018	14:46
	ICV 240-339715/15	UXJ3453.D	08/07/2018	15:08

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB1109A.D BFB Injection Date: 11/09/2018
 Instrument ID: A3UX11 BFB Injection Time: 09:19
 Analysis Batch No.: 354546

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	17.9
75	30.0 - 60.0 % of mass 95	49.2
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.2
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	105.8
175	5.0 - 9.0 % of mass 174	8.3 (7.8) 1
176	95.0 - 101.0 % of mass 174	102.4 (96.7) 1
177	5.0 - 9.0 % of mass 176	6.5 (6.4) 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 240-354546/2	UXJ6204.D	11/09/2018	09:45
	LCS 240-354546/4	UXJ6205.D	11/09/2018	10:07
	CCV 240-354546/3	UXJ6206.D	11/09/2018	10:29
	MB 240-354546/6	UXJ6208.D	11/09/2018	11:14
TB-102918	240-103610-1	UXJ6226.D	11/09/2018	17:52

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB8753.D BFB Injection Date: 10/18/2018
 Instrument ID: A3UX8 BFB Injection Time: 01:59
 Analysis Batch No.: 350647

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
50	15.0 - 40.0 % of mass 95	36.8	
75	30.0 - 60.0 % of mass 95	51.3	
95	Base Peak, 100% relative abundance	100.0	
96	5.0 - 9.0 % of mass 95	6.5	
173	Less than 2.0 % of mass 174	0.0	(0.0) 1
174	50.0 - 120.00 % of mass 95	65.6	
175	5.0 - 9.0 % of mass 174	4.9	(7.5) 1
176	95.0 - 101.0 % of mass 174	64.5	(98.3) 1
177	5.0 - 9.0 % of mass 176	4.0	(6.2) 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
	STDA9 240-350647/4	UX80006.D	10/18/2018	02:52
	STDA9 240-350647/5	UX80007.D	10/18/2018	03:14
	STDA9 240-350647/6	UX80008.D	10/18/2018	03:37
	STDA9 240-350647/7	UX80009.D	10/18/2018	04:00
	STDA9 240-350647/8	UX80010.D	10/18/2018	04:21
	STDA9 240-350647/9	UX80011.D	10/18/2018	04:43
	STDA9 240-350647/10	UX80012.D	10/18/2018	05:05
	STDA9 240-350647/11	UX80013.D	10/18/2018	05:27
	STDA9 240-350647/12	UX80014.D	10/18/2018	05:49

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB8776.D BFB Injection Date: 11/06/2018
 Instrument ID: A3UX8 BFB Injection Time: 06:11
 Analysis Batch No.: 353820

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	33.3
75	30.0 - 60.0 % of mass 95	50.5
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	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	74.8
175	5.0 - 9.0 % of mass 174	5.6 (7.5) 1
176	95.0 - 101.0 % of mass 174	72.6 (97.0) 1
177	5.0 - 9.0 % of mass 176	4.3 (6.0) 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
	STD8260 240-353820/3	UX80595.D	11/06/2018	06:49
	STD8260 240-353820/4	UX80596.D	11/06/2018	07:11
	STD8260 240-353820/5	UX80597.D	11/06/2018	07:34
	STD8260 240-353820/6	UX80598.D	11/06/2018	07:56
	ICIS 240-353820/7	UX80599.D	11/06/2018	08:18
	STD8260 240-353820/8	UX80600.D	11/06/2018	08:40
	STD8260 240-353820/9	UX80601.D	11/06/2018	09:02
	STD8260 240-353820/10	UX80602.D	11/06/2018	09:24
	STD8260 240-353820/11	UX80603.D	11/06/2018	09:45
	ICV 240-353820/13	UX80605.D	11/06/2018	10:30

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab File ID: BFB8777.D BFB Injection Date: 11/07/2018
 Instrument ID: A3UX8 BFB Injection Time: 04:45
 Analysis Batch No.: 354032

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 % of mass 95	34.4
75	30.0 - 60.0 % of mass 95	49.6
95	Base Peak, 100% relative abundance	100.0
96	5.0 - 9.0 % of mass 95	6.7
173	Less than 2.0 % of mass 174	0.0 (0.0) 1
174	50.0 - 120.00 % of mass 95	73.8
175	5.0 - 9.0 % of mass 174	5.4 (7.3) 1
176	95.0 - 101.0 % of mass 174	70.2 (95.1) 1
177	5.0 - 9.0 % of mass 176	4.5 (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 240-354032/4	UX80625.D	11/07/2018	05:19
	CCV 240-354032/5	UX80626.D	11/07/2018	05:41
	LCS 240-354032/6	UX80627.D	11/07/2018	06:02
	MB 240-354032/7	UX80628.D	11/07/2018	06:24
SB-SEMW-10D-10-15	240-103610-2	UX80652.D	11/07/2018	15:12
SB-SEMW-10D-20-28	240-103610-3	UX80653.D	11/07/2018	15:33
SB-SEMW-10D-DUP	240-103610-4	UX80654.D	11/07/2018	15:54
SB-SEMW-10D-DUP MS	240-103610-4 MS	UX80655.D	11/07/2018	16:16
SB-SEMW-10D-DUP MSD	240-103610-4 MSD	UX80656.D	11/07/2018	16:38

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

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: STD8260 240-339715/4 Date Analyzed: 08/07/2018 11:03
 Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXJ3442.D Heated Purge: (Y/N) N
 Calibration ID: 46381

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
INITIAL CALIBRATION MID-POINT	1108911	4.66	694915	7.31	334003	9.52	
UPPER LIMIT	2217822	5.16	1389830	7.81	668006	10.02	
LOWER LIMIT	554456	4.16	347458	6.81	167002	9.02	
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-339715/14		1156749	4.66	715134	7.31	341994	9.52
ICV 240-339715/15		1010902	4.66	619828	7.31	295366	9.52
CCVIS 240-354546/2		1258794	4.66	905486	7.31	484931	9.52

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: CCVIS 240-354546/2 Date Analyzed: 11/09/2018 09:45
 Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UXJ6204.D Heated Purge: (Y/N) N
 Calibration ID: 46387

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	1258794	4.66	905486	7.31	484931	9.52	
UPPER LIMIT	2517588	5.16	1810972	7.81	969862	10.02	
LOWER LIMIT	629397	4.16	452743	6.81	242466	9.02	
LAB SAMPLE ID	CLIENT SAMPLE ID						
LCS 240-354546/4		1142627	4.66	773686	7.31	437831	9.52
CCV 240-354546/3		1166212	4.65	783553	7.31	381641	9.52
MB 240-354546/6		1017945	4.66	774169	7.31	383985	9.52
240-103610-1	TB-102918	966019	4.66	675826	7.31	350352	9.52

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: ICIS 240-353820/7 Date Analyzed: 11/06/2018 08:18
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UX80599.D Heated Purge: (Y/N) Y
 Calibration ID: 47798

	FB		CBNZd5		DCBd4	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT	897987	5.16	657341	7.69	317330	9.88
UPPER LIMIT	1795974	5.66	1314682	8.19	634660	10.38
LOWER LIMIT	448994	4.66	328671	7.19	158665	9.38
LAB SAMPLE ID	CLIENT SAMPLE ID					
ICV 240-353820/13	976104	5.16	701529	7.69	328898	9.88
CCVIS 240-354032/4	997625	5.16	660321	7.69	324155	9.88

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
GC/MS VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Sample No.: CCVIS 240-354032/4 Date Analyzed: 11/07/2018 05:19
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm)
 Lab File ID (Standard): UX80625.D Heated Purge: (Y/N) Y
 Calibration ID: 47798

	FB		CBNZd5		DCBd4		
	AREA #	RT #	AREA #	RT #	AREA #	RT #	
12/24 HOUR STD	997625	5.16	660321	7.69	324155	9.88	
UPPER LIMIT	1995250	5.66	1320642	8.19	648310	10.38	
LOWER LIMIT	498813	4.66	330161	7.19	162078	9.38	
LAB SAMPLE ID	CLIENT SAMPLE ID						
CCV 240-354032/5	928987	5.16	659366	7.69	312615	9.88	
LCS 240-354032/6	939438	5.16	686648	7.69	325317	9.88	
MB 240-354032/7	917081	5.16	690483	7.69	310846	9.88	
240-103610-2	SB-SEMW-10D-10-15	938949	5.16	684823	7.69	299825	9.88
240-103610-3	SB-SEMW-10D-20-28	806309	5.16	583771	7.69	270882	9.88
240-103610-4	SB-SEMW-10D-DUP	917001	5.16	674708	7.69	291158	9.88
240-103610-4 MS	SB-SEMW-10D-DUP MS	1007292	5.16	725258	7.69	335879	9.88
240-103610-4 MSD	SB-SEMW-10D-DUP MSD	910864	5.16	659852	7.69	314995	9.88

FB = Fluorobenzene
 FB = Fluorobenzene
 CBNZd5 = Chlorobenzene-d5
 CBNZd5 = Chlorobenzene-d5
 Area Limit = 50%-200% of internal standard area
 DCBd4 = 1,4-Dichlorobenzene-d4
 RT Limit = ± 0.5 minutes of internal standard RT
 DCBd4 = 1,4-Dichlorobenzene-d4

Column used to flag values outside QC limits

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: TB-102918 Lab Sample ID: 240-103610-1
 Matrix: Water Lab File ID: UXJ6226.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 17:52
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-64-1	Acetone	20		10	5.4
630-20-6	1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14
71-43-2	Benzene	0.13	U	1.0	0.13
75-27-4	Bromodichloromethane	0.17	U	1.0	0.17
75-25-2	Bromoform	0.76	U	1.0	0.76
74-83-9	Bromomethane	0.42	U	1.0	0.42
78-93-3	2-Butanone (MEK)	1.2	U	10	1.2
75-15-0	Carbon disulfide	0.28	U	1.0	0.28
56-23-5	Carbon tetrachloride	0.26	U	1.0	0.26
108-90-7	Chlorobenzene	0.14	U	1.0	0.14
75-00-3	Chloroethane	0.83	U	1.0	0.83
67-66-3	Chloroform	0.13	U	1.0	0.13
563-58-6	1,1-Dichloropropene	0.14	U	1.0	0.14
74-87-3	Chloromethane	0.20	U	1.0	0.20
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17
87-61-6	1,2,3-Trichlorobenzene	0.54	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	0.24	U	1.0	0.24
107-06-2	1,2-Dichloroethane	0.21	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19
526-73-8	1,2,3-Trimethylbenzene	0.14	U	5.0	0.14
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.070	U	1.0	0.070
10061-01-5	cis-1,3-Dichloropropene	0.61	U	1.0	0.61
10061-02-6	trans-1,3-Dichloropropene	0.67	U	1.0	0.67
100-41-4	Ethylbenzene	0.11	U	1.0	0.11
591-78-6	2-Hexanone	0.54	U	10	0.54
75-09-2	Methylene Chloride	2.6	U	5.0	2.6
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42
100-42-5	Styrene	0.10	U	1.0	0.10
79-34-5	1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13
127-18-4	Tetrachloroethene	0.15	U	1.0	0.15
108-88-3	Toluene	0.14	U	1.0	0.14
79-01-6	Trichloroethene	0.10	U	1.0	0.10
75-01-4	Vinyl chloride	0.20	U	1.0	0.20
1330-20-7	Xylenes, Total	0.15	U	2.0	0.15
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: TB-102918 Lab Sample ID: 240-103610-1
 Matrix: Water Lab File ID: UXJ6226.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5(mL) Date Analyzed: 11/09/2018 17:52
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
142-28-9	1,3-Dichloropropane	0.21	U	1.0	0.21
96-12-8	1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12
75-71-8	Dichlorodifluoromethane	0.35	U	1.0	0.35
156-59-2	cis-1,2-Dichloroethene	0.16	U	1.0	0.16
156-60-5	trans-1,2-Dichloroethene	0.19	U	1.0	0.19
98-82-8	Isopropylbenzene	0.090	U	1.0	0.090
1634-04-4	Methyl tert-butyl ether	0.070	U	1.0	0.070
76-13-1	1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41
120-82-1	1,2,4-Trichlorobenzene	0.26	U	1.0	0.26
594-20-7	2,2-Dichloropropane	0.31	U	1.0	0.31
95-50-1	1,2-Dichlorobenzene	0.15	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	0.15	U	1.0	0.15
106-46-7	1,4-Dichlorobenzene	0.16	U	1.0	0.16
110-75-8	2-Chloroethyl vinyl ether	0.26	U	10	0.26
75-69-4	Trichlorofluoromethane	0.45	U	1.0	0.45
95-49-8	2-Chlorotoluene	0.15	U	1.0	0.15
124-48-1	Chlorodibromomethane	0.39	U	1.0	0.39
108-86-1	Bromobenzene	0.12	U	1.0	0.12
74-97-5	Bromochloromethane	0.14	U *	1.0	0.14
106-43-4	4-Chlorotoluene	0.090	U	1.0	0.090
99-87-6	4-Isopropyltoluene	0.13	U	1.0	0.13
87-68-3	Hexachlorobutadiene	0.83	U	1.0	0.83
74-95-3	Dibromomethane	0.090	U	1.0	0.090
108-20-3	Diisopropyl ether	0.17	U	10	0.17
91-20-3	Naphthalene	0.32	U	1.0	0.32
104-51-8	n-Butylbenzene	0.14	U	1.0	0.14
103-65-1	N-Propylbenzene	0.15	U	1.0	0.15
135-98-8	sec-Butylbenzene	0.13	U	1.0	0.13
994-05-8	Tert-amyl methyl ether	0.11	U	5.0	0.11
637-92-3	Ethyl tert-butyl ether	0.15	U	5.0	0.15
98-06-6	tert-Butylbenzene	0.14	U	1.0	0.14
108-05-4	Vinyl acetate	0.19	U	2.0	0.19
75-65-0	tert-Butyl alcohol	38	J	50	1.7

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: TB-102918 Lab Sample ID: 240-103610-1
 Matrix: Water Lab File ID: UXJ6226.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 17:52
 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.: 354546 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	108		70-121
460-00-4	4-Bromofluorobenzene (Surr)	79		59-120
2037-26-5	Toluene-d8 (Surr)	77		70-123
1868-53-7	Dibromofluoromethane (Surr)	123		75-128

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.4	U	5.7	3.4
71-55-6	1,1,1-Trichloroethane	0.93	U	5.7	0.93
79-34-5	1,1,2,2-Tetrachloroethane	1.6	U	5.7	1.6
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	5.7	1.5
75-34-3	1,1-Dichloroethane	0.79	U	5.7	0.79
75-35-4	1,1-Dichloroethene	1.0	U	5.7	1.0
563-58-6	1,1-Dichloropropene	1.1	U	5.7	1.1
87-61-6	1,2,3-Trichlorobenzene	0.65	U	5.7	0.65
96-18-4	1,2,3-Trichloropropane	1.8	U	5.7	1.8
526-73-8	1,2,3-Trimethylbenzene	2.1	U	5.7	2.1
120-82-1	1,2,4-Trichlorobenzene	0.65	U	5.7	0.65
95-63-6	1,2,4-Trimethylbenzene	1.1	U	5.7	1.1
96-12-8	1,2-Dibromo-3-Chloropropane	4.1	U	11	4.1
95-50-1	1,2-Dichlorobenzene	1.3	U	5.7	1.3
107-06-2	1,2-Dichloroethane	0.88	U	5.7	0.88
78-87-5	1,2-Dichloropropane	0.97	U	5.7	0.97
541-73-1	1,3-Dichlorobenzene	0.93	U	5.7	0.93
142-28-9	1,3-Dichloropropane	1.1	U	5.7	1.1
106-46-7	1,4-Dichlorobenzene	1.0	U	5.7	1.0
594-20-7	2,2-Dichloropropane	1.4	U	5.7	1.4
110-75-8	2-Chloroethyl vinyl ether	10	U	57	10
95-49-8	2-Chlorotoluene	1.1	U	5.7	1.1
591-78-6	2-Hexanone	4.6	U	23	4.6
108-86-1	Bromobenzene	1.3	U	5.7	1.3
74-97-5	Bromochloromethane	0.67	U	5.7	0.67
106-43-4	4-Chlorotoluene	0.98	U	5.7	0.98
99-87-6	p-Isopropyltoluene	3.3	U	5.7	3.3
67-64-1	Acetone	24	U	28	24
71-43-2	Benzene	0.79	U	5.7	0.79
75-25-2	Bromoform	2.7	U	5.7	2.7
74-83-9	Bromomethane	1.1	U	5.7	1.1
75-15-0	Carbon disulfide	1.3	U	5.7	1.3
56-23-5	Carbon tetrachloride	3.7	U	5.7	3.7
108-90-7	Chlorobenzene	1.0	U	5.7	1.0
75-00-3	Chloroethane	1.4	U	5.7	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.89	U	5.7	0.89
74-87-3	Chloromethane	1.2	U	5.7	1.2
156-59-2	cis-1,2-Dichloroethene	1.4	J	5.7	0.74
10061-01-5	cis-1,3-Dichloropropene	1.6	U	5.7	1.6
87-68-3	Hexachlorobutadiene	4.2	U	5.7	4.2
74-95-3	Dibromomethane	0.76	U	5.7	0.76
75-27-4	Bromodichloromethane	0.77	U	5.7	0.77
75-71-8	Dichlorodifluoromethane	1.1	U	5.7	1.1
100-41-4	Ethylbenzene	1.2	U	5.7	1.2
106-93-4	1,2-Dibromoethane	0.87	U	5.7	0.87
108-20-3	Diisopropyl ether	0.86	U	11	0.86
91-20-3	Naphthalene	3.1	U	5.7	3.1
179601-23-1	m-Xylene & p-Xylene	0.89	U	11	0.89
104-51-8	n-Butylbenzene	3.9	U	5.7	3.9
98-82-8	Isopropylbenzene	0.94	U	5.7	0.94
103-65-1	N-Propylbenzene	0.83	U	5.7	0.83
78-93-3	2-Butanone (MEK)	4.0	U	23	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	4.2	U	23	4.2
135-98-8	sec-Butylbenzene	0.98	U	5.7	0.98
1634-04-4	Methyl tert-butyl ether	0.93	U	5.7	0.93
994-05-8	Tert-amyl methyl ether	2.6	U	5.7	2.6
75-09-2	Methylene Chloride	14	U	28	14
95-47-6	o-Xylene	0.98	U	5.7	0.98
100-42-5	Styrene	1.3	U	5.7	1.3
637-92-3	Ethyl tert-butyl ether	2.6	U	5.7	2.6
98-06-6	tert-Butylbenzene	1.0	U	5.7	1.0
127-18-4	Tetrachloroethene	0.83	U	5.7	0.83
108-88-3	Toluene	0.88	U	5.7	0.88
156-60-5	trans-1,2-Dichloroethene	0.53	U	5.7	0.53
10061-02-6	trans-1,3-Dichloropropene	1.2	U	5.7	1.2
79-01-6	Trichloroethene	110		5.7	0.72
75-69-4	Trichlorofluoromethane	1.2	U	5.7	1.2
108-05-4	Vinyl acetate	2.4	U	11	2.4
75-01-4	Vinyl chloride	0.95	U	5.7	0.95
75-65-0	tert-Butyl alcohol	19	U	230	19
1330-20-7	Xylenes, Total	1.8	U	11	1.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.2	U	5.7	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		48-123
460-00-4	4-Bromofluorobenzene (Surr)	75		49-141
2037-26-5	Toluene-d8 (Surr)	88		62-135
1868-53-7	Dibromofluoromethane (Surr)	84		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-10-15 Lab Sample ID: 240-103610-2
 Matrix: Solid Lab File ID: UX80652.D
 Analysis Method: 8260B Date Collected: 10/29/2018 11:20
 Sample wt/vol: 5.33(g) Date Analyzed: 11/07/2018 15:12
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.3 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg
 Number TICs Found: 1 TIC Result Total: 17

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.32	17	T J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.6	U	6.0	3.6
71-55-6	1,1,1-Trichloroethane	0.98	U	6.0	0.98
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	6.0	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	6.0	1.5
75-34-3	1,1-Dichloroethane	0.83	U	6.0	0.83
75-35-4	1,1-Dichloroethene	1.1	U	6.0	1.1
563-58-6	1,1-Dichloropropene	1.2	U	6.0	1.2
87-61-6	1,2,3-Trichlorobenzene	0.68	U	6.0	0.68
96-18-4	1,2,3-Trichloropropane	1.9	U	6.0	1.9
526-73-8	1,2,3-Trimethylbenzene	2.2	U	6.0	2.2
120-82-1	1,2,4-Trichlorobenzene	0.68	U	6.0	0.68
95-63-6	1,2,4-Trimethylbenzene	1.2	U	6.0	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	4.3	U	12	4.3
95-50-1	1,2-Dichlorobenzene	1.3	U	6.0	1.3
107-06-2	1,2-Dichloroethane	0.92	U	6.0	0.92
78-87-5	1,2-Dichloropropane	1.0	U	6.0	1.0
541-73-1	1,3-Dichlorobenzene	0.97	U	6.0	0.97
142-28-9	1,3-Dichloropropane	1.2	U	6.0	1.2
106-46-7	1,4-Dichlorobenzene	1.1	U	6.0	1.1
594-20-7	2,2-Dichloropropane	1.4	U	6.0	1.4
110-75-8	2-Chloroethyl vinyl ether	11	U	60	11
95-49-8	2-Chlorotoluene	1.1	U	6.0	1.1
591-78-6	2-Hexanone	4.9	U	24	4.9
108-86-1	Bromobenzene	1.4	U	6.0	1.4
74-97-5	Bromochloromethane	0.71	U	6.0	0.71
106-43-4	4-Chlorotoluene	1.0	U	6.0	1.0
99-87-6	p-Isopropyltoluene	3.5	U	6.0	3.5
67-64-1	Acetone	25	U	30	25
71-43-2	Benzene	0.83	U	6.0	0.83
75-25-2	Bromoform	2.9	U	6.0	2.9
74-83-9	Bromomethane	1.2	U	6.0	1.2
75-15-0	Carbon disulfide	1.4	U	6.0	1.4
56-23-5	Carbon tetrachloride	3.9	U	6.0	3.9
108-90-7	Chlorobenzene	1.1	U	6.0	1.1
75-00-3	Chloroethane	1.5	U	6.0	1.5

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.94	U	6.0	0.94
74-87-3	Chloromethane	1.2	U	6.0	1.2
156-59-2	cis-1,2-Dichloroethene	0.78	U	6.0	0.78
10061-01-5	cis-1,3-Dichloropropene	1.7	U	6.0	1.7
87-68-3	Hexachlorobutadiene	4.5	U	6.0	4.5
74-95-3	Dibromomethane	0.80	U	6.0	0.80
75-27-4	Bromodichloromethane	0.81	U	6.0	0.81
75-71-8	Dichlorodifluoromethane	1.1	U	6.0	1.1
100-41-4	Ethylbenzene	1.3	U	6.0	1.3
106-93-4	1,2-Dibromoethane	0.92	U	6.0	0.92
108-20-3	Diisopropyl ether	0.90	U	12	0.90
91-20-3	Naphthalene	3.2	U	6.0	3.2
179601-23-1	m-Xylene & p-Xylene	0.94	U	12	0.94
104-51-8	n-Butylbenzene	4.1	U	6.0	4.1
98-82-8	Isopropylbenzene	0.99	U	6.0	0.99
103-65-1	N-Propylbenzene	0.87	U	6.0	0.87
78-93-3	2-Butanone (MEK)	4.2	U	24	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	4.4	U	24	4.4
135-98-8	sec-Butylbenzene	1.0	U	6.0	1.0
1634-04-4	Methyl tert-butyl ether	0.98	U	6.0	0.98
994-05-8	Tert-amyl methyl ether	2.7	U	6.0	2.7
75-09-2	Methylene Chloride	14	U	30	14
95-47-6	o-Xylene	1.0	U	6.0	1.0
100-42-5	Styrene	1.4	U	6.0	1.4
637-92-3	Ethyl tert-butyl ether	2.7	U	6.0	2.7
98-06-6	tert-Butylbenzene	1.1	U	6.0	1.1
127-18-4	Tetrachloroethene	0.87	U	6.0	0.87
108-88-3	Toluene	0.92	U	6.0	0.92
156-60-5	trans-1,2-Dichloroethene	0.56	U	6.0	0.56
10061-02-6	trans-1,3-Dichloropropene	1.2	U	6.0	1.2
79-01-6	Trichloroethene	7.3		6.0	0.76
75-69-4	Trichlorofluoromethane	1.3	U	6.0	1.3
108-05-4	Vinyl acetate	2.5	U	12	2.5
75-01-4	Vinyl chloride	1.0	U	6.0	1.0
75-65-0	tert-Butyl alcohol	20	U	240	20
1330-20-7	Xylenes, Total	1.9	U	12	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.3	U	6.0	3.3

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	84		48-123
460-00-4	4-Bromofluorobenzene (Surr)	80		49-141
2037-26-5	Toluene-d8 (Surr)	89		62-135
1868-53-7	Dibromofluoromethane (Surr)	86		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-20-28 Lab Sample ID: 240-103610-3
 Matrix: Solid Lab File ID: UX80653.D
 Analysis Method: 8260B Date Collected: 10/29/2018 12:30
 Sample wt/vol: 5.07(g) Date Analyzed: 11/07/2018 15:33
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg
 Number TICs Found: 2 TIC Result Total: 40

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.31	19	T J	
	Unknown	4.23	21	T J	

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.5	U	5.8	3.5
71-55-6	1,1,1-Trichloroethane	0.96	U	5.8	0.96
79-34-5	1,1,2,2-Tetrachloroethane	1.7	U	5.8	1.7
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	U	5.8	1.5
75-34-3	1,1-Dichloroethane	0.81	U	5.8	0.81
75-35-4	1,1-Dichloroethene	1.1	U	5.8	1.1
563-58-6	1,1-Dichloropropene	1.2	U	5.8	1.2
87-61-6	1,2,3-Trichlorobenzene	0.67	U	5.8	0.67
96-18-4	1,2,3-Trichloropropane	1.8	U	5.8	1.8
526-73-8	1,2,3-Trimethylbenzene	2.1	U	5.8	2.1
120-82-1	1,2,4-Trichlorobenzene	0.67	U	5.8	0.67
95-63-6	1,2,4-Trimethylbenzene	1.2	U	5.8	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	4.2	U	12	4.2
95-50-1	1,2-Dichlorobenzene	1.3	U	5.8	1.3
107-06-2	1,2-Dichloroethane	0.90	U	5.8	0.90
78-87-5	1,2-Dichloropropane	0.99	U	5.8	0.99
541-73-1	1,3-Dichlorobenzene	0.95	U	5.8	0.95
142-28-9	1,3-Dichloropropane	1.2	U	5.8	1.2
106-46-7	1,4-Dichlorobenzene	1.0	U	5.8	1.0
594-20-7	2,2-Dichloropropane	1.4	U	5.8	1.4
110-75-8	2-Chloroethyl vinyl ether	10	U	58	10
95-49-8	2-Chlorotoluene	1.1	U	5.8	1.1
591-78-6	2-Hexanone	4.8	U	23	4.8
108-86-1	Bromobenzene	1.4	U	5.8	1.4
74-97-5	Bromochloromethane	0.69	U	5.8	0.69
106-43-4	4-Chlorotoluene	1.0	U	5.8	1.0
99-87-6	p-Isopropyltoluene	3.4	U	5.8	3.4
67-64-1	Acetone	25	U	29	25
71-43-2	Benzene	0.82	U	5.8	0.82
75-25-2	Bromoform	2.8	U	5.8	2.8
74-83-9	Bromomethane	1.2	U	5.8	1.2
75-15-0	Carbon disulfide	1.4	U	5.8	1.4
56-23-5	Carbon tetrachloride	3.8	U	5.8	3.8
108-90-7	Chlorobenzene	1.1	U	5.8	1.1
75-00-3	Chloroethane	1.4	U	5.8	1.4

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
67-66-3	Chloroform	0.92	U	5.8	0.92
74-87-3	Chloromethane	1.2	U	5.8	1.2
156-59-2	cis-1,2-Dichloroethene	0.76	U	5.8	0.76
10061-01-5	cis-1,3-Dichloropropene	1.7	U	5.8	1.7
87-68-3	Hexachlorobutadiene	4.4	U	5.8	4.4
74-95-3	Dibromomethane	0.78	U	5.8	0.78
75-27-4	Bromodichloromethane	0.79	U	5.8	0.79
75-71-8	Dichlorodifluoromethane	1.1	U	5.8	1.1
100-41-4	Ethylbenzene	1.2	U	5.8	1.2
106-93-4	1,2-Dibromoethane	0.90	U	5.8	0.90
108-20-3	Diisopropyl ether	0.88	U	12	0.88
91-20-3	Naphthalene	3.2	U	5.8	3.2
179601-23-1	m-Xylene & p-Xylene	0.91	U	12	0.91
104-51-8	n-Butylbenzene	4.1	U	5.8	4.1
98-82-8	Isopropylbenzene	0.97	U	5.8	0.97
103-65-1	N-Propylbenzene	0.86	U	5.8	0.86
78-93-3	2-Butanone (MEK)	4.2	U	23	4.2
108-10-1	4-Methyl-2-pentanone (MIBK)	4.3	U	23	4.3
135-98-8	sec-Butylbenzene	1.0	U	5.8	1.0
1634-04-4	Methyl tert-butyl ether	0.96	U	5.8	0.96
994-05-8	Tert-amyl methyl ether	2.6	U	5.8	2.6
75-09-2	Methylene Chloride	14	U	29	14
95-47-6	o-Xylene	1.0	U	5.8	1.0
100-42-5	Styrene	1.4	U	5.8	1.4
637-92-3	Ethyl tert-butyl ether	2.6	U	5.8	2.6
98-06-6	tert-Butylbenzene	1.1	U	5.8	1.1
127-18-4	Tetrachloroethene	0.85	U	5.8	0.85
108-88-3	Toluene	0.90	U	5.8	0.90
156-60-5	trans-1,2-Dichloroethene	0.54	U	5.8	0.54
10061-02-6	trans-1,3-Dichloropropene	1.2	U	5.8	1.2
79-01-6	Trichloroethene	49	F1	5.8	0.74
75-69-4	Trichlorofluoromethane	1.3	U	5.8	1.3
108-05-4	Vinyl acetate	2.5	U	12	2.5
75-01-4	Vinyl chloride	0.98	U	5.8	0.98
75-65-0	tert-Butyl alcohol	19	U	230	19
1330-20-7	Xylenes, Total	1.9	U	12	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	3.2	U	5.8	3.2

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	83		48-123
460-00-4	4-Bromofluorobenzene (Surr)	78		49-141
2037-26-5	Toluene-d8 (Surr)	87		62-135
1868-53-7	Dibromofluoromethane (Surr)	85		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP Lab Sample ID: 240-103610-4
 Matrix: Solid Lab File ID: UX80654.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.18(g) Date Analyzed: 11/07/2018 15:54
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg
 Number TICs Found: 1 TIC Result Total: 18

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Unknown	3.32	18	T J	

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-339715/7	UXJ3445.D
Level 2	STD8260 240-339715/6	UXJ3444.D
Level 3	STD8260 240-339715/5	UXJ3443.D
Level 4	STD8260 240-339715/4	UXJ3442.D
Level 5	STD8260 240-339715/3	UXJ3441.D
Level 6	STD8260 240-339715/2	UXJ3440.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	0.2113 0.2754	0.2205	0.2514	0.2701	0.2552	Ave		0.2473			10.5		15.0				
Chloromethane	0.2966 0.2658	0.2669	0.2369	0.2642	0.2510	Ave		0.2636		0.1000	7.5		15.0				
Butadiene	0.2900 0.2983	0.2996	0.2687	0.3063	0.2906	Ave		0.2922			4.5		15.0				
Vinyl chloride	0.3410 0.3462	0.2906	0.2962	0.3301	0.3303	Ave		0.3224			7.3		15.0				
Bromomethane	0.2143 0.2276	0.2109	0.1862	0.2232	0.2234	Ave		0.2143			7.0		15.0				
Chloroethane	0.2081 0.2175	0.1820	0.1874	0.2169	0.2056	Ave		0.2029			7.4		15.0				
Dichlorofluoromethane	0.4987 0.4862	0.4843	0.4363	0.4824	0.4794	Ave		0.4779			4.5		15.0				
Trichlorofluoromethane	0.4391 0.4677	0.4073	0.4077	0.4518	0.4481	Ave		0.4369			5.6		15.0				
Ethyl ether	0.2465 0.2533	0.2557	0.2353	0.2364	0.2339	Ave		0.2435			4.0		15.0				
Acrolein	0.0759 0.0704	0.0703	0.0643	0.0544	0.0664	Ave		0.0670			10.9		15.0				
1,1-Dichloroethene	0.2835 0.2705	0.2694	0.2278	0.2497	0.2218	Ave		0.2538			9.8		15.0				
1,1,2-Trichlorotrifluoroethane	0.1886 0.2004	0.1793	0.1651	0.1792	0.1891	Ave		0.1836			6.5		15.0				
Acetone	++++ 0.1256	0.1097	0.1140	0.0844	0.1085	Ave		0.1084			13.9		15.0				
Iodomethane	0.3765 0.3938	0.3974	0.3709	0.3713	0.3649	Ave		0.3791			3.5		15.0				
Carbon disulfide	0.7838 0.8002	0.8291	0.7111	0.7182	0.7157	Ave		0.7597			6.7		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	0.1842 0.1931	0.1799	0.1853	0.1883	0.1745	Ave		0.1842			3.5		15.0				
Methyl acetate	0.3120 0.2718	0.3005	0.2764	0.2441	0.2852	Ave		0.2816			8.4		15.0				
Methylene Chloride	0.2465 0.2541	0.2600	0.2384	0.2463	0.2371	Ave		0.2471			3.6		15.0				
tert-Butyl alcohol	0.0449 0.0482	0.0271	0.0375	0.0294	0.0406	Qua	0.0221	0.0298	0.0000460					0.9980		0.9900	
Acrylonitrile	0.1530 0.1402	0.1434	0.1325	0.1156	0.1393	Ave		0.1373			9.2		15.0				
trans-1,2-Dichloroethene	0.3173 0.2799	0.2938	0.2593	0.2627	0.2556	Ave		0.2781			8.6		15.0				
Methyl tert-butyl ether	0.7025 0.7293	0.7524	0.6521	0.7053	0.7147	Ave		0.7094			4.7		15.0				
Hexane	0.0938 0.0874	0.0868	0.0886	0.0782	0.0870	Ave		0.0870			5.8		15.0				
1,1-Dichloroethane	0.4671 0.4860	0.5026	0.4549	0.4627	0.4600	Ave		0.4722		0.1000	3.9		15.0				
Vinyl acetate	0.6550 0.5994	0.6109	0.5939	0.5414	0.6173	Ave		0.6030			6.1		15.0				
cis-1,2-Dichloroethene	0.3206 0.2886	0.3118	0.2909	0.2867	0.2694	Ave		0.2947			6.3		15.0				
2,2-Dichloropropane	0.3140 0.3009	0.3134	0.2669	0.2887	0.2881	Ave		0.2953			6.1		15.0				
2-Butanone (MEK)	0.2472 0.1771	0.2101	0.2018	0.1738	0.2098	Ave		0.2033			13.2		15.0				
Bromochloromethane	0.1318 0.1289	0.1340	0.1263	0.1173	0.1214	Ave		0.1266			5.0		15.0				
Tetrahydrofuran	0.1508 0.1185	0.1488	0.1299	0.1111	0.1419	Ave		0.1335			12.3		15.0				
Chloroform	0.4501 0.4385	0.4667	0.4153	0.4412	0.4277	Ave		0.4399			4.0		15.0				
1,1,1-Trichloroethane	0.3505 0.3769	0.3912	0.3364	0.3638	0.3835	Ave		0.3670			5.7		15.0				
Cyclohexane	0.4465 0.4693	0.4545	0.4480	0.4464	0.4630	Ave		0.4546			2.1		15.0				
1,1-Dichloropropene	0.3360 0.3907	0.4134	0.3824	0.3708	0.3879	Ave		0.3802			6.8		15.0				
Carbon tetrachloride	0.3518 0.3442	0.3644	0.3271	0.3395	0.3353	Ave		0.3437			3.8		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	0.0232 0.0262	0.0226	0.0234	0.0215	0.0234	Ave		0.0234			6.6		15.0				
Benzene	1.1222 1.0686	1.1019	1.0204	1.0205	1.0586	Ave		1.0654			3.9		15.0				
1,2-Dichloroethane	0.3988 0.3589	0.3944	0.3421	0.3584	0.3661	Ave		0.3698			6.0		15.0				
n-Heptane	0.0871 0.0904	0.0824	0.0879	0.0817	0.0951	Ave		0.0874			5.8		15.0				
Trichloroethene	0.3118 0.2724	0.2870	0.2668	0.2668	0.2765	Ave		0.2802			6.1		15.0				
Methylcyclohexane	0.4796 0.5195	0.4976	0.4828	0.4753	0.4956	Ave		0.4917			3.3		15.0				
1,2-Dichloropropane	0.2481 0.2339	0.2676	0.2413	0.2322	0.2578	Ave		0.2468			5.6		15.0				
Dibromomethane	0.1916 0.1495	0.1735	0.1559	0.1491	0.1584	Ave		0.1630			10.2		15.0				
1,4-Dioxane	0.0018 0.0033	0.0024	0.0024	0.0031	0.0033	Lin1	-0.039	0.0033						0.9970		0.9900	
Bromodichloromethane	0.3350 0.3199	0.3431	0.3269	0.3198	0.3511	Ave		0.3326			3.8		15.0				
2-Chloroethyl vinyl ether	0.1977 0.1548	0.1743	0.1871	0.1596	0.2016	Ave		0.1792			10.9		15.0				
cis-1,3-Dichloropropene	0.4612 0.3848	0.4081	0.4004	0.3785	0.4269	Ave		0.4100			7.4		15.0				
4-Methyl-2-pentanone (MIBK)	0.4093 0.3080	0.3605	0.3540	0.3413	0.3856	Ave		0.3598			9.8		15.0				
Toluene	1.7043 1.7429	1.6573	1.5865	1.5729	1.6036	Ave		1.6446			4.2		15.0				
trans-1,3-Dichloropropene	0.5821 0.5592	0.5801	0.5507	0.5256	0.5622	Ave		0.5600			3.7		15.0				
Ethyl methacrylate	0.5398 0.5010	0.4957	0.4938	0.4974	0.5240	Ave		0.5086			3.7		15.0				
1,1,2-Trichloroethane	0.3576 0.3110	0.3495	0.3053	0.3019	0.3142	Ave		0.3232			7.4		15.0				
Tetrachloroethene	0.3108 0.3162	0.3056	0.3023	0.2968	0.3015	Ave		0.3055			2.3		15.0				
1,3-Dichloropropane	0.6243 0.5618	0.5686	0.5628	0.5497	0.5759	Ave		0.5738			4.6		15.0				
2-Hexanone	0.4399 0.3405	0.4417	0.4008	0.4080	0.4290	Ave		0.4100			9.2		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	0.3603 0.3658	0.3663	0.3459	0.3625	0.3623	Ave		0.3605			2.1		15.0				
1,2-Dibromoethane	0.3783 0.3173	0.3326	0.3203	0.3113	0.3285	Ave		0.3314			7.3		15.0				
Chlorobenzene	1.0540 0.9885	1.0242	0.9549	0.9534	0.9623	Ave		0.9896		0.3000	4.2		15.0				
1,1,1,2-Tetrachloroethane	0.3479 0.3526	0.3676	0.3148	0.3480	0.3192	Ave		0.3417			6.0		15.0				
Ethylbenzene	0.5165 0.5598	0.5941	0.5439	0.5446	0.5431	Ave		0.5503			4.7		15.0				
m-Xylene & p-Xylene	0.6867 0.6950	0.6556	0.6501	0.6526	0.6632	Ave		0.6672			2.8		15.0				
o-Xylene	0.5987 0.6716	0.6053	0.5917	0.6313	0.6267	Ave		0.6209			4.7		15.0				
Styrene	1.0210 1.1055	1.0931	1.0019	1.0434	1.0703	Ave		1.0559			3.9		15.0				
Bromoform	0.2735 0.2509	0.2607	0.2468	0.2535	0.2508	Ave		0.2560		0.1000	3.8		15.0				
Isopropylbenzene	1.7319 1.8318	1.7227	1.6269	1.6508	1.6772	Ave		1.7069			4.3		15.0				
1,1,2,2-Tetrachloroethane	1.1031 0.9672	1.0518	0.9569	0.9397	0.9566	Ave		0.9959		0.3000	6.6		15.0				
Bromobenzene	0.7755 0.7728	0.8428	0.7858	0.7561	0.7689	Ave		0.7837			3.9		15.0				
1,2,3-Trichloropropane	0.3314 0.3089	0.4042	0.3343	0.3161	0.3211	Ave		0.3360			10.3		15.0				
trans-1,4-Dichloro-2-butene	0.3422 0.2837	0.3748	0.3406	0.3053	0.3210	Ave		0.3279			9.7		15.0				
N-Propylbenzene	0.9682 0.9979	1.0752	0.9566	0.9342	0.9606	Ave		0.9821			5.1		15.0				
2-Chlorotoluene	0.8084 0.8069	0.8134	0.7783	0.7502	0.7658	Ave		0.7872			3.3		15.0				
1,3,5-Trimethylbenzene	2.8352 3.0005	2.8313	2.6946	2.6857	2.7266	Ave		2.7957			4.3		15.0				
4-Chlorotoluene	0.8308 0.8083	0.8444	0.7792	0.7838	0.8006	Ave		0.8078			3.2		15.0				
tert-Butylbenzene	2.4727 2.6589	2.3455	2.3803	2.2804	2.5152	Ave		2.4422			5.6		15.0				
1,2,4-Trimethylbenzene	2.9497 2.9942	2.9370	2.7123	2.7345	2.8285	Ave		2.8593			4.2		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	3.4706 4.0032	3.6555	3.5136	3.4874	3.7065	Ave		3.6395			5.6		15.0				
1,3-Dichlorobenzene	1.4827 1.4294	1.5563	1.4178	1.3884	1.4512	Ave		1.4543			4.1		15.0				
4-Isopropyltoluene	3.0208 3.2959	2.9682	2.9564	2.9783	3.0893	Ave		3.0515			4.2		15.0				
1,4-Dichlorobenzene	1.6181 1.4192	1.5822	1.4416	1.3856	1.4486	Ave		1.4826			6.4		15.0				
1,2-Dichlorobenzene	1.4461 1.3943	1.3583	1.2761	1.3011	1.3169	Ave		1.3488			4.7		15.0				
n-Butylbenzene	2.7917 2.9438	2.8420	2.6351	2.6422	2.8208	Ave		2.7793			4.3		15.0				
1,2-Dibromo-3-Chloropropane	0.3099 0.2581	0.3427	0.2561	0.2752	0.2727	Ave		0.2858			11.9		15.0				
1,2,4-Trichlorobenzene	1.0343 0.9847	0.9843	0.7977	0.9054	0.8895	Ave		0.9327			9.2		15.0				
Hexachlorobutadiene	0.4843 0.4537	0.4398	0.3857	0.4171	0.4414	Ave		0.4370			7.6		15.0				
Naphthalene	3.4842 3.3259	3.4926	2.6724	2.9660	3.0196	Ave		3.1601			10.4		15.0				
1,2,3-Trichlorobenzene	1.0474 0.9738	0.9604	0.7324	0.8501	0.8838	Ave		0.9080			12.2		15.0				
Dibromofluoromethane (Surr)	0.2447 0.2301	0.2304	0.2188	0.2371	0.2276	Ave		0.2315			3.8		15.0				
1,2-Dichloroethane-d4 (Surr)	0.3450 0.2970	0.3032	0.3004	0.2852	0.2919	Ave		0.3038			7.0		15.0				
Toluene-d8 (Surr)	1.4697 1.5033	1.4153	1.3785	1.4367	1.3796	Ave		1.4305			3.5		15.0				
4-Bromofluorobenzene (Surr)	0.4653 0.4235	0.4605	0.4377	0.4361	0.4275	Ave		0.4418			3.9		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-339715/7	UXJ3445.D
Level 2	STD8260 240-339715/6	UXJ3444.D
Level 3	STD8260 240-339715/5	UXJ3443.D
Level 4	STD8260 240-339715/4	UXJ3442.D
Level 5	STD8260 240-339715/3	UXJ3441.D
Level 6	STD8260 240-339715/2	UXJ3440.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	11447 680542	24307	78668	149776	299562	1.00 40.0	2.00	5.00	10.0	20.0
Chloromethane	FB	Ave	16064 656815	29429	74130	146467	294607	1.00 40.0	2.00	5.00	10.0	20.0
Butadiene	FB	Ave	15707 737188	33026	84061	169822	341072	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl chloride	FB	Ave	18472 855669	32033	92669	183026	387649	1.00 40.0	2.00	5.00	10.0	20.0
Bromomethane	FB	Ave	11609 562463	23252	58260	123749	262162	1.00 40.0	2.00	5.00	10.0	20.0
Chloroethane	FB	Ave	11273 537569	20060	58618	120262	241257	1.00 40.0	2.00	5.00	10.0	20.0
Dichlorofluoromethane	FB	Ave	27013 1201481	53394	136517	267487	562616	1.00 40.0	2.00	5.00	10.0	20.0
Trichlorofluoromethane	FB	Ave	23783 1155720	44898	127566	250505	525921	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl ether	FB	Ave	13350 626092	28188	73608	131078	274472	1.00 40.0	2.00	5.00	10.0	20.0
Acrolein	FB	Ave	20554 869540	38758	100650	150752	389886	5.00 200	10.0	25.0	50.0	100
1,1-Dichloroethene	FB	Ave	15357 668425	29702	71260	138473	260337	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichlorotrifluoroethane	FB	Ave	10215 495336	19766	51665	99374	221945	1.00 40.0	2.00	5.00	10.0	20.0
Acetone	FB	Ave	++++ 620984	24190	71322	93553	254621	++++ 80.0	4.00	10.0	20.0	40.0
Iodomethane	FB	Ave	20393 973158	43807	116037	205879	428259	1.00 40.0	2.00	5.00	10.0	20.0
Carbon disulfide	FB	Ave	42453 1977439	91401	222489	398185	839958	1.00 40.0	2.00	5.00	10.0	20.0
3-Chloro-1-propene	FB	Ave	9976 477102	19836	57973	104381	204745	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	33796 1343182	66247	172965	270646	669329	2.00 80.0	4.00	10.0	20.0	40.0
Methylene Chloride	FB	Ave	13349 628048	28664	74577	136538	278311	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butyl alcohol	FB	Qua	24332 1190225	29851	117292	162902	476148	10.0 400	20.0	50.0	100	200
Acrylonitrile	FB	Ave	82887 3464418	158046	414552	640991	1634644	10.0 400	20.0	50.0	100	200
trans-1,2-Dichloroethene	FB	Ave	17186 691777	32394	81111	145636	299988	1.00 40.0	2.00	5.00	10.0	20.0
Methyl tert-butyl ether	FB	Ave	38047 1802263	82947	204029	391069	838756	1.00 40.0	2.00	5.00	10.0	20.0
Hexane	FB	Ave	5081 215881	9568	27721	43367	102155	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloroethane	FB	Ave	25297 1201087	55413	142321	256570	539873	1.00 40.0	2.00	5.00	10.0	20.0
Vinyl acetate	FB	Ave	35474 1481308	67352	185806	300206	724519	1.00 40.0	2.00	5.00	10.0	20.0
cis-1,2-Dichloroethene	FB	Ave	17367 713342	34379	91004	158946	316134	1.00 40.0	2.00	5.00	10.0	20.0
2,2-Dichloropropane	FB	Ave	17008 743537	34552	83505	160045	338075	1.00 40.0	2.00	5.00	10.0	20.0
2-Butanone (MEK)	FB	Ave	26778 875113	46317	126300	192750	492424	2.00 80.0	4.00	10.0	20.0	40.0
Bromochloromethane	FB	Ave	7138 318611	14777	39523	65062	142518	1.00 40.0	2.00	5.00	10.0	20.0
Tetrahydrofuran	FB	Ave	16339 585780	32813	81294	123173	333033	2.00 80.0	4.00	10.0	20.0	40.0
Chloroform	FB	Ave	24379 1083638	51449	129926	244613	501955	1.00 40.0	2.00	5.00	10.0	20.0
1,1,1-Trichloroethane	FB	Ave	18983 931388	43130	105256	201707	450056	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexane	FB	Ave	24183 1159678	50101	140158	247503	543404	1.00 40.0	2.00	5.00	10.0	20.0
1,1-Dichloropropene	FB	Ave	18196 965529	45576	119651	205613	455305	1.00 40.0	2.00	5.00	10.0	20.0
Carbon tetrachloride	FB	Ave	19054 850585	40172	102346	188229	393530	1.00 40.0	2.00	5.00	10.0	20.0
Isobutyl alcohol	CBNZ d5	Ave	21575 957042	38424	122584	186697	480963	25.0 1000	50.0	125	250	500
Benzene	FB	Ave	60783 2640949	121475	319255	565813	1242477	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	21600 886906	43476	107027	198704	429725	1.00 40.0	2.00	5.00	10.0	20.0
n-Heptane	FB	Ave	4716 223487	9082	27500	45282	111633	1.00 40.0	2.00	5.00	10.0	20.0
Trichloroethene	FB	Ave	16887 673282	31643	83470	147933	324527	1.00 40.0	2.00	5.00	10.0	20.0
Methylcyclohexane	FB	Ave	25977 1283821	54859	151042	263525	581668	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloropropane	FB	Ave	13436 577957	29503	75481	128767	302581	1.00 40.0	2.00	5.00	10.0	20.0
Dibromomethane	FB	Ave	10376 369432	19130	48788	82671	185891	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dioxane	FB	Lin1	1918 162405	5338	14931	34216	78610	20.0 800	40.0	100	200	400
Bromodichloromethane	FB	Ave	18145 790624	37827	102276	177327	412016	1.00 40.0	2.00	5.00	10.0	20.0
2-Chloroethyl vinyl ether	FB	Ave	21411 765103	38440	117064	176954	473304	2.00 80.0	4.00	10.0	20.0	40.0
cis-1,3-Dichloropropene	FB	Ave	24977 950990	44990	125258	209879	501026	1.00 40.0	2.00	5.00	10.0	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	44337 1522147	79494	221502	378476	905194	2.00 80.0	4.00	10.0	20.0	40.0
Toluene	CBNZ d5	Ave	63519 2549041	112761	332828	546511	1320444	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,3-Dichloropropene	CBNZ d5	Ave	21693 817796	39470	115532	182616	462927	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl methacrylate	CBNZ d5	Ave	20120 732749	33729	103598	172832	431485	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	13327 454815	23780	64042	104891	258691	1.00 40.0	2.00	5.00	10.0	20.0
Tetrachloroethene	CBNZ d5	Ave	11584 462493	20793	63410	103114	248308	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichloropropane	CBNZ d5	Ave	23267 821677	38684	118078	190991	474232	1.00 40.0	2.00	5.00	10.0	20.0
2-Hexanone	CBNZ d5	Ave	32791 996108	60100	168177	283510	706466	2.00 80.0	4.00	10.0	20.0	40.0
Chlorodibromomethane	CBNZ d5	Ave	13430 535056	24924	72573	125959	298297	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromoethane	CBNZ d5	Ave	14101 464134	22631	67192	108178	270470	1.00 40.0	2.00	5.00	10.0	20.0
Chlorobenzene	CBNZ d5	Ave	39284 1445704	69684	200325	331254	792434	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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	12967 515655	25008	66047	120907	262847	1.00 40.0	2.00	5.00	10.0	20.0
Ethylbenzene	CBNZ d5	Ave	19250 818805	40421	114108	189214	447245	1.00 40.0	2.00	5.00	10.0	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	25593 1016432	44605	136385	226746	546104	1.00 40.0	2.00	5.00	10.0	20.0
o-Xylene	CBNZ d5	Ave	22312 982329	41183	124136	219346	516074	1.00 40.0	2.00	5.00	10.0	20.0
Styrene	CBNZ d5	Ave	38054 1616898	74370	210192	362539	881322	1.00 40.0	2.00	5.00	10.0	20.0
Bromoform	CBNZ d5	Ave	10193 367005	17740	51778	88073	206508	1.00 40.0	2.00	5.00	10.0	20.0
Isopropylbenzene	CBNZ d5	Ave	64547 2679188	117205	341312	573572	1381113	1.00 40.0	2.00	5.00	10.0	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	19176 691868	33798	93320	156931	380086	1.00 40.0	2.00	5.00	10.0	20.0
Bromobenzene	DCBd 4	Ave	13480 552835	27082	76632	126278	305507	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	5760 220975	12987	32603	52789	127593	1.00 40.0	2.00	5.00	10.0	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	5949 202931	12042	33220	50989	127538	1.00 40.0	2.00	5.00	10.0	20.0
N-Propylbenzene	DCBd 4	Ave	16830 713853	34550	93283	156009	381705	1.00 40.0	2.00	5.00	10.0	20.0
2-Chlorotoluene	DCBd 4	Ave	14053 577244	26138	75895	125283	304270	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	49285 2146431	90977	262780	448521	1083408	1.00 40.0	2.00	5.00	10.0	20.0
4-Chlorotoluene	DCBd 4	Ave	14441 578262	27131	75986	130897	318105	1.00 40.0	2.00	5.00	10.0	20.0
tert-Butylbenzene	DCBd 4	Ave	42983 1902063	75366	232129	380825	999390	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	51274 2141910	94372	264501	456670	1123868	1.00 40.0	2.00	5.00	10.0	20.0
sec-Butylbenzene	DCBd 4	Ave	60330 2863772	117460	342649	582400	1472736	1.00 40.0	2.00	5.00	10.0	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	25774 1022537	50007	138268	231863	576608	1.00 40.0	2.00	5.00	10.0	20.0
4-Isopropyltoluene	DCBd 4	Ave	52511 2357752	95376	288310	497384	1227502	1.00 40.0	2.00	5.00	10.0	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	28127 1015242	50840	140588	231395	575598	1.00 40.0	2.00	5.00	10.0	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 10:19 Calibration End Date: 08/07/2018 12:10 Calibration ID: 46381

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-Dichlorobenzene	DCBd 4	Ave	25138 997412	43644	124444	217283	523269	1.00 40.0	2.00	5.00	10.0	20.0
n-Butylbenzene	DCBd 4	Ave	48529 2105884	91321	256969	441254	1120808	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Ave	5387 184621	11011	24972	45966	108371	1.00 40.0	2.00	5.00	10.0	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	17979 704390	31628	77795	151209	353429	1.00 40.0	2.00	5.00	10.0	20.0
Hexachlorobutadiene	DCBd 4	Ave	8418 324575	14131	37618	69657	175378	1.00 40.0	2.00	5.00	10.0	20.0
Naphthalene	DCBd 4	Ave	60566 2379214	112226	260613	495330	1199814	1.00 40.0	2.00	5.00	10.0	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	18207 696616	30859	71420	141976	351154	1.00 40.0	2.00	5.00	10.0	20.0
Dibromofluoromethane (Surr)	FB	Ave	13254 568670	25405	68445	131439	267150	1.00 40.0	2.00	5.00	10.0	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	18685 734090	33428	93994	158114	342588	1.00 40.0	2.00	5.00	10.0	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	54774 2198709	96293	289196	499207	1136029	1.00 40.0	2.00	5.00	10.0	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	17342 619411	31328	91818	151542	352027	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 12:55 Calibration End Date: 08/07/2018 14:46 Calibration ID: 46384

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-339715/13	UXJ3452.D
Level 2	STD2 240-339715/12	UXJ3451.D
Level 3	STD3 240-339715/11	UXJ3450.D
Level 4	STD4 240-339715/10	UXJ3449.D
Level 5	STD5 240-339715/9	UXJ3448.D
Level 6	STD6 240-339715/8	UXJ3447.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								
Acetonitrile	0.0504 0.0338	0.0225	0.0412	0.0369	0.0398	Qua	-0.219	0.0451	-0.000027					0.9980			0.9900
2-Chloro-1,3-butadiene	0.4031 0.4070	0.4129	0.4184	0.4459	0.4336	Ave		0.4202			3.9		15.0				
Diisopropyl ether	0.2076 0.2133	0.2205	0.2186	0.2234	0.2226	Ave		0.2177			2.8		15.0				
Ethyl tert-butyl ether	0.6780 0.6534	0.6925	0.6983	0.6895	0.7178	Ave		0.6883			3.1		15.0				
Propionitrile	0.0592 0.0508	0.0616	0.0631	0.0547	0.0601	Ave		0.0583			7.9		15.0				
Ethyl acetate	0.3997 0.3455	0.3384	0.3311	0.3182	0.3412	Ave		0.3457			8.1		15.0				
Methacrylonitrile	0.2199 0.2139	0.2003	0.2005	0.2025	0.2141	Ave		0.2085			4.1		15.0				
Tert-amyl methyl ether	0.8494 0.7274	0.7941	0.7968	0.7870	0.7877	Ave		0.7904			4.9		15.0				
n-Butanol	0.0224 0.0191	0.0206	0.0232	0.0211	0.0253	Ave		0.0220			9.9		15.0				
Ethyl acrylate	0.4425 0.4331	0.3506	0.3690	0.3745	0.3787	Ave		0.3914			9.5		15.0				
Methyl methacrylate	0.2765 0.2861	0.2395	0.2436	0.2468	0.2551	Ave		0.2579			7.4		15.0				
2-Nitropropane	0.1202 0.1120	0.1061	0.1059	0.1047	0.1112	Ave		0.1100			5.3		15.0				
n-Butyl acetate	0.4934 0.4597	0.4116	0.4118	0.4058	0.4258	Ave		0.4347			8.0		15.0				
1-Chlorohexane	0.5927 0.5351	0.5084	0.4904	0.5382	0.5407	Ave		0.5342			6.5		15.0				
Cyclohexanone	0.0623 0.0494	0.0662	0.0591	0.0576	0.0718	Ave		0.0611			12.6		15.0				

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 12:55 Calibration End Date: 08/07/2018 14:46 Calibration ID: 46384

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								
Pentachloroethane	0.2149 0.2210	0.2243	0.2152	0.2259	0.2345	Ave		0.2226			3.3		15.0				
1,2,3-Trimethylbenzene	2.7583 2.9261	2.7403	2.7042	2.8828	3.0256	Ave		2.8395			4.4		15.0				
Benzyl chloride	0.3040 0.4246	0.3146	0.3526	0.3957	0.4116	Ave		0.3672			13.9		15.0				
1,3,5-Trichlorobenzene	1.1377 1.0486	1.0259	1.0232	1.0488	1.1163	Ave		1.0668			4.5		15.0				
2-Methylnaphthalene	2.2775 1.8631	2.3102	2.2390	1.9982	2.2702	Ave		2.1597			8.5		15.0				
1-Chloro-1-fluoroethane TIC	0.2557 0.2668	0.2672	0.2782	0.2489	0.2713	None											

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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 12:55 Calibration End Date: 08/07/2018 14:46 Calibration ID: 46384

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-339715/13	UXJ3452.D
Level 2	STD2 240-339715/12	UXJ3451.D
Level 3	STD3 240-339715/11	UXJ3450.D
Level 4	STD4 240-339715/10	UXJ3449.D
Level 5	STD5 240-339715/9	UXJ3448.D
Level 6	STD6 240-339715/8	UXJ3447.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
Acetonitrile	FB	Qua	25553 740177	22780	102139	207823	424313	10.0 400	20.0	50.0	100	200
2-Chloro-1,3-butadiene	FB	Ave	20425 892252	41778	103841	250984	462681	1.00 40.0	2.00	5.00	10.0	20.0
Diisopropyl ether	FB	Ave	10521 467561	22310	54238	125758	237468	1.00 40.0	2.00	5.00	10.0	20.0
Ethyl tert-butyl ether	FB	Ave	34352 1432261	70076	173285	388158	765868	1.00 40.0	2.00	5.00	10.0	20.0
Propionitrile	FB	Ave	29980 1114170	62332	156678	307855	641035	10.0 400	20.0	50.0	100	200
Ethyl acetate	FB	Ave	40502 1514661	68481	164324	358250	728108	2.00 80.0	4.00	10.0	20.0	40.0
Methacrylonitrile	FB	Ave	111420 4689243	202644	497655	1139678	2283823	10.0 400	20.0	50.0	100	200
Tert-amyl methyl ether	FB	Ave	43040 1594508	80350	197729	443007	840453	1.00 40.0	2.00	5.00	10.0	20.0
n-Butanol	CBNZ d5	Ave	19309 700971	33014	91107	183825	411170	25.0 1000	50.0	125	250	500
Ethyl acrylate	FB	Ave	22420 949489	35472	91584	210808	404016	1.00 40.0	2.00	5.00	10.0	20.0
Methyl methacrylate	FB	Ave	28021 1254285	48475	120914	277911	544258	2.00 80.0	4.00	10.0	20.0	40.0
2-Nitropropane	FB	Ave	12179 490974	21475	52555	117900	237344	2.00 80.0	4.00	10.0	20.0	40.0
n-Butyl acetate	FB	Ave	25002 1007633	41644	102193	228436	454274	1.00 40.0	2.00	5.00	10.0	20.0
1-Chlorohexane	CBNZ d5	Ave	20476 784692	32535	77134	187155	350920	1.00 40.0	2.00	5.00	10.0	20.0
Cyclohexanone	DCBd 4	Ave	10365 337885	20423	44442	94477	220253	10.0 400	20.0	50.0	100	200
Pentachloroethane	CBNZ d5	Ave	14846 648119	28711	67693	157131	304403	2.00 80.0	4.00	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.: 240-103610-1 Analy Batch No.: 339715

SDG No.: _____

Instrument ID: A3UX11 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) N

Calibration Start Date: 08/07/2018 12:55 Calibration End Date: 08/07/2018 14:46 Calibration ID: 46384

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
1,2,3-Trimethylbenzene	DCBd 4	Ave	45880 2000640	84513	203284	473023	927608	1.00 40.0	2.00	5.00	10.0	20.0
Benzyl chloride	DCBd 4	Ave	5056 290282	9704	26509	64933	126187	1.00 40.0	2.00	5.00	10.0	20.0
1,3,5-Trichlorobenzene	DCBd 4	Ave	18924 716926	31641	76919	172099	342234	1.00 40.0	2.00	5.00	10.0	20.0
2-Methylnaphthalene	DCBd 4	Ave	75765 2547751	142498	336620	655753	1392029	2.00 80.0	4.00	10.0	20.0	40.0
1-Chloro-1-fluoroethane TIC	FB	None	12958 584926	27033	69048	140085	289412	1.00 40.0	2.00	5.00	10.0	20.0

Curve Type Legend:

Ave = Average ISTD
None = No Calib Curve
Qua = Quadratic ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-350647/12	UX80014.D
Level 2	STDA9 240-350647/11	UX80013.D
Level 3	STDA9 240-350647/10	UX80012.D
Level 4	STDA9 240-350647/9	UX80011.D
Level 5	STDA9 240-350647/8	UX80010.D
Level 6	STDA9 240-350647/7	UX80009.D
Level 7	STDA9 240-350647/6	UX80008.D
Level 8	STDA9 240-350647/5	UX80007.D
Level 9	STDA9 240-350647/4	UX80006.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Acetonitrile	0.0659 0.0524	0.0585 0.0505	0.0667 0.0482	0.0624 0.0472	0.0562	Ave	0.0564				13.1		15.0				
Diisopropyl ether	0.2104 0.2465	0.2128 0.2517	0.2652 0.2429	0.2705 0.2297	0.2674	Ave	0.2441				9.2		15.0				
2-Chloro-1,3-butadiene	0.7281 0.8227	0.6733 0.8636	0.8699 0.8631	0.8586 0.8358	0.8564	Ave	0.8191				8.6		15.0				
Ethyl tert-butyl ether	1.0204 1.1113	1.0102 1.1142	1.2137 1.1062	1.1919 1.0158	1.1443	Ave	1.1031				6.8		15.0				
Ethyl acetate	0.4472 0.3456	0.4509 0.3591	0.4428 0.3481	0.3995 0.3449	0.3828	Ave	0.3912				11.7		15.0				
Propionitrile	0.0522 0.0477	0.0511 0.0478	0.0622 0.0460	0.0559 0.0437	0.0520	Ave	0.0510				11.0		15.0				
Methacrylonitrile	0.2598 0.2485	0.2458 0.2532	0.3002 0.2450	0.2799 0.2373	0.2748	Ave	0.2605				7.9		15.0				
Tert-amyl methyl ether	0.5374 0.6368	0.5318 0.6409	0.6989 0.6260	0.6746 0.5747	0.6512	Ave	0.6191				9.5		15.0				
n-Butanol	++++ 0.0078	++++ 0.0083	0.0151 0.0083	0.0091 0.0078	0.0075	Lin1	0.5793	0.0078						0.9960		0.9900	
Ethyl acrylate	0.3022 0.3622	0.3199 0.3783	0.4075 0.3636	0.3824 0.3686	0.3911	Ave	0.3640				9.2		15.0				
Methyl methacrylate	0.2925 0.3311	0.3125 0.3447	0.3829 0.3255	0.3644 0.3274	0.3685	Ave	0.3388				8.6		15.0				
2-Nitropropane	0.0299 0.0485	0.0393 0.0596	0.0555 0.0686	0.0522 ++++	0.0479	Qua	-0.036	0.0478	0.0000526					1.0000		0.9900	
n-Butyl acetate	++++ 0.5208	++++ 0.5380	0.7420 0.5055	0.5741 0.5174	0.5316	Ave	0.5613				14.7		15.0				

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.: 240-103610-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1-Chlorohexane	0.3943 0.4521	0.3936 0.4872	0.4454 0.4786	0.4530 0.4782	0.4748	Ave		0.4508			7.8		15.0				
Cyclohexanone	++++ 0.0137	++++ 0.0151	0.0238 0.0156	0.0149 0.0143	0.0121	Lin1	0.1864	0.0146						0.9930		0.9900	
Pentachloroethane	0.2309 0.3683	0.2693 0.4224	0.5213 0.4442	0.3558 0.4051	0.3424	Lin1	-0.423	0.4177						0.9950		0.9900	
1,2,3-Trimethylbenzene	3.3780 3.4782	3.1998 3.6509	4.9367 3.4477	3.9795 3.1789	3.6771	Ave		3.6585			14.8		15.0				
Benzyl chloride	++++ 0.1192	++++ 0.1625	0.1439 0.1932	0.0968 0.1911	0.0927	Qua	-0.965	0.1570	0.0001663					0.9970		0.9900	
1,3,5-Trichlorobenzene	++++ 1.2467	++++ 1.3061	2.0755 1.2098	1.4281 1.1029	1.3188	Lin1	4.1420	1.1538						0.9960		0.9900	
2-Methylnaphthalene	++++ 1.4067	++++ 1.4942	2.2722 1.3322	1.4840 ++++	1.3574	Lin1	6.4375	1.3512						0.9950		0.9900	
1-Chloro-1-fluoroethane TIC	0.6254 0.5744	0.5656 0.5624	0.7066 0.5413	0.6740 0.5249	0.6179	None											

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.: 240-103610-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STDA9 240-350647/12	UX80014.D
Level 2	STDA9 240-350647/11	UX80013.D
Level 3	STDA9 240-350647/10	UX80012.D
Level 4	STDA9 240-350647/9	UX80011.D
Level 5	STDA9 240-350647/8	UX80010.D
Level 6	STDA9 240-350647/7	UX80009.D
Level 7	STDA9 240-350647/6	UX80008.D
Level 8	STDA9 240-350647/5	UX80007.D
Level 9	STDA9 240-350647/4	UX80006.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
Acetonitrile	FB	Ave	10206 408518	18253 816155	51768 1596658	98387 1974213	182851	10.0 500	20.0 1000	50.0 2000	100 2500	200
Diisopropyl ether	FB	Ave	3257 192058	6638 406941	20577 804480	42654 961846	87035	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chloro-1,3-butadiene	FB	Ave	11273 640993	20999 1396137	67494 2857873	135411 3499361	278784	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl tert-butyl ether	FB	Ave	15798 865846	31504 1801222	94170 3662929	187967 4253276	372521	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl acetate	FB	Ave	13847 538585	28126 1161128	68720 2305051	125992 2888334	249209	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Propionitrile	FB	Ave	8086 371900	15936 773025	48271 1523981	88198 1830286	169128	10.0 500	20.0 1000	50.0 2000	100 2500	200
Methacrylonitrile	FB	Ave	40219 1935925	76646 4093178	232908 8114317	441399 9936882	894718	10.0 500	20.0 1000	50.0 2000	100 2500	200
Tert-amyl methyl ether	FB	Ave	8320 496185	16584 1036069	54226 2072796	106386 2406193	211977	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Butanol	FB	Lin1	++++ 151918	++++ 334668	29300 683344	35888 815564	60832	++++ 1250	++++ 2500	125 5000	250 6250	500
Ethyl acrylate	FB	Ave	4678 282224	9978 611512	31621 1203869	60305 1543279	127316	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl methacrylate	FB	Ave	9056 515917	19492 1114595	59426 2155909	114933 2741485	239920	2.00 100	4.00 200	10.0 400	20.0 500	40.0
2-Nitropropane	FB	Qua	926 75577	2450 192689	8617 454249	16455 ++++	31178	2.00 100	4.00 200	10.0 400	20.0 ++++	40.0
n-Butyl acetate	FB	Ave	++++ 405789	++++ 869696	57572 1673794	90539 2166174	173043	++++ 50.0	++++ 100	5.00 200	10.0 250	20.0
1-Chlorohexane	CBNZ d5	Ave	4393 255902	8751 548322	24964 1087954	52883 1390173	113580	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 350647

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 10/18/2018 02:52 Calibration End Date: 10/18/2018 05:49 Calibration ID: 47539

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
Cyclohexanone	CBNZ d5	Lin1	++++ 77301	++++ 169662	13336 355151	17382 415852	28957	++++ 500	++++ 1000	50.0 2000	100 2500	200
Pentachloroethane	DCBd 4	Lin1	2338 195778	5491 445870	27198 977675	38215 1127241	73233	2.00 100	4.00 200	10.0 400	20.0 500	40.0
1,2,3-Trimethylbenzene	DCBd 4	Ave	17100 924408	32619 1926878	128790 3793867	213724 4422324	393221	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Benzyl chloride	DCBd 4	Qua	++++ 31676	++++ 85769	3754 212623	5199 265830	9912	++++ 50.0	++++ 100	5.00 200	10.0 250	20.0
1,3,5-Trichlorobenzene	DCBd 4	Lin1	++++ 331331	++++ 689345	54147 1331269	76699 1534346	141029	++++ 50.0	++++ 100	5.00 200	10.0 250	20.0
2-Methylnaphthalene	DCBd 4	Lin1	++++ 747717	++++ 1577196	118554 2931910	159399 ++++	290313	++++ 100	++++ 200	10.0 400	20.0 ++++	40.0
1-Chloro-1-fluoroethane TIC	FB	None	9682 447556	17638 909198	54824 1792320	106285 2197957	201144	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
None = No Calib Curve
Qua = Quadratic ISTD

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-353820/11	UX80603.D
Level 2	STD8260 240-353820/10	UX80602.D
Level 3	STD8260 240-353820/9	UX80601.D
Level 4	STD8260 240-353820/8	UX80600.D
Level 5	ICIS 240-353820/7	UX80599.D
Level 6	STD8260 240-353820/6	UX80598.D
Level 7	STD8260 240-353820/5	UX80597.D
Level 8	STD8260 240-353820/4	UX80596.D
Level 9	STD8260 240-353820/3	UX80595.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Dichlorodifluoromethane	0.3664 0.3475	0.4353 0.3350	0.3768 0.3095	0.4143 0.3233	0.3804	Ave	0.3654				11.4	15.0					
Chloromethane	0.7187 0.6261	0.7217 0.6052	0.7097 0.5775	0.7412 0.5865	0.6995	Ave	0.6651			0.1000	9.8	15.0					
Vinyl chloride	0.4368 0.3685	0.4318 0.3529	0.4007 0.3368	0.4289 0.3492	0.4087	Ave	0.3905				10.0	15.0					
Butadiene	0.6116 0.5367	0.6182 0.5197	0.5808 0.5027	0.6380 0.5183	0.5998	Ave	0.5695				8.9	15.0					
Bromomethane	0.2481 0.1886	0.2297 0.1609	0.2332 +++++	0.2358 +++++	0.2205	Ave	0.2167				14.2	15.0					
Chloroethane	0.2958 0.2482	0.2842 0.2301	0.2788 0.2028	0.2971 +++++	0.2734	Ave	0.2638				12.8	15.0					
Dichlorofluoromethane	0.5733 0.5013	0.6076 0.4816	0.5591 0.4563	0.5942 0.4577	0.5602	Ave	0.5324				11.0	15.0					
Trichlorofluoromethane	0.5051 0.4367	0.4821 0.4296	0.5114 0.4097	0.5241 0.4142	0.4896	Ave	0.4669				9.5	15.0					
Ethyl ether	0.3406 0.3208	0.3449 0.2771	0.3598 0.2745	0.3337 0.2726	0.3282	Ave	0.3169				10.6	15.0					
Acrolein	0.0502 0.0529	0.0586 0.0508	0.0593 0.0481	0.0598 0.0478	0.0606	Ave	0.0542				9.8	15.0					
1,1-Dichloroethene	0.2906 0.3059	0.3201 0.2599	0.3282 0.2539	0.3387 0.2567	0.3086	Ave	0.2958				10.9	15.0					
1,1,2-Trichloro-1,2,2-trifluoroethane	0.2181 0.2193	0.2522 0.1900	0.2295 0.1859	0.2436 0.1935	0.2325	Ave	0.2183				11.0	15.0					
Acetone	0.3264 0.1190	0.2145 0.1056	0.1620 0.1030	0.1492 0.1047	0.1406	Lin1	0.5104 0.1048							0.9970		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 Canton Job No.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R ² OR COD	#	MIN R ² OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Iodomethane	0.5119 0.4732	0.5002 0.4074	0.4885 0.4052	0.5363 0.4056	0.4997	Ave		0.4698			10.8		15.0				
Carbon disulfide	0.7553 0.9415	0.8388 0.8249	0.8500 0.8452	0.9296 0.8558	0.9371	Ave		0.8642			7.1		15.0				
3-Chloro-1-propene	0.1464 0.1859	0.1467 0.1690	0.1695 0.1674	0.1826 0.1692	0.1866	Ave		0.1693			8.8		15.0				
Methyl acetate	0.3303 0.2772	0.3251 0.2631	0.3115 0.2587	0.3318 0.2632	0.3247	Ave		0.2984			10.7		15.0				
Methylene Chloride	++++ 0.3340	0.6410 0.2839	0.4476 0.2758	0.4126 0.2725	0.3693	Lin1	0.9302	0.2762						0.9960		0.9900	
tert-Butyl alcohol	0.0244 0.0234	0.0222 0.0213	0.0245 0.0211	0.0257 0.0209	0.0289	Ave		0.0236			11.1		15.0				
Acrylonitrile	0.1478 0.1242	0.1388 0.1124	0.1366 0.1116	0.1452 0.1121	0.1440	Ave		0.1303			11.7		15.0				
Methyl tert-butyl ether	0.7282 0.6666	0.6756 0.6054	0.6994 0.5961	0.7592 0.5682	0.7296	Ave		0.6698			10.0		15.0				
trans-1,2-Dichloroethene	0.3588 0.3349	0.3517 0.2913	0.3669 0.2881	0.3819 0.2850	0.3565	Ave		0.3350			11.1		15.0				
Hexane	0.0720 0.0848	0.0981 0.0845	0.0910 0.0812	0.0994 0.0876	0.0966	Ave		0.0883			10.1		15.0				
1,1-Dichloroethane	0.7962 0.7024	0.7470 0.6320	0.7665 0.6283	0.7903 0.6284	0.7332	Ave		0.7138		0.1000	9.7		15.0				
Vinyl acetate	0.5807 0.6541	0.5605 0.6477	0.6112 0.6581	0.6326 0.6663	0.6453	Ave		0.6285			5.9		15.0				
2-Butanone (MEK)	++++ 0.1596	++++ 0.1532	0.2063 0.1514	0.1975 0.1524	0.1967	Ave		0.1739			14.3		15.0				
cis-1,2-Dichloroethene	0.4221 0.3556	0.3743 0.3152	0.3783 0.3083	0.3993 0.3036	0.3753	Ave		0.3591			11.7		15.0				
2,2-Dichloropropane	0.3928 0.3567	0.3817 0.3217	0.3535 0.3231	0.3983 0.3135	0.3644	Ave		0.3562			8.8		15.0				
Bromochloromethane	0.1326 0.1416	0.1083 0.1274	0.1419 0.1246	0.1519 0.1237	0.1464	Ave		0.1331			10.2		15.0				
Tetrahydrofuran	0.3787 0.1081	0.2380 0.1006	0.1476 0.0982	0.1339 0.0991	0.1288	Lin1	0.5794	0.0984						0.9990		0.9900	
Chloroform	0.5765 0.5260	0.5489 0.4752	0.5581 0.4770	0.5830 0.4712	0.5527	Ave		0.5298			8.4		15.0				
1,1,1-Trichloroethane	0.3711 0.4733	0.3937 0.4239	0.4495 0.4257	0.5002 0.4231	0.4903	Ave		0.4390			9.9		15.0				
Cyclohexane	0.9909 0.9153	0.8858 0.8154	0.9822 0.8112	1.0097 0.8231	0.9952	Ave		0.9143			9.1		15.0				

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.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
1,1-Dichloropropene	0.4248	0.4194	0.4634	0.4929	0.4328	Ave	0.4284				7.5	15.0					
	0.4267	0.4014	0.3974	0.3970													
Carbon tetrachloride	0.3159	0.3297	0.3768	0.4060	0.4045	Ave	0.3717				8.6	15.0					
	0.4041	0.3645	0.3713	0.3722													
Isobutyl alcohol	0.0135	0.0120	0.0116	0.0135	0.0142	Ave	0.0122				10.3	15.0					
	0.0122	0.0109	0.0109	0.0110													
1,2-Dichloroethane	0.5365	0.4928	0.5363	0.5080	0.4980	Ave	0.4799				9.4	15.0					
	0.4658	0.4272	0.4287	0.4260													
Benzene	1.4341	1.2912	1.4171	1.3767	1.3052	Ave	1.2762				9.4	15.0					
	1.2505	1.1485	1.1341	1.1282													
n-Heptane	0.0701	0.0876	0.0940	0.1011	0.0966	Ave	0.0897				9.6	15.0					
	0.0906	0.0879	0.0876	0.0916													
Trichloroethene	0.4245	0.3310	0.3558	0.3320	0.3175	Ave	0.3280				12.9	15.0					
	0.3159	0.2929	0.2904	0.2915													
Methylcyclohexane	0.4948	0.5769	0.6316	0.6586	0.6392	Ave	0.5781				10.2	15.0					
	0.6088	0.5367	0.5256	0.5312													
1,2-Dichloropropane	0.3855	0.3301	0.3876	0.3863	0.3595	Ave	0.3548				7.6	15.0					
	0.3579	0.3330	0.3269	0.3260													
Dibromomethane	0.1380	0.1280	0.1514	0.1463	0.1457	Ave	0.1373				6.6	15.0					
	0.1404	0.1286	0.1283	0.1294													
1,4-Dioxane	++++	0.0016	0.0021	0.0021	0.0022	Ave	0.0019				11.1	15.0					
	0.0019	0.0018	0.0018	0.0018													
Bromodichloromethane	0.2946	0.2571	0.2909	0.3106	0.3185	Ave	0.3092				8.0	15.0					
	0.3328	0.3175	0.3310	0.3295													
2-Chloroethyl vinyl ether	0.1095	0.1072	0.1237	0.1248	0.1349	Ave	0.1240				7.6	15.0					
	0.1286	0.1293	0.1288	0.1288													
cis-1,3-Dichloropropene	0.3137	0.2334	0.3185	0.3374	0.3598	Ave	0.3419				14.2	15.0					
	0.3806	0.3707	0.3801	0.3824													
4-Methyl-2-pentanone (MIBK)	0.2995	0.3147	0.3354	0.3615	0.3762	Ave	0.3276				8.1	15.0					
	0.3348	0.3123	0.3055	0.3087													
Toluene	1.9927	1.7824	1.9104	1.8497	1.8141	Ave	1.7866				6.8	15.0					
	1.7689	1.6272	1.6700	1.6638													
trans-1,3-Dichloropropene	0.2772	0.2491	0.3305	0.3716	0.3739	Lin1	-0.323	0.4370						0.9990		0.9900	
	0.4161	0.4172	0.4463	0.4421													
Ethyl methacrylate	0.2774	0.2870	0.3275	0.3550	0.3739	Ave	0.3411				10.6	15.0					
	0.3681	0.3646	0.3646	0.3513													
1,1,2-Trichloroethane	0.3464	0.2692	0.2754	0.2899	0.2849	Ave	0.2768				10.8	15.0					
	0.2732	0.2523	0.2507	0.2494													
1,3-Dichloropropane	0.5234	0.4909	0.5187	0.5349	0.5174	Ave	0.4921				6.7	15.0					
	0.4824	0.4548	0.4553	0.4513													

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.: 240-103610-1

Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49

Calibration End Date: 11/06/2018 09:45

Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
Tetrachloroethene	0.4142 0.3280	0.3524 0.3088	0.3458 0.3099	0.3585 0.3096	0.3320	Ave		0.3399			9.9		15.0				
2-Hexanone	0.2337 0.3124	0.2538 0.2980	0.3094 0.2938	0.3441 0.2892	0.3564	Ave		0.2990			13.0		15.0				
Dibromochloromethane	0.1395 0.2687	0.1639 0.2676	0.2164 0.2837	0.2372 0.2827	0.2548	Lin1	-0.214	0.2799						0.9990			0.9900
1,2-Dibromoethane	0.2306 0.2553	0.2189 0.2419	0.2600 0.2420	0.2679 0.2421	0.2551	Ave		0.2460			6.2		15.0				
Chlorobenzene	1.2386 1.0989	1.1532 1.0096	1.2529 1.0203	1.2460 1.0156	1.1408	Ave		1.1306		0.3000	8.9		15.0				
1,1,1,2-Tetrachloroethane	0.2537 0.3665	0.2571 0.3352	0.3481 0.3470	0.3587 0.3417	0.3651	Ave		0.3304			13.2		15.0				
Ethylbenzene	0.6614 0.6132	0.5976 0.5712	0.6552 0.5773	0.6658 0.5711	0.6241	Ave		0.6152			6.3		15.0				
m-Xylene & p-Xylene	0.7759 0.7631	0.7836 0.6995	0.8211 0.7008	0.8099 0.6923	0.7695	Ave		0.7573			6.4		15.0				
o-Xylene	0.7202 0.7486	0.6317 0.6639	0.7862 0.6603	0.8170 0.6421	0.7754	Ave		0.7162			9.6		15.0				
Styrene	0.9270 1.1781	0.8974 1.0966	1.1695 1.1010	1.2244 1.0664	1.1838	Ave		1.0938			10.5		15.0				
Bromoform	++++ 0.1292	0.0841 0.1333	0.0901 0.1451	0.1060 0.1462	0.1209	Lin1	-0.214	0.1431		0.1000				0.9980			0.9900
Isopropylbenzene	1.6366 2.0169	1.7801 1.8248	2.1084 1.8179	2.1090 1.8059	2.0896	Ave		1.9099			9.1		15.0				
1,1,2,2-Tetrachloroethane	0.5751 0.6495	0.5904 0.6068	0.6468 0.6116	0.7043 0.6088	0.6913	Ave		0.6316		0.3000	7.0		15.0				
Bromobenzene	1.1104 0.8541	0.8439 0.8242	0.9291 0.8221	0.9351 0.8059	0.8810	Ave		0.8895			10.6		15.0				
1,2,3-Trichloropropane	0.2072 0.2040	0.2261 0.1938	0.2571 0.1939	0.2400 0.1892	0.2341	Ave		0.2162			11.1		15.0				
trans-1,4-Dichloro-2-butene	0.1800 0.2825	0.2295 0.2860	0.2758 0.3020	0.2942 0.3030	0.2848	Ave		0.2709			14.9		15.0				
N-Propylbenzene	0.9893 1.1369	0.9999 1.0634	1.1884 1.0810	1.1802 1.0518	1.1888	Ave		1.0977			7.2		15.0				
2-Chlorotoluene	0.9069 0.9373	0.9278 0.9018	1.0143 0.8970	1.0740 0.8828	1.0013	Ave		0.9492			6.9		15.0				
1,3,5-Trimethylbenzene	3.2078 3.5524	2.9287 3.3254	3.7053 3.3220	3.7535 3.2855	3.5808	Ave		3.4068			7.7		15.0				
4-Chlorotoluene	0.9080 0.9484	0.9454 0.9172	1.0556 0.9076	1.0628 0.8846	0.9801	Ave		0.9566			6.7		15.0				

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.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5		B	M1	M2								
	LVL 6	LVL 7	LVL 8	LVL 9													
tert-Butylbenzene	3.0682	2.7070	3.2686	3.2425	3.1766	Ave		3.0341			6.2		15.0				
	3.1279	2.9233	2.9225	2.8702													
1,2,4-Trimethylbenzene	3.0198	3.0614	3.8105	3.8620	3.7031	Ave		3.4432			9.0		15.0				
	3.5662	3.3391	3.3561	3.2707													
sec-Butylbenzene	4.1781	4.3421	4.9121	5.0382	4.7060	Ave		4.4982			7.4		15.0				
	4.6382	4.2584	4.2401	4.1702													
1,3-Dichlorobenzene	2.0244	1.9514	1.9356	1.9768	1.8298	Ave		1.7963			10.3		15.0				
	1.6962	1.5935	1.5992	1.5596													
p-Isopropyltoluene	3.2018	3.5929	3.8787	4.0470	3.9068	Ave		3.6532			7.2		15.0				
	3.7311	3.5439	3.5227	3.4539													
1,4-Dichlorobenzene	2.3535	2.0534	1.9515	1.9964	1.8176	Ave		1.8528			14.0		15.0				
	1.7117	1.6170	1.6154	1.5583													
n-Butylbenzene	3.0374	3.1236	3.4494	3.5708	3.4639	Ave		3.2723			5.8		15.0				
	3.3593	3.1679	3.1536	3.1245													
1,2-Dichlorobenzene	2.0627	1.7884	1.8879	1.8575	1.6785	Ave		1.6787			14.2		15.0				
	1.5858	1.4342	1.4241	1.3890													
1,2-Dibromo-3-Chloropropane	++++	++++	0.0512	0.0771	0.0749	Lin1	-0.171	0.0861						0.9980		0.9900	
	0.0821	0.0775	0.0850	0.0883													
1,2,4-Trichlorobenzene	1.3241	1.1884	1.1356	1.1047	1.0852	Ave		1.0752			12.2		15.0				
	1.0196	0.9362	0.9520	0.9314													
Hexachlorobutadiene	++++	++++	0.6794	0.7315	0.6512	Ave		0.6026			14.2		15.0				
	0.5828	0.5231	0.5338	0.5167													
Naphthalene	2.2190	1.9473	1.9824	2.2202	2.2344	Ave		2.0464			7.4		15.0				
	2.1136	1.9145	1.9382	1.8484													
1,2,3-Trichlorobenzene	++++	++++	1.0921	1.1088	1.0355	Ave		0.9454			14.1		15.0				
	0.9285	0.8150	0.8370	0.8009													
Dibromofluoromethane (Surr)	0.2333	0.2605	0.2694	0.2595	0.2657	Ave		0.2472			6.6		15.0				
	0.2250	0.2364	0.2363	0.2388													
1,2-Dichloroethane-d4 (Surr)	0.3962	0.3756	0.4161	0.3566	0.3572	Ave		0.3443			13.7		15.0				
	0.2799	0.3024	0.3045	0.3103													
Toluene-d8 (Surr)	1.4502	1.4983	1.5808	1.4646	1.4755	Ave		1.4290			6.1		15.0				
	1.3143	1.3251	1.3784	1.3735													
4-Bromofluorobenzene (Surr)	0.5861	0.6093	0.6154	0.5821	0.5667	Ave		0.5387			12.1		15.0				
	0.4570	0.4755	0.4838	0.4723													

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.: 240-103610-1 Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD8260 240-353820/11	UX80603.D
Level 2	STD8260 240-353820/10	UX80602.D
Level 3	STD8260 240-353820/9	UX80601.D
Level 4	STD8260 240-353820/8	UX80600.D
Level 5	ICIS 240-353820/7	UX80599.D
Level 6	STD8260 240-353820/6	UX80598.D
Level 7	STD8260 240-353820/5	UX80597.D
Level 8	STD8260 240-353820/4	UX80596.D
Level 9	STD8260 240-353820/3	UX80595.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
Dichlorodifluoromethane	FB	Ave	6726 331738	14342 696152	37294 1313153	73315 1683009	136641	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chloromethane	FB	Ave	13193 597745	23779 1257679	70240 2449991	131165 3052810	251243	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl chloride	FB	Ave	8019 351838	14227 733391	39656 1428789	75904 1817871	146806	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Butadiene	FB	Ave	11226 512466	20371 1080010	57483 2132679	112897 2697738	215450	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromomethane	FB	Ave	4555 180057	7570 334441	23079 +++++	41725 +++++	79198	1.00 50.0	2.00 100	5.00 +++++	10.0 +++++	20.0
Chloroethane	FB	Ave	5429 237019	9365 478249	27595 860396	52574 +++++	98217	1.00 50.0	2.00 100	5.00 200	10.0 +++++	20.0
Dichlorofluoromethane	FB	Ave	10524 478611	20019 1000744	55330 1935961	105147 2382217	201218	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichlorofluoromethane	FB	Ave	9271 416968	15885 892738	50610 1738138	92737 2155885	175864	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl ether	FB	Ave	6253 306318	11364 575858	35604 1164739	59059 1418952	117902	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acrolein	FB	Ave	4603 252303	9658 527832	29361 1020780	52935 1245109	108876	5.00 250	10.0 500	25.0 1000	50.0 1250	100
1,1-Dichloroethene	FB	Ave	5334 292049	10548 540076	32485 1077379	59928 1336191	110859	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	FB	Ave	4003 209388	8311 394836	22710 788814	43110 1007334	83501	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Acetone	FB	Lin1	11983 227272	14138 438958	32066 873684	52806 1089499	101034	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Iodomethane	FB	Ave	9396 451772	16483 846472	48347 1719254	94905 2111224	179494	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49

Calibration End Date: 11/06/2018 09:45

Calibration ID: 47798

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
Carbon disulfide	FB	Ave	13865 898922	27640 1714174	84124 3585691	164507 4454471	336601	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
3-Chloro-1-propene	FB	Ave	2687 177520	4834 351273	16772 710328	32321 880924	67035	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methyl acetate	FB	Ave	12128 529241	21423 1093480	61664 2195048	117426 2740147	233280	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Methylene Chloride	FB	Lin1	++++ 318930	21121 590019	44303 1170157	73016 1418266	132664	++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
tert-Butyl alcohol	FB	Ave	4487 223702	7299 443569	24294 894251	45458 1088970	103721	10.0 500	20.0 1000	50.0 2000	100 2500	200
Acrylonitrile	FB	Ave	27129 1186028	45749 2335336	135235 4733388	256940 5836659	517288	10.0 500	20.0 1000	50.0 2000	100 2500	200
Methyl tert-butyl ether	FB	Ave	13368 636423	22261 1258015	69216 2529139	134341 2957473	262070	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,2-Dichloroethene	FB	Ave	6587 319783	11590 605337	36315 1222326	67585 1483559	128063	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Hexane	FB	Ave	1321 80936	3232 175643	9009 344384	17585 456093	34681	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloroethane	FB	Ave	14615 670599	24614 1313232	75857 2665486	139855 3270840	263377	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Vinyl acetate	FB	Ave	10659 624468	18470 1345975	60485 2792306	111936 3468126	231784	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Butanone (MEK)	FB	Ave	++++ 304773	++++ 636611	40829 1284780	69908 1586494	141311	++++ 100	++++ 200	10.0 400	20.0 500	40.0
cis-1,2-Dichloroethene	FB	Ave	7749 339474	12333 655069	37436 1307986	70652 1580466	134803	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2,2-Dichloropropane	FB	Ave	7210 340579	12577 668498	34988 1370624	70481 1632015	130883	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromochloromethane	FB	Ave	2434 135185	3569 264636	14047 528652	26874 643743	52584	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrahydrofuran	FB	Lin1	13903 206337	15687 418101	29206 833534	47401 1032179	92529	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Chloroform	FB	Ave	10582 502223	18086 987369	55230 2023552	103168 2452789	198529	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1-Trichloroethane	FB	Ave	6813 451917	12971 880874	44488 1806226	88519 2202229	176101	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Cyclohexane	FB	Ave	18189 873889	29187 1694491	97203 3441444	178684 4284384	357463	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1-Dichloropropene	FB	Ave	7798 407365	13818 834140	45864 1685999	87223 2066332	155471	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Carbon tetrachloride	FB	Ave	5799 385808	10864 757495	37288 1575121	71852 1937192	145299	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49

Calibration End Date: 11/06/2018 09:45

Calibration ID: 47798

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
Isobutyl alcohol	FB	Ave	6188 291187	9889 564039	28764 1158051	59786 1436633	127586	25.0 1250	50.0 2500	125 5000	250 6250	500
1,2-Dichloroethane	FB	Ave	9848 444728	16237 887668	53074 1818789	89898 2217287	178879	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Benzene	FB	Ave	26325 1193973	42547 2386642	140249 4811662	243617 5872772	468839	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Heptane	FB	Ave	1287 86514	2886 182612	9307 371460	17898 476816	34702	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Trichloroethene	FB	Ave	7792 301591	10908 608741	35216 1232212	58749 1517352	114035	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Methylcyclohexane	FB	Ave	9082 581239	19010 1115204	62505 2229842	116546 2765120	229595	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloropropane	FB	Ave	7077 341695	10877 691976	38365 1386854	68357 1696798	129147	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Dibromomethane	FB	Ave	2533 134032	4219 267247	14984 544216	25882 673558	52320	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,4-Dioxane	FB	Ave	++++ 37150	1054 73386	4173 154299	7301 185507	16119	++++ 1000	40.0 2000	100 4000	200 5000	400
Bromodichloromethane	FB	Ave	5408 317773	8471 659843	28787 1404196	54960 1715064	114403	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chloroethyl vinyl ether	FB	Ave	4021 245635	7065 537547	24488 1093313	44172 1340572	96923	2.00 100	4.00 200	10.0 400	20.0 500	40.0
cis-1,3-Dichloropropene	FB	Ave	5759 363385	7691 770309	31522 1612475	59707 1990603	129247	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Methyl-2-pentanone (MIBK)	FB	Ave	10997 639246	20736 1297937	66394 2592236	127958 3214220	270245	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Toluene	CBNZ d5	Ave	26568 1202360	41816 2402186	134006 4873835	237090 6009847	476990	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,3-Dichloropropene	CBNZ d5	Lin1	3696 282806	5845 615820	23180 1302585	47634 1596784	98313	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethyl methacrylate	CBNZ d5	Ave	3699 250220	6734 538250	22970 1064213	45498 1269033	98315	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2-Trichloroethane	CBNZ d5	Ave	4618 185681	6315 372446	19318 731760	37164 900816	74904	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichloropropane	CBNZ d5	Ave	6978 327859	11518 671424	36386 1328751	68558 1630155	136047	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Tetrachloroethene	CBNZ d5	Ave	5523 222967	8267 455874	24256 904323	45956 1118265	87282	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Hexanone	CBNZ d5	Ave	6232 424740	11907 879897	43405 1714887	88215 2089000	187408	2.00 100	4.00 200	10.0 400	20.0 500	40.0
Dibromochloromethane	CBNZ d5	Lin1	1860 182637	3845 395030	15176 828028	30401 1021176	66998	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton

Job No.: 240-103610-1

Analy Batch No.: 353820

SDG No.: _____

Instrument ID: A3UX8

GC Column: DB-624

ID: 0.18 (mm)

Heated Purge: (Y/N) Y

Calibration Start Date: 11/06/2018 06:49

Calibration End Date: 11/06/2018 09:45

Calibration ID: 47798

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
1,2-Dibromoethane	CBNZ d5	Ave	3074 173504	5136 357053	18236 706370	34332 874547	67062	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Chlorobenzene	CBNZ d5	Ave	16514 746925	27055 1490377	87884 2977764	159707 3668726	299947	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,1,2-Tetrachloroethane	CBNZ d5	Ave	3385 249118	6033 494798	24418 1012844	45980 1234355	96008	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Ethylbenzene	CBNZ d5	Ave	8818 416803	14020 843254	45960 1684962	85340 2063037	164111	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
m-Xylene & p-Xylene	CBNZ d5	Ave	10345 518698	18384 1032583	57598 2045210	103815 2500697	202327	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
o-Xylene	CBNZ d5	Ave	9603 508816	14820 980092	55147 1927069	104718 2319517	203880	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Styrene	CBNZ d5	Ave	12360 800751	21055 1618818	82035 3213380	156944 3852195	311255	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromoform	CBNZ d5	Lin1	++++ 87812	1972 196821	6323 423331	13587 527943	31777	++++ 50.0	2.00 100	5.00 200	10.0 250	20.0
Isopropylbenzene	CBNZ d5	Ave	21820 1370930	41764 2693775	147892 5305504	270318 6523269	549441	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,1,2,2-Tetrachloroethane	DCBd 4	Ave	3530 207078	6835 405494	21717 805229	43688 987326	87747	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Bromobenzene	DCBd 4	Ave	6815 272293	9770 550793	31192 1082349	58007 1306902	111826	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichloropropane	DCBd 4	Ave	1272 65025	2618 129522	8631 255232	14889 306893	29716	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
trans-1,4-Dichloro-2-butene	DCBd 4	Ave	1105 90052	2657 191123	9258 397610	18251 491334	36145	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
N-Propylbenzene	DCBd 4	Ave	6072 362446	11576 710685	39898 1423140	73209 1705727	150893	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
2-Chlorotoluene	DCBd 4	Ave	5566 298820	10741 602682	34054 1180964	66624 1431586	127091	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3,5-Trimethylbenzene	DCBd 4	Ave	19688 1132551	33906 2222347	124401 4373593	232838 5327883	454524	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Chlorotoluene	DCBd 4	Ave	5573 302352	10945 612979	35441 1194848	65930 1434532	124408	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
tert-Butylbenzene	DCBd 4	Ave	18831 997210	31339 1953628	109738 3847637	201139 4654540	403212	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,4-Trimethylbenzene	DCBd 4	Ave	18534 1136952	35442 2231525	127932 4418519	239566 5303956	470047	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
sec-Butylbenzene	DCBd 4	Ave	25643 1478703	50269 2845858	164918 5582300	312530 6762612	597343	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,3-Dichlorobenzene	DCBd 4	Ave	12425 540756	22592 1064924	64985 2105362	122627 2529154	232261	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

FORM VI
GC/MS VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: TestAmerica Canton Job No.: 240-103610-1 Analy Batch No.: 353820
 SDG No.: _____
 Instrument ID: A3UX8 GC Column: DB-624 ID: 0.18 (mm) Heated Purge: (Y/N) Y
 Calibration Start Date: 11/06/2018 06:49 Calibration End Date: 11/06/2018 09:45 Calibration ID: 47798

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (UG/L)				
			LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5
			LVL 6	LVL 7	LVL 8	LVL 9		LVL 6	LVL 7	LVL 8	LVL 9	
p-Isopropyltoluene	DCBd 4	Ave	19651 1189519	41595 2368363	130220 4637809	251045 5601093	495892	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,4-Dichlorobenzene	DCBd 4	Ave	14445 545712	23772 1080646	65518 2126808	123840 2527063	230716	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
n-Butylbenzene	DCBd 4	Ave	18642 1070980	36162 2117084	115807 4151898	221506 5066836	439674	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichlorobenzene	DCBd 4	Ave	12660 505579	20704 958438	63382 1874833	115221 2252554	213060	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dibromo-3-Chloropropane	DCBd 4	Lin1	++++ 26161	++++ 51780	1720 111923	4781 143208	9507	++++ 50.0	++++ 100	5.00 200	10.0 250	20.0
1,2,4-Trichlorobenzene	DCBd 4	Ave	8127 325044	13758 625655	38126 1253308	68526 1510334	137752	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Hexachlorobutadiene	DCBd 4	Ave	++++ 185792	++++ 349568	22810 702755	45379 837869	82656	++++ 50.0	++++ 100	5.00 200	10.0 250	20.0
Naphthalene	DCBd 4	Ave	13619 673852	22544 1279475	66556 2551693	137720 2997460	283612	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2,3-Trichlorobenzene	DCBd 4	Ave	++++ 296011	++++ 544647	36665 1101995	68779 1298790	131444	++++ 50.0	++++ 100	5.00 200	10.0 250	20.0
Dibromofluoromethane (Surr)	FB	Ave	4283 214860	8582 491249	26662 1002345	45919 1242805	95432	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
1,2-Dichloroethane-d4 (Surr)	FB	Ave	7272 267191	12375 628405	41183 1291783	63112 1615022	128300	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
Toluene-d8 (Surr)	CBNZ d5	Ave	19336 893364	35151 1956150	110884 4022739	187733 4961425	387953	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0
4-Bromofluorobenzene (Surr)	CBNZ d5	Ave	7814 310631	14295 701889	43169 1412028	74611 1706206	149008	1.00 50.0	2.00 100	5.00 200	10.0 250	20.0

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.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/14 Calibration Date: 08/07/2018 12:33
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3446.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	0.2473	0.2531		0.0102	0.0100	2.3	50.0
Chloromethane	Ave	0.2636	0.2421	0.1000	0.00919	0.0100	-8.1	50.0
Butadiene	Ave	0.2922	0.2582		0.00883	0.0100	-11.7	50.0
Vinyl chloride	Ave	0.3224	0.3029		0.00940	0.0100	-6.0	20.0
Bromomethane	Ave	0.2143	0.1941		0.00906	0.0100	-9.4	50.0
Chloroethane	Ave	0.2029	0.1980		0.00976	0.0100	-2.4	50.0
Dichlorofluoromethane	Ave	0.4779	0.4509		0.00943	0.0100	-5.7	50.0
Trichlorofluoromethane	Ave	0.4369	0.4246		0.00972	0.0100	-2.8	50.0
Ethyl ether	Ave	0.2435	0.2553		0.0105	0.0100	4.9	50.0
Acrolein	Ave	0.0670	0.0382		0.0285	0.0500	-42.9	50.0
1,1-Dichloroethene	Ave	0.2538	0.2622		0.0103	0.0100	3.3	20.0
1,1,2-Trichlorotrifluoroethane	Ave	0.1836	0.1904		0.0104	0.0100	3.7	50.0
Acetone	Ave	0.1084	0.0853		0.0174	0.0200	-21.4	50.0
Iodomethane	Ave	0.3791	0.3949		0.0104	0.0100	4.2	50.0
Carbon disulfide	Ave	0.7597	0.7656		0.0101	0.0100	0.8	50.0
3-Chloro-1-propene	Ave	0.1842	0.1988		0.0108	0.0100	7.9	50.0
Methyl acetate	Ave	0.2816	0.2330		0.0165	0.0200	-17.3	50.0
Methylene Chloride	Ave	0.2471	0.2557		0.0103	0.0100	3.5	50.0
tert-Butyl alcohol	Qua		0.0268		0.0795	0.100	-20.5	50.0
Acrylonitrile	Ave	0.1373	0.1135		0.0827	0.100	-17.3	50.0
trans-1,2-Dichloroethene	Ave	0.2781	0.2923		0.0105	0.0100	5.1	50.0
Methyl tert-butyl ether	Ave	0.7094	0.7342		0.0104	0.0100	3.5	50.0
Hexane	Ave	0.0870	0.0882		0.0101	0.0100	1.5	20.0
1,1-Dichloroethane	Ave	0.4722	0.5009	0.1000	0.0106	0.0100	6.1	50.0
Vinyl acetate	Ave	0.6030	0.5266		0.00873	0.0100	-12.7	50.0
2,2-Dichloropropane	Ave	0.2953	0.2889		0.00978	0.0100	-2.2	50.0
cis-1,2-Dichloroethene	Ave	0.2947	0.2913		0.00989	0.0100	-1.1	50.0
2-Butanone (MEK)	Ave	0.2033	0.1491		0.0147	0.0200	-26.6	50.0
Bromochloromethane	Ave	0.1266	0.1362		0.0108	0.0100	7.5	50.0
Tetrahydrofuran	Ave	0.1335	0.1084		0.0162	0.0200	-18.8	50.0
Chloroform	Ave	0.4399	0.4597		0.0104	0.0100	4.5	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.3888		0.0106	0.0100	5.9	50.0
Cyclohexane	Ave	0.4546	0.4751		0.0105	0.0100	4.5	50.0
1,1-Dichloropropene	Ave	0.3802	0.3927		0.0103	0.0100	3.3	50.0
Carbon tetrachloride	Ave	0.3437	0.3680		0.0107	0.0100	7.1	50.0
Isobutyl alcohol	Ave	0.0234	0.0188		0.201	0.250	-19.4	50.0
Benzene	Ave	1.065	1.076		0.0101	0.0100	1.0	50.0
1,2-Dichloroethane	Ave	0.3698	0.3676		0.00994	0.0100	-0.6	50.0
n-Heptane	Ave	0.0874	0.0887		0.0101	0.0100	1.5	50.0
Trichloroethene	Ave	0.2802	0.2827		0.0101	0.0100	0.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/14 Calibration Date: 08/07/2018 12:33
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3446.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	0.4917	0.4942		0.0101	0.0100	0.5	50.0
1,2-Dichloropropane	Ave	0.2468	0.2525		0.0102	0.0100	2.3	20.0
Dibromomethane	Ave	0.1630	0.1515		0.00929	0.0100	-7.1	50.0
1,4-Dioxane	Lin1		0.0024		0.153	0.200	-23.6	50.0
Bromodichloromethane	Ave	0.3326	0.3375		0.0101	0.0100	1.4	50.0
2-Chloroethyl vinyl ether	Ave	0.1792	0.1585		0.00885	0.0100	-11.5	50.0
cis-1,3-Dichloropropene	Ave	0.4100	0.4046		0.00987	0.0100	-1.3	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3598	0.2976		0.0165	0.0200	-17.3	50.0
Toluene	Ave	1.645	1.713		0.0104	0.0100	4.1	20.0
trans-1,3-Dichloropropene	Ave	0.5600	0.5330		0.00952	0.0100	-4.8	50.0
Ethyl methacrylate	Ave	0.5086	0.5175		0.0102	0.0100	1.7	50.0
1,1,2-Trichloroethane	Ave	0.3232	0.3355		0.0104	0.0100	3.8	50.0
Tetrachloroethene	Ave	0.3055	0.3233		0.0106	0.0100	5.8	50.0
1,3-Dichloropropane	Ave	0.5738	0.5544		0.00966	0.0100	-3.4	50.0
2-Hexanone	Ave	0.4100	0.3457		0.0169	0.0200	-15.7	50.0
Chlorodibromomethane	Ave	0.3605	0.3794		0.0105	0.0100	5.2	50.0
1,2-Dibromoethane	Ave	0.3314	0.3225		0.00973	0.0100	-2.7	50.0
Chlorobenzene	Ave	0.9896	0.997	0.3000	0.0101	0.0100	0.8	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3417	0.3525		0.0103	0.0100	3.2	50.0
Ethylbenzene	Ave	0.5503	0.5639		0.0102	0.0100	2.5	20.0
m-Xylene & p-Xylene	Ave	0.6672	0.6995		0.0105	0.0100	4.8	50.0
o-Xylene	Ave	0.6209	0.6635		0.0107	0.0100	6.9	50.0
Styrene	Ave	1.056	1.090		0.0103	0.0100	3.2	50.0
Bromoform	Ave	0.2560	0.2510	0.1000	0.00980	0.0100	-2.0	50.0
Isopropylbenzene	Ave	1.707	1.780		0.0104	0.0100	4.3	50.0
1,1,2,2-Tetrachloroethane	Ave	0.996	0.9709	0.3000	0.00975	0.0100	-2.5	50.0
Bromobenzene	Ave	0.7837	0.7974		0.0102	0.0100	1.8	50.0
1,2,3-Trichloropropane	Ave	0.3360	0.3229		0.00961	0.0100	-3.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3279	0.3185		0.00971	0.0100	-2.9	50.0
N-Propylbenzene	Ave	0.9821	1.034		0.0105	0.0100	5.3	50.0
2-Chlorotoluene	Ave	0.7872	0.8272		0.0105	0.0100	5.1	50.0
1,3,5-Trimethylbenzene	Ave	2.796	2.874		0.0103	0.0100	2.8	50.0
4-Chlorotoluene	Ave	0.8078	0.7903		0.00978	0.0100	-2.2	50.0
tert-Butylbenzene	Ave	2.442	2.520		0.0103	0.0100	3.2	50.0
1,2,4-Trimethylbenzene	Ave	2.859	2.894		0.0101	0.0100	1.2	50.0
sec-Butylbenzene	Ave	3.639	3.786		0.0104	0.0100	4.0	50.0
1,3-Dichlorobenzene	Ave	1.454	1.448		0.00996	0.0100	-0.4	50.0
4-Isopropyltoluene	Ave	3.051	3.147		0.0103	0.0100	3.1	50.0
1,4-Dichlorobenzene	Ave	1.483	1.508		0.0102	0.0100	1.7	50.0
1,2-Dichlorobenzene	Ave	1.349	1.403		0.0104	0.0100	4.0	50.0
n-Butylbenzene	Ave	2.779	2.781		0.0100	0.0100	0.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/14 Calibration Date: 08/07/2018 12:33
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3446.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	0.2858	0.2452		0.00858	0.0100	-14.2	50.0
1,2,4-Trichlorobenzene	Ave	0.9327	0.8708		0.00934	0.0100	-6.6	50.0
Hexachlorobutadiene	Ave	0.4370	0.4181		0.00957	0.0100	-4.3	50.0
Naphthalene	Ave	3.160	2.756		0.00872	0.0100	-12.8	50.0
1,2,3-Trichlorobenzene	Ave	0.9080	0.8430		0.00928	0.0100	-7.2	50.0
Dibromofluoromethane (Surr)	Ave	0.2315	0.2470		0.0213	0.0200	6.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3038	0.3037		0.0200	0.0200	-0.0	50.0
Toluene-d8 (Surr)	Ave	1.431	1.484		0.0208	0.0200	3.8	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4418	0.4465		0.0202	0.0200	1.1	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/15 Calibration Date: 08/07/2018 15:08
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ3453.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
Dibromofluoromethane (Surr)	Ave	0.2315	0.2532		0.0219	0.0200	9.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3038	0.3257		0.0214	0.0200	7.2	50.0
Toluene-d8 (Surr)	Ave	1.431	1.510		0.0211	0.0200	5.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4418	0.4573		0.0207	0.0200	3.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-339715/15 Calibration Date: 08/07/2018 15:08
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 12:55
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 14:46
 Lab File ID: UXJ3453.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
Acetonitrile	Qua		0.0408		0.102	0.100	1.5	50.0
2-Chloro-1,3-butadiene	Ave	0.4202	0.4117		0.00980	0.0100	-2.0	50.0
Diisopropyl ether	Ave	0.2177	0.2091		0.00961	0.0100	-3.9	50.0
Ethyl tert-butyl ether	Ave	0.6883	0.6814		0.00990	0.0100	-1.0	50.0
Propionitrile	Ave	0.0583	0.0539		0.0925	0.100	-7.5	50.0
Ethyl acetate	Ave	0.3457	0.2992		0.0173	0.0200	-13.4	50.0
Methacrylonitrile	Ave	0.2085	0.1939		0.0930	0.100	-7.0	50.0
Tert-amyl methyl ether	Ave	0.7904	0.7617		0.00964	0.0100	-3.6	50.0
n-Butanol	Ave	0.0220	0.0168		0.191	0.250	-23.7	50.0
Ethyl acrylate	Ave	0.3914	0.3507		0.00896	0.0100	-10.4	50.0
Methyl methacrylate	Ave	0.2579	0.2382		0.0185	0.0200	-7.7	50.0
2-Nitropropane	Ave	0.1100	0.0996		0.0181	0.0200	-9.5	50.0
n-Butyl acetate	Ave	0.4347	0.4016		0.00924	0.0100	-7.6	50.0
1-Chlorohexane	Ave	0.5342	0.5239		0.00981	0.0100	-1.9	50.0
Cyclohexanone	Ave	0.0611	0.0386		0.0631	0.100	-36.9	50.0
Pentachloroethane	Ave	0.2226	0.1821		0.0164	0.0200	-18.2	50.0
1,2,3-Trimethylbenzene	Ave	2.840	2.866		0.0101	0.0100	0.9	50.0
Benzyl chloride	Ave	0.3672	0.3176		0.00865	0.0100	-13.5	50.0
1,3,5-Trichlorobenzene	Ave	1.067	1.015		0.00952	0.0100	-4.8	50.0
2-Methylnaphthalene	Ave	2.160	1.857		0.0172	0.0200	-14.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354546/2 Calibration Date: 11/09/2018 09:45
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ6204.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	0.2473	0.3496		0.0141	0.0100	41.4	50.0
Chloromethane	Ave	0.2636	0.2505	0.1000	0.00950	0.0100	-5.0	50.0
Butadiene	Ave	0.2922	0.2319		0.00794	0.0100	-20.6	50.0
Vinyl chloride	Ave	0.3224	0.2695		0.00836	0.0100	-16.4	20.0
Bromomethane	Ave	0.2143	0.1911		0.00892	0.0100	-10.8	50.0
Chloroethane	Ave	0.2029	0.1610		0.00794	0.0100	-20.6	50.0
Dichlorofluoromethane	Ave	0.4779	0.3938		0.00824	0.0100	-17.6	50.0
Trichlorofluoromethane	Ave	0.4369	0.4625		0.0106	0.0100	5.9	50.0
Ethyl ether	Ave	0.2435	0.1946		0.00799	0.0100	-20.1	50.0
Acrolein	Ave	0.0670	0.0555		0.0414	0.0500	-17.2	50.0
1,1-Dichloroethene	Ave	0.2538	0.2590		0.0102	0.0100	2.1	20.0
1,1,2-Trichlorotrifluoroethane	Ave	0.1836	0.2256		0.0123	0.0100	22.9	50.0
Acetone	Ave	0.1084	0.1298		0.0239	0.0200	19.7	50.0
Iodomethane	Ave	0.3791	0.4998		0.0132	0.0100	31.8	50.0
Carbon disulfide	Ave	0.7597	0.7857		0.0103	0.0100	3.4	50.0
3-Chloro-1-propene	Ave	0.1842	0.1688		0.00917	0.0100	-8.3	50.0
Methyl acetate	Ave	0.2816	0.2485		0.0176	0.0200	-11.8	50.0
Methylene Chloride	Ave	0.2471	0.2875		0.0116	0.0100	16.4	50.0
tert-Butyl alcohol	Qua		0.0431		0.121	0.100	21.3	50.0
Acrylonitrile	Ave	0.1373	0.1288		0.0938	0.100	-6.2	50.0
trans-1,2-Dichloroethene	Ave	0.2781	0.3000		0.0108	0.0100	7.9	50.0
Methyl tert-butyl ether	Ave	0.7094	0.6805		0.00959	0.0100	-4.1	50.0
Hexane	Ave	0.0870	0.0744		0.00856	0.0100	-14.4	20.0
1,1-Dichloroethane	Ave	0.4722	0.4904	0.1000	0.0104	0.0100	3.8	50.0
Vinyl acetate	Ave	0.6030	0.4829		0.00801	0.0100	-19.9	50.0
2,2-Dichloropropane	Ave	0.2953	0.3177		0.0108	0.0100	7.6	50.0
cis-1,2-Dichloroethene	Ave	0.2947	0.3214		0.0109	0.0100	9.1	50.0
2-Butanone (MEK)	Ave	0.2033	0.1494		0.0147	0.0200	-26.5	50.0
Bromochloromethane	Ave	0.1266	0.1692		0.0134	0.0100	33.6	50.0
Tetrahydrofuran	Ave	0.1335	0.0951		0.0142	0.0200	-28.8	50.0
Chloroform	Ave	0.4399	0.5103		0.0116	0.0100	16.0	20.0
1,1,1-Trichloroethane	Ave	0.3670	0.4446		0.0121	0.0100	21.1	50.0
Cyclohexane	Ave	0.4546	0.3764		0.00828	0.0100	-17.2	50.0
1,1-Dichloropropene	Ave	0.3802	0.3862		0.0102	0.0100	1.6	50.0
Carbon tetrachloride	Ave	0.3437	0.4199		0.0122	0.0100	22.2	50.0
Isobutyl alcohol	Ave	0.0234	0.0177		0.190	0.250	-24.1	50.0
Benzene	Ave	1.065	1.055		0.00990	0.0100	-1.0	50.0
1,2-Dichloroethane	Ave	0.3698	0.3962		0.0107	0.0100	7.1	50.0
n-Heptane	Ave	0.0874	0.0702		0.00803	0.0100	-19.7	50.0
Trichloroethene	Ave	0.2802	0.3328		0.0119	0.0100	18.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354546/2 Calibration Date: 11/09/2018 09:45
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ6204.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	0.4917	0.4372		0.00889	0.0100	-11.1	50.0
1,2-Dichloropropane	Ave	0.2468	0.2186		0.00886	0.0100	-11.4	20.0
Dibromomethane	Ave	0.1630	0.1735		0.0106	0.0100	6.4	50.0
1,4-Dioxane	Lin1		0.0036		0.225	0.200	12.5	50.0
Bromodichloromethane	Ave	0.3326	0.3628		0.0109	0.0100	9.1	50.0
2-Chloroethyl vinyl ether	Ave	0.1792	0.1353		0.0151	0.0200	-24.5	50.0
cis-1,3-Dichloropropene	Ave	0.4100	0.3769		0.00919	0.0100	-8.1	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3598	0.2763		0.0154	0.0200	-23.2	50.0
Toluene	Ave	1.645	1.505		0.00915	0.0100	-8.5	20.0
trans-1,3-Dichloropropene	Ave	0.5600	0.4733		0.00845	0.0100	-15.5	50.0
Ethyl methacrylate	Ave	0.5086	0.4003		0.00787	0.0100	-21.3	50.0
1,1,2-Trichloroethane	Ave	0.3232	0.2968		0.00918	0.0100	-8.2	50.0
Tetrachloroethene	Ave	0.3055	0.3791		0.0124	0.0100	24.1	50.0
1,3-Dichloropropane	Ave	0.5738	0.4938		0.00860	0.0100	-14.0	50.0
2-Hexanone	Ave	0.4100	0.2638		0.0129	0.0200	-35.7	50.0
Chlorodibromomethane	Ave	0.3605	0.3932		0.0109	0.0100	9.1	50.0
1,2-Dibromoethane	Ave	0.3314	0.3228		0.00974	0.0100	-2.6	50.0
Chlorobenzene	Ave	0.9896	0.9540	0.3000	0.00964	0.0100	-3.6	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3417	0.3850		0.0113	0.0100	12.7	50.0
Ethylbenzene	Ave	0.5503	0.4892		0.00889	0.0100	-11.1	20.0
m-Xylene & p-Xylene	Ave	0.6672	0.6170		0.00925	0.0100	-7.5	50.0
o-Xylene	Ave	0.6209	0.5601		0.00902	0.0100	-9.8	50.0
Styrene	Ave	1.056	1.004		0.00951	0.0100	-4.9	50.0
Bromoform	Ave	0.2560	0.3176	0.1000	0.0124	0.0100	24.0	50.0
Isopropylbenzene	Ave	1.707	1.506		0.00883	0.0100	-11.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.996	0.7983	0.3000	0.00802	0.0100	-19.8	50.0
Bromobenzene	Ave	0.7837	0.7843		0.0100	0.0100	0.0	50.0
1,2,3-Trichloropropane	Ave	0.3360	0.2855		0.00850	0.0100	-15.0	50.0
trans-1,4-Dichloro-2-butene	Ave	0.3279	0.2171		0.00662	0.0100	-33.8	50.0
N-Propylbenzene	Ave	0.9821	0.7815		0.00796	0.0100	-20.4	50.0
2-Chlorotoluene	Ave	0.7872	0.7438		0.00945	0.0100	-5.5	50.0
1,3,5-Trimethylbenzene	Ave	2.796	2.267		0.00811	0.0100	-18.9	50.0
4-Chlorotoluene	Ave	0.8078	0.7532		0.00932	0.0100	-6.8	50.0
tert-Butylbenzene	Ave	2.442	1.907		0.00781	0.0100	-21.9	50.0
1,2,4-Trimethylbenzene	Ave	2.859	2.343		0.00819	0.0100	-18.1	50.0
sec-Butylbenzene	Ave	3.639	2.841		0.00781	0.0100	-21.9	50.0
1,3-Dichlorobenzene	Ave	1.454	1.429		0.00983	0.0100	-1.7	50.0
4-Isopropyltoluene	Ave	3.051	2.462		0.00807	0.0100	-19.3	50.0
1,4-Dichlorobenzene	Ave	1.483	1.480		0.00998	0.0100	-0.2	50.0
1,2-Dichlorobenzene	Ave	1.349	1.363		0.0101	0.0100	1.0	50.0
n-Butylbenzene	Ave	2.779	1.939		0.00698	0.0100	-30.2	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354546/2 Calibration Date: 11/09/2018 09:45
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 10:19
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 12:10
 Lab File ID: UXJ6204.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	0.2858	0.2589		0.00906	0.0100	-9.4	50.0
1,2,4-Trichlorobenzene	Ave	0.9327	0.8571		0.00919	0.0100	-8.1	50.0
Hexachlorobutadiene	Ave	0.4370	0.3911		0.00895	0.0100	-10.5	50.0
Naphthalene	Ave	3.160	2.247		0.00711	0.0100	-28.9	50.0
1,2,3-Trichlorobenzene	Ave	0.9080	0.8929		0.00983	0.0100	-1.7	50.0
Dibromofluoromethane (Surr)	Ave	0.2315	0.2601		0.0225	0.0200	12.4	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3038	0.3285		0.0216	0.0200	8.1	50.0
Toluene-d8 (Surr)	Ave	1.431	1.201		0.0168	0.0200	-16.0	50.0
4-Bromofluorobenzene (Surr)	Ave	0.4418	0.3933		0.0178	0.0200	-11.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCV 240-354546/3 Calibration Date: 11/09/2018 10:29
 Instrument ID: A3UX11 Calib Start Date: 08/07/2018 12:55
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 08/07/2018 14:46
 Lab File ID: UXJ6206.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
Acetonitrile	Qua		0.0302		0.0751	0.100	-24.9	50.0
2-Chloro-1,3-butadiene	Ave	0.4202	0.3780		0.00900	0.0100	-10.0	50.0
Diisopropyl ether	Ave	0.2177	0.1950		0.00896	0.0100	-10.4	50.0
Ethyl tert-butyl ether	Ave	0.6883	0.5673		0.00824	0.0100	-17.6	50.0
Propionitrile	Ave	0.0583	0.0405		0.0696	0.100	-30.4	50.0
Ethyl acetate	Ave	0.3457	0.2340		0.0135	0.0200	-32.3	50.0
Methacrylonitrile	Ave	0.2085	0.1618		0.0776	0.100	-22.4	50.0
Tert-amyl methyl ether	Ave	0.7904	0.5922		0.00749	0.0100	-25.1	50.0
n-Butanol	Ave	0.0220	0.0136		0.155	0.250	-37.9	50.0
Ethyl acrylate	Ave	0.3914	0.2615		0.00668	0.0100	-33.2	50.0
Methyl methacrylate	Ave	0.2579	0.1755		0.0136	0.0200	-32.0	50.0
2-Nitropropane	Ave	0.1100	0.0800		0.0145	0.0200	-27.3	50.0
n-Butyl acetate	Ave	0.4347	0.2768		0.00637	0.0100	-36.3	50.0
1-Chlorohexane	Ave	0.5342	0.3987		0.00746	0.0100	-25.4	50.0
Cyclohexanone	Ave	0.0611	0.0296		0.0484	0.100	-51.6*	50.0
Pentachloroethane	Ave	0.2226	0.2346		0.0211	0.0200	5.4	50.0
1,2,3-Trimethylbenzene	Ave	2.840	2.073		0.00730	0.0100	-27.0	50.0
Benzyl chloride	Ave	0.3672	0.3674		0.0100	0.0100	0.0	50.0
1,3,5-Trichlorobenzene	Ave	1.067	0.9755		0.00914	0.0100	-8.6	50.0
2-Methylnaphthalene	Ave	2.160	0.9654		0.00894	0.0200	-55.3*	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-353820/13 Calibration Date: 11/06/2018 10:30
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80605.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3654	0.3269		0.0224	0.0250	-10.5	50.0
Chloromethane	Ave	0.6651	0.5914	0.1000	0.0222	0.0250	-11.1	50.0
Vinyl chloride	Ave	0.3905	0.3639		0.0233	0.0250	-6.8	20.0
Butadiene	Ave	0.5695	0.4600		0.0202	0.0250	-19.2	50.0
Bromomethane	Ave	0.2167	0.1809		0.0209	0.0250	-16.5	50.0
Chloroethane	Ave	0.2638	0.2306		0.0219	0.0250	-12.6	50.0
Dichlorofluoromethane	Ave	0.5324	0.4860		0.0228	0.0250	-8.7	50.0
Trichlorofluoromethane	Ave	0.4669	0.3980		0.0213	0.0250	-14.8	50.0
Ethyl ether	Ave	0.3169	0.2892		0.0228	0.0250	-8.7	50.0
Acrolein	Ave	0.0542	0.0507		0.117	0.125	-6.6	50.0
1,1-Dichloroethene	Ave	0.2958	0.2590		0.0219	0.0250	-12.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2183	0.1896		0.0217	0.0250	-13.2	50.0
Acetone	Lin1		0.1046		0.0451	0.0500	-9.9	50.0
Iodomethane	Ave	0.4698	0.4102		0.0218	0.0250	-12.7	50.0
Carbon disulfide	Ave	0.8642	0.7476		0.0216	0.0250	-13.5	50.0
3-Chloro-1-propene	Ave	0.1693	0.1547		0.0228	0.0250	-8.6	50.0
Methyl acetate	Ave	0.2984	0.2402		0.0402	0.0500	-19.5	50.0
Methylene Chloride	Lin1		0.2989		0.0237	0.0250	-5.3	50.0
tert-Butyl alcohol	Ave	0.0236	0.0223		0.236	0.250	-5.5	50.0
Acrylonitrile	Ave	0.1303	0.1143		0.219	0.250	-12.3	50.0
Methyl tert-butyl ether	Ave	0.6698	0.5832		0.0218	0.0250	-12.9	50.0
trans-1,2-Dichloroethene	Ave	0.3350	0.3015		0.0225	0.0250	-10.0	50.0
Hexane	Ave	0.0883	0.0739		0.0209	0.0250	-16.3	20.0
1,1-Dichloroethane	Ave	0.7138	0.6265	0.1000	0.0219	0.0250	-12.2	50.0
Vinyl acetate	Ave	0.6285	0.6863		0.0273	0.0250	9.2	50.0
2-Butanone (MEK)	Ave	0.1739	0.1582		0.0455	0.0500	-9.0	50.0
cis-1,2-Dichloroethene	Ave	0.3591	0.3147		0.0219	0.0250	-12.4	50.0
2,2-Dichloropropane	Ave	0.3562	0.2852		0.0200	0.0250	-19.9	50.0
Bromochloromethane	Ave	0.1331	0.1279		0.0240	0.0250	-4.0	50.0
Chloroform	Ave	0.5298	0.4763		0.0225	0.0250	-10.1	20.0
Tetrahydrofuran	Lin1		0.1072		0.0485	0.0500	-2.9	50.0
1,1,1-Trichloroethane	Ave	0.4390	0.3995		0.0228	0.0250	-9.0	50.0
Cyclohexane	Ave	0.9143	0.7786		0.0213	0.0250	-14.8	50.0
1,1-Dichloropropene	Ave	0.4284	0.3703		0.0216	0.0250	-13.6	50.0
Carbon tetrachloride	Ave	0.3717	0.3304		0.0222	0.0250	-11.1	50.0
Isobutyl alcohol	Ave	0.0122	0.0115		0.587	0.625	-6.0	50.0
1,2-Dichloroethane	Ave	0.4799	0.4323		0.0225	0.0250	-9.9	50.0
Benzene	Ave	1.276	1.109		0.0217	0.0250	-13.1	50.0
n-Heptane	Ave	0.0897	0.0818		0.0228	0.0250	-8.8	50.0
Trichloroethene	Ave	0.3280	0.2825		0.0215	0.0250	-13.9	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-353820/13 Calibration Date: 11/06/2018 10:30
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80605.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Methylcyclohexane	Ave	0.5781	0.4885		0.0211	0.0250	-15.5	50.0
1,2-Dichloropropane	Ave	0.3548	0.3267		0.0230	0.0250	-7.9	20.0
Dibromomethane	Ave	0.1373	0.1237		0.0225	0.0250	-10.0	50.0
1,4-Dioxane	Ave	0.0019	0.0018		0.479	0.500	-4.2	50.0
Bromodichloromethane	Ave	0.3092	0.2752		0.0223	0.0250	-11.0	50.0
2-Chloroethyl vinyl ether	Ave	0.1240	0.1153		0.0233	0.0250	-7.0	50.0
cis-1,3-Dichloropropene	Ave	0.3419	0.3264		0.0239	0.0250	-4.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3276	0.3130		0.0478	0.0500	-4.5	50.0
Toluene	Ave	1.787	1.571		0.0220	0.0250	-12.1	20.0
trans-1,3-Dichloropropene	Lin1		0.3367		0.0200	0.0250	-20.0	50.0
Ethyl methacrylate	Ave	0.3411	0.3304		0.0242	0.0250	-3.1	50.0
1,1,2-Trichloroethane	Ave	0.2768	0.2582		0.0233	0.0250	-6.7	50.0
1,3-Dichloropropane	Ave	0.4921	0.4540		0.0231	0.0250	-7.7	50.0
Tetrachloroethene	Ave	0.3399	0.2909		0.0214	0.0250	-14.4	50.0
2-Hexanone	Ave	0.2990	0.2877		0.0481	0.0500	-3.8	50.0
Dibromochloromethane	Lin1		0.2278		0.0211	0.0250	-15.5	50.0
1,2-Dibromoethane	Ave	0.2460	0.2350		0.0239	0.0250	-4.5	50.0
Chlorobenzene	Ave	1.131	0.996	0.3000	0.0220	0.0250	-11.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3304	0.3157		0.0239	0.0250	-4.5	50.0
Ethylbenzene	Ave	0.6152	0.5455		0.0222	0.0250	-11.3	20.0
m-Xylene & p-Xylene	Ave	0.7573	0.6701		0.0221	0.0250	-11.5	50.0
o-Xylene	Ave	0.7162	0.6412		0.0224	0.0250	-10.5	50.0
Styrene	Ave	1.094	1.030		0.0235	0.0250	-5.8	50.0
Bromoform	Lin1		0.1077	0.1000	0.0203	0.0250	-18.8	50.0
Isopropylbenzene	Ave	1.910	1.763		0.0231	0.0250	-7.7	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6316	0.6097	0.3000	0.0241	0.0250	-3.5	50.0
Bromobenzene	Ave	0.8895	0.7776		0.0219	0.0250	-12.6	50.0
1,2,3-Trichloropropane	Ave	0.2162	0.1977		0.0229	0.0250	-8.6	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2709	0.2705		0.0250	0.0250	-0.1	50.0
N-Propylbenzene	Ave	1.098	0.9770		0.0222	0.0250	-11.0	50.0
2-Chlorotoluene	Ave	0.9492	0.8543		0.0225	0.0250	-10.0	50.0
1,3,5-Trimethylbenzene	Ave	3.407	3.047		0.0224	0.0250	-10.6	50.0
4-Chlorotoluene	Ave	0.9566	0.8685		0.0227	0.0250	-9.2	50.0
tert-Butylbenzene	Ave	3.034	2.680		0.0221	0.0250	-11.7	50.0
1,2,4-Trimethylbenzene	Ave	3.443	3.122		0.0227	0.0250	-9.3	50.0
sec-Butylbenzene	Ave	4.498	3.970		0.0221	0.0250	-11.7	50.0
1,3-Dichlorobenzene	Ave	1.796	1.523		0.0212	0.0250	-15.2	50.0
p-Isopropyltoluene	Ave	3.653	3.248		0.0222	0.0250	-11.1	50.0
1,4-Dichlorobenzene	Ave	1.853	1.554		0.0210	0.0250	-16.1	50.0
n-Butylbenzene	Ave	3.272	2.676		0.0204	0.0250	-18.2	50.0
1,2-Dichlorobenzene	Ave	1.679	1.430		0.0213	0.0250	-14.8	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: ICV 240-353820/13 Calibration Date: 11/06/2018 10:30
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80605.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.0632		0.0203	0.0250	-18.6	50.0
1,2,4-Trichlorobenzene	Ave	1.075	0.7711		0.0179	0.0250	-28.3	50.0
Hexachlorobutadiene	Ave	0.6026	0.4807		0.0199	0.0250	-20.2	50.0
Naphthalene	Ave	2.046	1.591		0.0194	0.0250	-22.2	50.0
1,2,3-Trichlorobenzene	Ave	0.9454	0.7476		0.0198	0.0250	-20.9	50.0
Dibromofluoromethane (Surr)	Ave	0.2472	0.2157		0.0436	0.0500	-12.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3443	0.2764		0.0401	0.0500	-19.7	50.0
Toluene-d8 (Surr)	Ave	1.429	1.248		0.0437	0.0500	-12.7	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5387	0.4366		0.0405	0.0500	-19.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354032/4 Calibration Date: 11/07/2018 05:19
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80625.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Dichlorodifluoromethane	Ave	0.3654	0.3738		0.0205	0.0200	2.3	50.0
Chloromethane	Ave	0.6651	0.6471	0.1000	0.0195	0.0200	-2.7	50.0
Vinyl chloride	Ave	0.3905	0.4247		0.0218	0.0200	8.8	20.0
Butadiene	Ave	0.5695	0.6322		0.0222	0.0200	11.0	50.0
Bromomethane	Ave	0.2167	0.1955		0.0180	0.0200	-9.8	50.0
Chloroethane	Ave	0.2638	0.2527		0.0192	0.0200	-4.2	50.0
Dichlorofluoromethane	Ave	0.5324	0.5231		0.0197	0.0200	-1.7	50.0
Trichlorofluoromethane	Ave	0.4669	0.4836		0.0207	0.0200	3.6	50.0
Ethyl ether	Ave	0.3169	0.3076		0.0194	0.0200	-3.0	50.0
Acrolein	Ave	0.0542	0.0496		0.0914	0.100	-8.6	50.0
1,1-Dichloroethene	Ave	0.2958	0.3059		0.0207	0.0200	3.4	20.0
1,1,2-Trichloro-1,2,2-trifluoroethane	Ave	0.2183	0.2249		0.0206	0.0200	3.0	50.0
Acetone	Lin1		0.1179		0.0401	0.0400	0.3	50.0
Iodomethane	Ave	0.4698	0.4511		0.0192	0.0200	-4.0	50.0
Carbon disulfide	Ave	0.8642	0.8873		0.0205	0.0200	2.7	50.0
3-Chloro-1-propene	Ave	0.1693	0.1815		0.0214	0.0200	7.2	50.0
Methyl acetate	Ave	0.2984	0.2667		0.0357	0.0400	-10.6	50.0
Methylene Chloride	Lin1		0.3239		0.0201	0.0200	0.4	50.0
tert-Butyl alcohol	Ave	0.0236	0.0198		0.168	0.200	-16.1	50.0
Acrylonitrile	Ave	0.1303	0.1167		0.179	0.200	-10.5	50.0
Methyl tert-butyl ether	Ave	0.6698	0.6200		0.0185	0.0200	-7.4	50.0
trans-1,2-Dichloroethene	Ave	0.3350	0.3381		0.0202	0.0200	0.9	50.0
Hexane	Ave	0.0883	0.0937		0.0212	0.0200	6.0	20.0
1,1-Dichloroethane	Ave	0.7138	0.6856	0.1000	0.0192	0.0200	-3.9	50.0
Vinyl acetate	Ave	0.6285	0.5754		0.0183	0.0200	-8.4	50.0
2,2-Dichloropropane	Ave	0.3562	0.3473		0.0195	0.0200	-2.5	50.0
2-Butanone (MEK)	Ave	0.1739	0.1631		0.0375	0.0400	-6.2	50.0
cis-1,2-Dichloroethene	Ave	0.3591	0.3475		0.0194	0.0200	-3.2	50.0
Bromochloromethane	Ave	0.1331	0.1392		0.0209	0.0200	4.6	50.0
Chloroform	Ave	0.5298	0.5141		0.0194	0.0200	-3.0	20.0
Tetrahydrofuran	Lin1		0.1093		0.0385	0.0400	-3.7	50.0
1,1,1-Trichloroethane	Ave	0.4390	0.4614		0.0210	0.0200	5.1	50.0
Cyclohexane	Ave	0.9143	0.9297		0.0203	0.0200	1.7	50.0
1,1-Dichloropropene	Ave	0.4284	0.4295		0.0201	0.0200	0.3	50.0
Carbon tetrachloride	Ave	0.3717	0.3916		0.0211	0.0200	5.4	50.0
Isobutyl alcohol	Ave	0.0122	0.0102		0.417	0.500	-16.6	50.0
1,2-Dichloroethane	Ave	0.4799	0.4600		0.0192	0.0200	-4.2	50.0
Benzene	Ave	1.276	1.235		0.0194	0.0200	-3.2	50.0
n-Heptane	Ave	0.0897	0.0877		0.0196	0.0200	-2.2	50.0
Trichloroethene	Ave	0.3280	0.3093		0.0189	0.0200	-5.7	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354032/4 Calibration Date: 11/07/2018 05:19
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80625.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dichloropropane	Ave	0.3548	0.3330		0.0188	0.0200	-6.1	20.0
Methylcyclohexane	Ave	0.5781	0.6005		0.0208	0.0200	3.9	50.0
1,4-Dioxane	Ave	0.0019	0.0018		0.367	0.400	-8.3	50.0
Dibromomethane	Ave	0.1373	0.1274		0.0186	0.0200	-7.2	50.0
Bromodichloromethane	Ave	0.3092	0.2943		0.0190	0.0200	-4.8	50.0
2-Chloroethyl vinyl ether	Ave	0.1240	0.1008		0.0325	0.0400	-18.7	50.0
cis-1,3-Dichloropropene	Ave	0.3419	0.3093		0.0181	0.0200	-9.5	50.0
4-Methyl-2-pentanone (MIBK)	Ave	0.3276	0.2862		0.0349	0.0400	-12.6	50.0
Toluene	Ave	1.787	1.786		0.0200	0.0200	-0.0	20.0
trans-1,3-Dichloropropene	Lin1		0.3459		0.0166	0.0200	-17.2	50.0
Ethyl methacrylate	Ave	0.3411	0.3076		0.0180	0.0200	-9.8	50.0
1,1,2-Trichloroethane	Ave	0.2768	0.2630		0.0190	0.0200	-5.0	50.0
1,3-Dichloropropane	Ave	0.4921	0.4650		0.0189	0.0200	-5.5	50.0
Tetrachloroethene	Ave	0.3399	0.3505		0.0206	0.0200	3.1	50.0
2-Hexanone	Ave	0.2990	0.2807		0.0376	0.0400	-6.1	50.0
Dibromochloromethane	Lin1		0.2394		0.0179	0.0200	-10.6	50.0
1,2-Dibromoethane	Ave	0.2460	0.2431		0.0198	0.0200	-1.2	50.0
Chlorobenzene	Ave	1.131	1.109	0.3000	0.0196	0.0200	-1.9	50.0
1,1,1,2-Tetrachloroethane	Ave	0.3304	0.3482		0.0211	0.0200	5.4	50.0
Ethylbenzene	Ave	0.6152	0.6125		0.0199	0.0200	-0.4	20.0
m-Xylene & p-Xylene	Ave	0.7573	0.7324		0.0193	0.0200	-3.3	50.0
o-Xylene	Ave	0.7162	0.7375		0.0206	0.0200	3.0	50.0
Styrene	Ave	1.094	1.106		0.0202	0.0200	1.1	50.0
Bromoform	Lin1		0.1048	0.1000	0.0161	0.0200	-19.3	50.0
Isopropylbenzene	Ave	1.910	2.064		0.0216	0.0200	8.1	50.0
1,1,2,2-Tetrachloroethane	Ave	0.6316	0.5907	0.3000	0.0187	0.0200	-6.5	50.0
Bromobenzene	Ave	0.8895	0.8234		0.0185	0.0200	-7.4	50.0
1,2,3-Trichloropropane	Ave	0.2162	0.1969		0.0182	0.0200	-8.9	50.0
trans-1,4-Dichloro-2-butene	Ave	0.2709	0.2427		0.0179	0.0200	-10.4	50.0
N-Propylbenzene	Ave	1.098	1.101		0.0201	0.0200	0.3	50.0
2-Chlorotoluene	Ave	0.9492	0.9304		0.0196	0.0200	-2.0	50.0
1,3,5-Trimethylbenzene	Ave	3.407	3.538		0.0208	0.0200	3.9	50.0
4-Chlorotoluene	Ave	0.9566	0.9390		0.0196	0.0200	-1.8	50.0
tert-Butylbenzene	Ave	3.034	3.081		0.0203	0.0200	1.5	50.0
1,2,4-Trimethylbenzene	Ave	3.443	3.580		0.0208	0.0200	4.0	50.0
sec-Butylbenzene	Ave	4.498	4.654		0.0207	0.0200	3.5	50.0
1,3-Dichlorobenzene	Ave	1.796	1.671		0.0186	0.0200	-6.9	50.0
p-Isopropyltoluene	Ave	3.653	3.827		0.0210	0.0200	4.8	50.0
1,4-Dichlorobenzene	Ave	1.853	1.700		0.0183	0.0200	-8.3	50.0
n-Butylbenzene	Ave	3.272	3.501		0.0214	0.0200	7.0	50.0
1,2-Dichlorobenzene	Ave	1.679	1.561		0.0186	0.0200	-7.0	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCVIS 240-354032/4 Calibration Date: 11/07/2018 05:19
 Instrument ID: A3UX8 Calib Start Date: 11/06/2018 06:49
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 11/06/2018 09:45
 Lab File ID: UX80625.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Dibromo-3-Chloropropane	Lin1		0.0626		0.0165	0.0200	-17.3	50.0
1,2,4-Trichlorobenzene	Ave	1.075	0.9030		0.0168	0.0200	-16.0	50.0
Hexachlorobutadiene	Ave	0.6026	0.5552		0.0184	0.0200	-7.9	50.0
Naphthalene	Ave	2.046	1.514		0.0148	0.0200	-26.0	50.0
1,2,3-Trichlorobenzene	Ave	0.9454	0.7870		0.0166	0.0200	-16.8	50.0
Dibromofluoromethane (Surr)	Ave	0.2472	0.2232		0.0451	0.0500	-9.7	50.0
1,2-Dichloroethane-d4 (Surr)	Ave	0.3443	0.2823		0.0410	0.0500	-18.0	50.0
Toluene-d8 (Surr)	Ave	1.429	1.291		0.0452	0.0500	-9.6	50.0
4-Bromofluorobenzene (Surr)	Ave	0.5387	0.4607		0.0428	0.0500	-14.5	50.0

FORM VII
GC/MS VOA CONTINUING CALIBRATION DATA

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Lab Sample ID: CCV 240-354032/5 Calibration Date: 11/07/2018 05:41
 Instrument ID: A3UX8 Calib Start Date: 10/18/2018 02:52
 GC Column: DB-624 ID: 0.18 (mm) Calib End Date: 10/18/2018 05:49
 Lab File ID: UX80626.D Conc. Units: ng/uL Heated Purge: (Y/N) Y

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Acetonitrile	Ave	0.0564	0.0477		0.169	0.200	-15.5	50.0
Diisopropyl ether	Ave	0.2441	0.2463		0.0202	0.0200	0.9	50.0
2-Chloro-1,3-butadiene	Ave	0.8191	0.8547		0.0209	0.0200	4.4	50.0
Ethyl tert-butyl ether	Ave	1.103	1.068		0.0194	0.0200	-3.2	50.0
Ethyl acetate	Ave	0.3912	0.2963		0.0303	0.0400	-24.3	50.0
Propionitrile	Ave	0.0510	0.0409		0.161	0.200	-19.7	50.0
Methacrylonitrile	Ave	0.2605	0.2142		0.164	0.200	-17.8	50.0
Tert-amyl methyl ether	Ave	0.6191	0.6178		0.0200	0.0200	-0.2	50.0
n-Butanol	Lin1		0.0062		0.324	0.500	-35.3	50.0
Ethyl acrylate	Ave	0.3640	0.2828		0.0155	0.0200	-22.3	50.0
Methyl methacrylate	Ave	0.3388	0.2720		0.0321	0.0400	-19.7	50.0
2-Nitropropane	Qua		0.0388		0.0321	0.0400	-19.9	50.0
n-Butyl acetate	Ave	0.5613	0.4308		0.0153	0.0200	-23.3	50.0
1-Chlorohexane	Ave	0.4508	0.4925		0.0219	0.0200	9.3	50.0
Cyclohexanone	Lin1		0.0113		0.142	0.200	-28.8	50.0
Pentachloroethane	Lin1		0.3529		0.0348	0.0400	-13.0	50.0
1,2,3-Trimethylbenzene	Ave	3.659	3.368		0.0184	0.0200	-8.0	50.0
Benzyl chloride	Qua		0.0953		0.0179	0.0200	-10.3	50.0
1,3,5-Trichlorobenzene	Lin1		1.209		0.0174	0.0200	-13.2	50.0
2-Methylnaphthalene	Lin1		0.7973		0.0188	0.0400	-52.9*	50.0

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	3.0	U	5.0	3.0
563-58-6	1,1-Dichloropropene	0.99	U	5.0	0.99
75-34-3	1,1-Dichloroethane	0.69	U	5.0	0.69
87-61-6	1,2,3-Trichlorobenzene	0.581	J	5.0	0.57
96-18-4	1,2,3-Trichloropropane	1.6	U	5.0	1.6
107-06-2	1,2-Dichloroethane	0.77	U	5.0	0.77
75-35-4	1,1-Dichloroethene	0.90	U	5.0	0.90
526-73-8	1,2,3-Trimethylbenzene	1.8	U	5.0	1.8
78-87-5	1,2-Dichloropropane	0.85	U	5.0	0.85
95-63-6	1,2,4-Trimethylbenzene	1.0	U	5.0	1.0
591-78-6	2-Hexanone	4.1	U	20	4.1
79-34-5	1,1,2,2-Tetrachloroethane	1.4	U	5.0	1.4
67-64-1	Acetone	21	U	25	21
71-43-2	Benzene	0.70	U	5.0	0.70
75-25-2	Bromoform	2.4	U	5.0	2.4
74-83-9	Bromomethane	0.99	U	5.0	0.99
75-15-0	Carbon disulfide	1.2	U	5.0	1.2
56-23-5	Carbon tetrachloride	3.3	U	5.0	3.3
71-55-6	1,1,1-Trichloroethane	0.82	U	5.0	0.82
108-90-7	Chlorobenzene	0.92	U	5.0	0.92
142-28-9	1,3-Dichloropropane	0.99	U	5.0	0.99
75-00-3	Chloroethane	1.2	U	5.0	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	3.6	U	10	3.6
67-66-3	Chloroform	0.79	U	5.0	0.79
74-87-3	Chloromethane	1.0	U	5.0	1.0
156-59-2	cis-1,2-Dichloroethene	0.65	U	5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	1.4	U	5.0	1.4
75-27-4	Bromodichloromethane	0.68	U	5.0	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1.3	U	5.0	1.3
75-71-8	Dichlorodifluoromethane	0.94	U	5.0	0.94
120-82-1	1,2,4-Trichlorobenzene	0.57	U	5.0	0.57
100-41-4	Ethylbenzene	1.0	U	5.0	1.0
106-93-4	1,2-Dibromoethane	0.77	U	5.0	0.77
594-20-7	2,2-Dichloropropane	1.2	U	5.0	1.2
95-50-1	1,2-Dichlorobenzene	1.1	U	5.0	1.1

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	0.82	U	5.0	0.82
106-46-7	1,4-Dichlorobenzene	0.88	U	5.0	0.88
110-75-8	2-Chloroethyl vinyl ether	8.9	U	50	8.9
98-82-8	Isopropylbenzene	0.83	U	5.0	0.83
95-49-8	2-Chlorotoluene	0.95	U	5.0	0.95
78-93-3	2-Butanone (MEK)	3.6	U	20	3.6
108-10-1	4-Methyl-2-pentanone (MIBK)	3.7	U	20	3.7
108-86-1	Bromobenzene	1.2	U	5.0	1.2
1634-04-4	Methyl tert-butyl ether	0.82	U	5.0	0.82
74-97-5	Bromochloromethane	0.59	U	5.0	0.59
75-09-2	Methylene Chloride	12	U	25	12
106-43-4	4-Chlorotoluene	0.86	U	5.0	0.86
99-87-6	p-Isopropyltoluene	2.9	U	5.0	2.9
100-42-5	Styrene	1.2	U	5.0	1.2
179601-23-1	m-Xylene & p-Xylene	0.78	U	10	0.78
95-47-6	o-Xylene	0.86	U	5.0	0.86
87-68-3	Hexachlorobutadiene	3.7	U	5.0	3.7
127-18-4	Tetrachloroethene	0.73	U	5.0	0.73
74-95-3	Dibromomethane	0.67	U	5.0	0.67
108-88-3	Toluene	0.77	U	5.0	0.77
108-20-3	Diisopropyl ether	0.76	U	10	0.76
91-20-3	Naphthalene	2.7	U	5.0	2.7
156-60-5	trans-1,2-Dichloroethene	0.47	U	5.0	0.47
104-51-8	n-Butylbenzene	3.5	U	5.0	3.5
10061-02-6	trans-1,3-Dichloropropene	1.0	U	5.0	1.0
103-65-1	N-Propylbenzene	0.73	U	5.0	0.73
79-01-6	Trichloroethene	0.63	U	5.0	0.63
135-98-8	sec-Butylbenzene	0.86	U	5.0	0.86
75-69-4	Trichlorofluoromethane	1.1	U	5.0	1.1
994-05-8	Tert-amyl methyl ether	2.2	U	5.0	2.2
637-92-3	Ethyl tert-butyl ether	2.3	U	5.0	2.3
98-06-6	tert-Butylbenzene	0.91	U	5.0	0.91
75-01-4	Vinyl chloride	0.84	U	5.0	0.84
108-05-4	Vinyl acetate	2.1	U	10	2.1
75-65-0	tert-Butyl alcohol	17	U	200	17
1330-20-7	Xylenes, Total	1.6	U	10	1.6

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	2.8	U	5.0	2.8

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	87		48-123
460-00-4	4-Bromofluorobenzene (Surr)	80		49-141
2037-26-5	Toluene-d8 (Surr)	86		62-135
1868-53-7	Dibromofluoromethane (Surr)	89		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354032/7
 Matrix: Solid Lab File ID: UX80628.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:24
 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.: 354032 Units: ug/Kg
 Number TICs Found: 0 TIC Result Total: 0

CAS NO.	COMPOUND NAME	RT	RESULT	Q	MATCH QUALITY
	Tentatively Identified Compound		None		

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354546/6
 Matrix: Water Lab File ID: UXJ6208.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 11:14
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	0.14	U	1.0	0.14
563-58-6	1,1-Dichloropropene	0.14	U	1.0	0.14
75-34-3	1,1-Dichloroethane	0.17	U	1.0	0.17
87-61-6	1,2,3-Trichlorobenzene	0.54	U	1.0	0.54
96-18-4	1,2,3-Trichloropropane	0.24	U	1.0	0.24
107-06-2	1,2-Dichloroethane	0.21	U	1.0	0.21
75-35-4	1,1-Dichloroethene	0.19	U	1.0	0.19
526-73-8	1,2,3-Trimethylbenzene	0.14	U	5.0	0.14
78-87-5	1,2-Dichloropropane	0.15	U	1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	0.070	U	1.0	0.070
591-78-6	2-Hexanone	0.54	U	10	0.54
79-34-5	1,1,2,2-Tetrachloroethane	0.13	U	1.0	0.13
67-64-1	Acetone	5.4	U	10	5.4
71-43-2	Benzene	0.13	U	1.0	0.13
75-25-2	Bromoform	0.76	U	1.0	0.76
74-83-9	Bromomethane	0.42	U	1.0	0.42
75-15-0	Carbon disulfide	0.28	U	1.0	0.28
56-23-5	Carbon tetrachloride	0.26	U	1.0	0.26
71-55-6	1,1,1-Trichloroethane	0.24	U	1.0	0.24
108-90-7	Chlorobenzene	0.14	U	1.0	0.14
142-28-9	1,3-Dichloropropane	0.21	U	1.0	0.21
75-00-3	Chloroethane	0.83	U	1.0	0.83
96-12-8	1,2-Dibromo-3-Chloropropane	0.91	U	2.0	0.91
67-66-3	Chloroform	0.13	U	1.0	0.13
74-87-3	Chloromethane	0.20	U	1.0	0.20
156-59-2	cis-1,2-Dichloroethene	0.16	U	1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	0.61	U	1.0	0.61
75-27-4	Bromodichloromethane	0.17	U	1.0	0.17
76-13-1	1,1,2-Trichlorotrifluoroethane	0.41	U	1.0	0.41
75-71-8	Dichlorodifluoromethane	0.35	U	1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	0.26	U	1.0	0.26
100-41-4	Ethylbenzene	0.11	U	1.0	0.11
106-93-4	1,2-Dibromoethane	0.12	U	1.0	0.12
594-20-7	2,2-Dichloropropane	0.31	U	1.0	0.31
95-50-1	1,2-Dichlorobenzene	0.15	U	1.0	0.15
541-73-1	1,3-Dichlorobenzene	0.15	U	1.0	0.15

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354546/6
 Matrix: Water Lab File ID: UXJ6208.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 11:14
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-46-7	1,4-Dichlorobenzene	0.16	U	1.0	0.16
110-75-8	2-Chloroethyl vinyl ether	0.26	U	10	0.26
98-82-8	Isopropylbenzene	0.090	U	1.0	0.090
95-49-8	2-Chlorotoluene	0.15	U	1.0	0.15
78-93-3	2-Butanone (MEK)	1.2	U	10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	0.42	U	10	0.42
108-86-1	Bromobenzene	0.12	U	1.0	0.12
1634-04-4	Methyl tert-butyl ether	0.070	U	1.0	0.070
74-97-5	Bromochloromethane	0.14	U	1.0	0.14
75-09-2	Methylene Chloride	2.6	U	5.0	2.6
106-43-4	4-Chlorotoluene	0.090	U	1.0	0.090
99-87-6	4-Isopropyltoluene	0.13	U	1.0	0.13
100-42-5	Styrene	0.10	U	1.0	0.10
179601-23-1	m-Xylene & p-Xylene	0.080	U	2.0	0.080
95-47-6	o-Xylene	0.090	U	1.0	0.090
87-68-3	Hexachlorobutadiene	0.83	U	1.0	0.83
127-18-4	Tetrachloroethene	0.15	U	1.0	0.15
74-95-3	Dibromomethane	0.090	U	1.0	0.090
108-88-3	Toluene	0.14	U	1.0	0.14
108-20-3	Diisopropyl ether	0.17	U	10	0.17
91-20-3	Naphthalene	0.32	U	1.0	0.32
156-60-5	trans-1,2-Dichloroethene	0.19	U	1.0	0.19
104-51-8	n-Butylbenzene	0.14	U	1.0	0.14
10061-02-6	trans-1,3-Dichloropropene	0.67	U	1.0	0.67
103-65-1	N-Propylbenzene	0.15	U	1.0	0.15
79-01-6	Trichloroethene	0.10	U	1.0	0.10
135-98-8	sec-Butylbenzene	0.13	U	1.0	0.13
75-69-4	Trichlorofluoromethane	0.45	U	1.0	0.45
994-05-8	Tert-amyl methyl ether	0.11	U	5.0	0.11
637-92-3	Ethyl tert-butyl ether	0.15	U	5.0	0.15
98-06-6	tert-Butylbenzene	0.14	U	1.0	0.14
75-01-4	Vinyl chloride	0.20	U	1.0	0.20
108-05-4	Vinyl acetate	0.19	U	2.0	0.19
75-65-0	tert-Butyl alcohol	1.7	U	50	1.7
1330-20-7	Xylenes, Total	0.15	U	2.0	0.15
124-48-1	Chlorodibromomethane	0.39	U	1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: MB 240-354546/6
 Matrix: Water Lab File ID: UXJ6208.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 11:14
 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.: 354546 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	111		70-121
460-00-4	4-Bromofluorobenzene (Surr)	78		59-120
2037-26-5	Toluene-d8 (Surr)	79		70-123
1868-53-7	Dibromofluoromethane (Surr)	120		75-128

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-354032/6
 Matrix: Solid Lab File ID: UX80627.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:02
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	26.1		5.0	3.0
563-58-6	1,1-Dichloropropene	24.8		5.0	0.99
75-34-3	1,1-Dichloroethane	25.2		5.0	0.69
87-61-6	1,2,3-Trichlorobenzene	22.4		5.0	0.57
96-18-4	1,2,3-Trichloropropane	24.2		5.0	1.6
107-06-2	1,2-Dichloroethane	24.0		5.0	0.77
75-35-4	1,1-Dichloroethene	27.6		5.0	0.90
78-87-5	1,2-Dichloropropane	24.3		5.0	0.85
95-63-6	1,2,4-Trimethylbenzene	24.6		5.0	1.0
591-78-6	2-Hexanone	48.1		20	4.1
79-34-5	1,1,2,2-Tetrachloroethane	24.2		5.0	1.4
67-64-1	Acetone	54.2		25	21
71-43-2	Benzene	23.7		5.0	0.70
75-25-2	Bromoform	20.9		5.0	2.4
74-83-9	Bromomethane	24.7		5.0	0.99
75-15-0	Carbon disulfide	26.5		5.0	1.2
56-23-5	Carbon tetrachloride	26.6		5.0	3.3
71-55-6	1,1,1-Trichloroethane	27.7		5.0	0.82
108-90-7	Chlorobenzene	23.4		5.0	0.92
142-28-9	1,3-Dichloropropane	23.4		5.0	0.99
75-00-3	Chloroethane	25.5		5.0	1.2
96-12-8	1,2-Dibromo-3-Chloropropane	21.9		10	3.6
67-66-3	Chloroform	25.1		5.0	0.79
74-87-3	Chloromethane	25.1		5.0	1.0
156-59-2	cis-1,2-Dichloroethene	24.6		5.0	0.65
10061-01-5	cis-1,3-Dichloropropene	24.1		5.0	1.4
75-27-4	Bromodichloromethane	24.3		5.0	0.68
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	26.3		5.0	1.3
75-71-8	Dichlorodifluoromethane	22.8		5.0	0.94
120-82-1	1,2,4-Trichlorobenzene	20.5		5.0	0.57
100-41-4	Ethylbenzene	23.6		5.0	1.0
106-93-4	1,2-Dibromoethane	24.1		5.0	0.77
594-20-7	2,2-Dichloropropane	25.5		5.0	1.2
95-50-1	1,2-Dichlorobenzene	23.0		5.0	1.1
541-73-1	1,3-Dichlorobenzene	22.9		5.0	0.82

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-354032/6
 Matrix: Solid Lab File ID: UX80627.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:02
 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.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
106-46-7	1,4-Dichlorobenzene	22.4		5.0	0.88
110-75-8	2-Chloroethyl vinyl ether	22.3	J	50	8.9
98-82-8	Isopropylbenzene	25.3		5.0	0.83
95-49-8	2-Chlorotoluene	24.0		5.0	0.95
78-93-3	2-Butanone (MEK)	48.7		20	3.6
108-10-1	4-Methyl-2-pentanone (MIBK)	49.5		20	3.7
108-86-1	Bromobenzene	22.7		5.0	1.2
1634-04-4	Methyl tert-butyl ether	25.1		5.0	0.82
74-97-5	Bromochloromethane	26.5		5.0	0.59
75-09-2	Methylene Chloride	27.2		25	12
106-43-4	4-Chlorotoluene	24.5		5.0	0.86
99-87-6	p-Isopropyltoluene	25.4		5.0	2.9
100-42-5	Styrene	24.2		5.0	1.2
179601-23-1	m-Xylene & p-Xylene	24.2		10	0.78
95-47-6	o-Xylene	24.6		5.0	0.86
87-68-3	Hexachlorobutadiene	23.2		5.0	3.7
127-18-4	Tetrachloroethene	23.3		5.0	0.73
74-95-3	Dibromomethane	23.7		5.0	0.67
108-88-3	Toluene	23.9		5.0	0.77
91-20-3	Naphthalene	21.3		5.0	2.7
156-60-5	trans-1,2-Dichloroethene	26.5		5.0	0.47
104-51-8	n-Butylbenzene	25.0		5.0	3.5
10061-02-6	trans-1,3-Dichloropropene	20.3		5.0	1.0
103-65-1	N-Propylbenzene	24.7		5.0	0.73
79-01-6	Trichloroethene	23.4		5.0	0.63
135-98-8	sec-Butylbenzene	24.6		5.0	0.86
75-69-4	Trichlorofluoromethane	26.4		5.0	1.1
98-06-6	tert-Butylbenzene	24.2		5.0	0.91
75-01-4	Vinyl chloride	28.8		5.0	0.84
108-05-4	Vinyl acetate	24.4		10	2.1
75-65-0	tert-Butyl alcohol	231		200	17
1330-20-7	Xylenes, Total	48.8		10	1.6
124-48-1	Dibromochloromethane	21.3		5.0	2.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-354032/6
 Matrix: Solid Lab File ID: UX80627.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5(g) Date Analyzed: 11/07/2018 06:02
 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.: 354032 Units: ug/Kg

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	82		48-123
460-00-4	4-Bromofluorobenzene (Surr)	82		49-141
2037-26-5	Toluene-d8 (Surr)	88		62-135
1868-53-7	Dibromofluoromethane (Surr)	91		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-354546/4
 Matrix: Water Lab File ID: UXJ6205.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 10:07
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	11.5		1.0	0.14
563-58-6	1,1-Dichloropropene	10.0		1.0	0.14
75-34-3	1,1-Dichloroethane	10.2		1.0	0.17
87-61-6	1,2,3-Trichlorobenzene	9.81		1.0	0.54
96-18-4	1,2,3-Trichloropropane	8.70		1.0	0.24
107-06-2	1,2-Dichloroethane	10.3		1.0	0.21
75-35-4	1,1-Dichloroethene	9.84		1.0	0.19
78-87-5	1,2-Dichloropropane	9.09		1.0	0.15
95-63-6	1,2,4-Trimethylbenzene	7.79		1.0	0.070
591-78-6	2-Hexanone	13.3		10	0.54
79-34-5	1,1,2,2-Tetrachloroethane	7.50		1.0	0.13
67-64-1	Acetone	19.7		10	5.4
71-43-2	Benzene	9.37		1.0	0.13
75-25-2	Bromoform	12.1		1.0	0.76
74-83-9	Bromomethane	8.42		1.0	0.42
75-15-0	Carbon disulfide	9.49		1.0	0.28
56-23-5	Carbon tetrachloride	12.4		1.0	0.26
71-55-6	1,1,1-Trichloroethane	11.8		1.0	0.24
108-90-7	Chlorobenzene	9.76		1.0	0.14
142-28-9	1,3-Dichloropropane	8.19		1.0	0.21
75-00-3	Chloroethane	7.26		1.0	0.83
96-12-8	1,2-Dibromo-3-Chloropropane	8.63		2.0	0.91
67-66-3	Chloroform	11.6		1.0	0.13
74-87-3	Chloromethane	8.56		1.0	0.20
156-59-2	cis-1,2-Dichloroethene	10.5		1.0	0.16
10061-01-5	cis-1,3-Dichloropropene	8.17		1.0	0.61
75-27-4	Bromodichloromethane	10.3		1.0	0.17
76-13-1	1,1,2-Trichlorotrifluoroethane	11.8		1.0	0.41
75-71-8	Dichlorodifluoromethane	13.0		1.0	0.35
120-82-1	1,2,4-Trichlorobenzene	9.07		1.0	0.26
100-41-4	Ethylbenzene	9.01		1.0	0.11
106-93-4	1,2-Dibromoethane	8.65		1.0	0.12
594-20-7	2,2-Dichloropropane	10.6		1.0	0.31
95-50-1	1,2-Dichlorobenzene	9.54		1.0	0.15
541-73-1	1,3-Dichlorobenzene	9.54		1.0	0.15
106-46-7	1,4-Dichlorobenzene	9.35		1.0	0.16

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-354546/4
 Matrix: Water Lab File ID: UXJ6205.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 10:07
 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.: 354546 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
110-75-8	2-Chloroethyl vinyl ether	5.89	J	10	0.26
98-82-8	Isopropylbenzene	9.10		1.0	0.090
95-49-8	2-Chlorotoluene	9.42		1.0	0.15
78-93-3	2-Butanone (MEK)	13.3		10	1.2
108-10-1	4-Methyl-2-pentanone (MIBK)	14.6		10	0.42
108-86-1	Bromobenzene	9.88		1.0	0.12
1634-04-4	Methyl tert-butyl ether	9.55		1.0	0.070
74-97-5	Bromochloromethane	13.3		1.0	0.14
75-09-2	Methylene Chloride	11.5		5.0	2.6
106-43-4	4-Chlorotoluene	8.99		1.0	0.090
99-87-6	4-Isopropyltoluene	7.86		1.0	0.13
100-42-5	Styrene	9.03		1.0	0.10
179601-23-1	m-Xylene & p-Xylene	9.16		2.0	0.080
95-47-6	o-Xylene	9.22		1.0	0.090
87-68-3	Hexachlorobutadiene	8.59		1.0	0.83
127-18-4	Tetrachloroethene	11.3		1.0	0.15
74-95-3	Dibromomethane	9.53		1.0	0.090
108-88-3	Toluene	8.72		1.0	0.14
91-20-3	Naphthalene	6.89		1.0	0.32
156-60-5	trans-1,2-Dichloroethene	10.8		1.0	0.19
104-51-8	n-Butylbenzene	6.96		1.0	0.14
10061-02-6	trans-1,3-Dichloropropene	7.76		1.0	0.67
103-65-1	N-Propylbenzene	8.02		1.0	0.15
79-01-6	Trichloroethene	10.9		1.0	0.10
135-98-8	sec-Butylbenzene	7.37		1.0	0.13
75-69-4	Trichlorofluoromethane	9.84		1.0	0.45
98-06-6	tert-Butylbenzene	7.25		1.0	0.14
75-01-4	Vinyl chloride	8.62		1.0	0.20
108-05-4	Vinyl acetate	6.74		2.0	0.19
75-65-0	tert-Butyl alcohol	110		50	1.7
1330-20-7	Xylenes, Total	18.4		2.0	0.15
124-48-1	Chlorodibromomethane	10.9		1.0	0.39

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: _____ Lab Sample ID: LCS 240-354546/4
 Matrix: Water Lab File ID: UXJ6205.D
 Analysis Method: 8260B Date Collected: _____
 Sample wt/vol: 5 (mL) Date Analyzed: 11/09/2018 10:07
 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.: 354546 Units: ug/L

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	98		70-121
460-00-4	4-Bromofluorobenzene (Surr)	89		59-120
2037-26-5	Toluene-d8 (Surr)	84		70-123
1868-53-7	Dibromofluoromethane (Surr)	113		75-128

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP MS Lab Sample ID: 240-103610-4 MS
 Matrix: Solid Lab File ID: UX80655.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.42(g) Date Analyzed: 11/07/2018 16:16
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	23.1		5.6	3.3
563-58-6	1,1-Dichloropropene	22.4		5.6	1.1
75-34-3	1,1-Dichloroethane	23.3		5.6	0.77
87-61-6	1,2,3-Trichlorobenzene	16.6		5.6	0.64
96-18-4	1,2,3-Trichloropropane	22.8		5.6	1.7
107-06-2	1,2-Dichloroethane	22.7		5.6	0.86
75-35-4	1,1-Dichloroethene	23.7		5.6	1.0
526-73-8	1,2,3-Trimethylbenzene	2.0	U	5.6	2.0
78-87-5	1,2-Dichloropropane	24.7		5.6	0.95
95-63-6	1,2,4-Trimethylbenzene	22.0		5.6	1.1
591-78-6	2-Hexanone	43.5		22	4.6
79-34-5	1,1,2,2-Tetrachloroethane	23.2		5.6	1.6
67-64-1	Acetone	46.0		28	23
71-43-2	Benzene	23.3		5.6	0.78
75-25-2	Bromoform	17.2		5.6	2.7
74-83-9	Bromomethane	21.7		5.6	1.1
75-15-0	Carbon disulfide	22.0		5.6	1.3
56-23-5	Carbon tetrachloride	22.1		5.6	3.6
71-55-6	1,1,1-Trichloroethane	24.3		5.6	0.92
108-90-7	Chlorobenzene	22.6		5.6	1.0
142-28-9	1,3-Dichloropropane	23.3		5.6	1.1
75-00-3	Chloroethane	21.5		5.6	1.4
96-12-8	1,2-Dibromo-3-Chloropropane	15.9		11	4.0
67-66-3	Chloroform	23.0		5.6	0.88
74-87-3	Chloromethane	22.8		5.6	1.2
156-59-2	cis-1,2-Dichloroethene	24.6		5.6	0.73
10061-01-5	cis-1,3-Dichloropropene	22.3		5.6	1.6
75-27-4	Bromodichloromethane	22.7		5.6	0.76
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	23.3		5.6	1.4
75-71-8	Dichlorodifluoromethane	19.5		5.6	1.1
120-82-1	1,2,4-Trichlorobenzene	14.8		5.6	0.64
100-41-4	Ethylbenzene	22.5		5.6	1.2
106-93-4	1,2-Dibromoethane	22.9		5.6	0.86
594-20-7	2,2-Dichloropropane	19.7		5.6	1.3
95-50-1	1,2-Dichlorobenzene	20.6		5.6	1.2

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP MS Lab Sample ID: 240-103610-4 MS
 Matrix: Solid Lab File ID: UX80655.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.42(g) Date Analyzed: 11/07/2018 16:16
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	20.6		5.6	0.91
106-46-7	1,4-Dichlorobenzene	19.9		5.6	0.98
110-75-8	2-Chloroethyl vinyl ether	17.9	J	56	9.9
98-82-8	Isopropylbenzene	22.6		5.6	0.93
95-49-8	2-Chlorotoluene	22.4		5.6	1.1
78-93-3	2-Butanone (MEK)	43.8		22	4.0
108-10-1	4-Methyl-2-pentanone (MIBK)	44.2		22	4.1
108-86-1	Bromobenzene	22.0		5.6	1.3
1634-04-4	Methyl tert-butyl ether	22.3		5.6	0.92
74-97-5	Bromochloromethane	23.4		5.6	0.66
75-09-2	Methylene Chloride	24.5	J	28	13
106-43-4	4-Chlorotoluene	22.6		5.6	0.96
99-87-6	p-Isopropyltoluene	21.4		5.6	3.3
100-42-5	Styrene	22.8		5.6	1.3
179601-23-1	m-Xylene & p-Xylene	22.1		11	0.87
95-47-6	o-Xylene	23.0		5.6	0.96
87-68-3	Hexachlorobutadiene	15.7		5.6	4.2
127-18-4	Tetrachloroethene	21.9		5.6	0.81
74-95-3	Dibromomethane	22.5		5.6	0.75
108-88-3	Toluene	23.6		5.6	0.86
108-20-3	Diisopropyl ether	0.85	U	11	0.85
91-20-3	Naphthalene	15.3		5.6	3.0
156-60-5	trans-1,2-Dichloroethene	24.1		5.6	0.52
104-51-8	n-Butylbenzene	19.4		5.6	3.9
10061-02-6	trans-1,3-Dichloropropene	18.4		5.6	1.2
103-65-1	N-Propylbenzene	22.3		5.6	0.82
79-01-6	Trichloroethene	129		5.6	0.71
135-98-8	sec-Butylbenzene	21.5		5.6	0.96
75-69-4	Trichlorofluoromethane	21.9		5.6	1.2
994-05-8	Tert-amyl methyl ether	2.5	U	5.6	2.5
637-92-3	Ethyl tert-butyl ether	2.5	U	5.6	2.5
98-06-6	tert-Butylbenzene	22.0		5.6	1.0
75-01-4	Vinyl chloride	24.3		5.6	0.93
108-05-4	Vinyl acetate	22.7		11	2.4
75-65-0	tert-Butyl alcohol	201	J	220	18
1330-20-7	Xylenes, Total	45.1		11	1.8

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP MS Lab Sample ID: 240-103610-4 MS
 Matrix: Solid Lab File ID: UX80655.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.42(g) Date Analyzed: 11/07/2018 16:16
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	19.0		5.6	3.1

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	79		48-123
460-00-4	4-Bromofluorobenzene (Surr)	83		49-141
2037-26-5	Toluene-d8 (Surr)	88		62-135
1868-53-7	Dibromofluoromethane (Surr)	83		49-132

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP MSD Lab Sample ID: 240-103610-4 MSD
 Matrix: Solid Lab File ID: UX80656.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.02(g) Date Analyzed: 11/07/2018 16:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
630-20-6	1,1,1,2-Tetrachloroethane	27.2		6.0	3.6
563-58-6	1,1-Dichloropropene	26.3		6.0	1.2
75-34-3	1,1-Dichloroethane	27.7		6.0	0.84
87-61-6	1,2,3-Trichlorobenzene	16.7		6.0	0.69
96-18-4	1,2,3-Trichloropropane	27.8		6.0	1.9
107-06-2	1,2-Dichloroethane	26.0		6.0	0.93
75-35-4	1,1-Dichloroethene	28.8		6.0	1.1
526-73-8	1,2,3-Trimethylbenzene	2.2	U	6.0	2.2
78-87-5	1,2-Dichloropropane	27.5		6.0	1.0
95-63-6	1,2,4-Trimethylbenzene	25.3		6.0	1.2
591-78-6	2-Hexanone	50.2		24	4.9
79-34-5	1,1,2,2-Tetrachloroethane	26.7		6.0	1.7
67-64-1	Acetone	60.0		30	25
71-43-2	Benzene	26.8		6.0	0.84
75-25-2	Bromoform	20.8		6.0	2.9
74-83-9	Bromomethane	27.3		6.0	1.2
75-15-0	Carbon disulfide	28.1		6.0	1.4
56-23-5	Carbon tetrachloride	27.4		6.0	3.9
71-55-6	1,1,1-Trichloroethane	28.9		6.0	0.99
108-90-7	Chlorobenzene	25.6		6.0	1.1
142-28-9	1,3-Dichloropropane	25.8		6.0	1.2
75-00-3	Chloroethane	29.8		6.0	1.5
96-12-8	1,2-Dibromo-3-Chloropropane	18.4		12	4.3
67-66-3	Chloroform	28.1		6.0	0.95
74-87-3	Chloromethane	29.2		6.0	1.3
156-59-2	cis-1,2-Dichloroethene	29.6		6.0	0.78
10061-01-5	cis-1,3-Dichloropropene	25.9		6.0	1.7
75-27-4	Bromodichloromethane	26.0		6.0	0.82
76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	27.7		6.0	1.5
75-71-8	Dichlorodifluoromethane	23.7		6.0	1.1
120-82-1	1,2,4-Trichlorobenzene	15.1		6.0	0.69
100-41-4	Ethylbenzene	26.1		6.0	1.3
106-93-4	1,2-Dibromoethane	25.4		6.0	0.93
594-20-7	2,2-Dichloropropane	25.0		6.0	1.4
95-50-1	1,2-Dichlorobenzene	20.4		6.0	1.3

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP MSD Lab Sample ID: 240-103610-4 MSD
 Matrix: Solid Lab File ID: UX80656.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.02(g) Date Analyzed: 11/07/2018 16:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
541-73-1	1,3-Dichlorobenzene	23.9		6.0	0.98
106-46-7	1,4-Dichlorobenzene	22.9		6.0	1.1
110-75-8	2-Chloroethyl vinyl ether	20.3	J	60	11
98-82-8	Isopropylbenzene	26.8		6.0	1.0
95-49-8	2-Chlorotoluene	24.6		6.0	1.1
78-93-3	2-Butanone (MEK)	50.8		24	4.3
108-10-1	4-Methyl-2-pentanone (MIBK)	51.5		24	4.5
108-86-1	Bromobenzene	23.9		6.0	1.4
1634-04-4	Methyl tert-butyl ether	26.9		6.0	0.99
74-97-5	Bromochloromethane	28.7		6.0	0.72
75-09-2	Methylene Chloride	30.7		30	14
106-43-4	4-Chlorotoluene	24.9		6.0	1.0
99-87-6	p-Isopropyltoluene	25.1		6.0	3.6
100-42-5	Styrene	26.6		6.0	1.4
179601-23-1	m-Xylene & p-Xylene	25.4		12	0.94
95-47-6	o-Xylene	26.8		6.0	1.0
87-68-3	Hexachlorobutadiene	16.0		6.0	4.5
127-18-4	Tetrachloroethene	24.8		6.0	0.88
74-95-3	Dibromomethane	26.7		6.0	0.81
108-88-3	Toluene	25.5		6.0	0.93
108-20-3	Diisopropyl ether	0.91	U	12	0.91
91-20-3	Naphthalene	15.9		6.0	3.3
156-60-5	trans-1,2-Dichloroethene	29.1		6.0	0.56
104-51-8	n-Butylbenzene	20.2		6.0	4.2
10061-02-6	trans-1,3-Dichloropropene	19.7		6.0	1.2
103-65-1	N-Propylbenzene	24.9		6.0	0.88
79-01-6	Trichloroethene	171		6.0	0.76
135-98-8	sec-Butylbenzene	25.3		6.0	1.0
75-69-4	Trichlorofluoromethane	28.6		6.0	1.3
994-05-8	Tert-amyl methyl ether	2.7	U	6.0	2.7
637-92-3	Ethyl tert-butyl ether	2.7	U	6.0	2.7
98-06-6	tert-Butylbenzene	25.1		6.0	1.1
75-01-4	Vinyl chloride	31.8		6.0	1.0
108-05-4	Vinyl acetate	25.5		12	2.6
75-65-0	tert-Butyl alcohol	244		240	20
1330-20-7	Xylenes, Total	52.2		12	1.9

FORM I
GC/MS VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1
 SDG No.: _____
 Client Sample ID: SB-SEMW-10D-DUP MSD Lab Sample ID: 240-103610-4 MSD
 Matrix: Solid Lab File ID: UX80656.D
 Analysis Method: 8260B Date Collected: 10/29/2018 00:00
 Sample wt/vol: 5.02(g) Date Analyzed: 11/07/2018 16:38
 Soil Aliquot Vol: _____ Dilution Factor: 1
 Soil Extract Vol.: _____ GC Column: DB-624 ID: 0.18 (mm)
 % Moisture: 17.4 Level: (low/med) Low
 Analysis Batch No.: 354032 Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
124-48-1	Dibromochloromethane	22.4		6.0	3.4

CAS NO.	SURROGATE	%REC	Q	LIMITS
17060-07-0	1,2-Dichloroethane-d4 (Surr)	81		48-123
460-00-4	4-Bromofluorobenzene (Surr)	83		49-141
2037-26-5	Toluene-d8 (Surr)	87		62-135
1868-53-7	Dibromofluoromethane (Surr)	88		49-132

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica CantonJob No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX11Start Date: 08/07/2018 09:44Analysis Batch Number: 339715End Date: 08/07/2018 18:07

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-339715/1		08/07/2018 09:44	1	J80807A.D	DB-624 0.18 (mm)
STD8260 240-339715/2 IC		08/07/2018 10:19	1	UXJ3440.D	DB-624 0.18 (mm)
STD8260 240-339715/3 IC		08/07/2018 10:41	1	UXJ3441.D	DB-624 0.18 (mm)
STD8260 240-339715/4 ICIS		08/07/2018 11:03	1	UXJ3442.D	DB-624 0.18 (mm)
STD8260 240-339715/5 IC		08/07/2018 11:26	1	UXJ3443.D	DB-624 0.18 (mm)
STD8260 240-339715/6 IC		08/07/2018 11:48	1	UXJ3444.D	DB-624 0.18 (mm)
STD8260 240-339715/7 IC		08/07/2018 12:10	1	UXJ3445.D	DB-624 0.18 (mm)
ICV 240-339715/14		08/07/2018 12:33	1	UXJ3446.D	DB-624 0.18 (mm)
STD6 240-339715/8 IC		08/07/2018 12:55	1	UXJ3447.D	DB-624 0.18 (mm)
STD5 240-339715/9 IC		08/07/2018 13:17	1	UXJ3448.D	DB-624 0.18 (mm)
STD4 240-339715/10 IC		08/07/2018 13:39	1	UXJ3449.D	DB-624 0.18 (mm)
STD3 240-339715/11 IC		08/07/2018 14:02	1	UXJ3450.D	DB-624 0.18 (mm)
STD2 240-339715/12 IC		08/07/2018 14:24	1	UXJ3451.D	DB-624 0.18 (mm)
STD1 240-339715/13 IC		08/07/2018 14:46	1	UXJ3452.D	DB-624 0.18 (mm)
ICV 240-339715/15		08/07/2018 15:08	1	UXJ3453.D	DB-624 0.18 (mm)
STD 240-339715/16 IC		08/07/2018 15:31	1		DB-624 0.18 (mm)
STD 240-339715/17 IC		08/07/2018 15:53	1		DB-624 0.18 (mm)
STD 240-339715/18 IC		08/07/2018 16:15	1		DB-624 0.18 (mm)
STD 240-339715/19 IC		08/07/2018 16:37	1		DB-624 0.18 (mm)
STD 240-339715/20 IC		08/07/2018 17:00	1		DB-624 0.18 (mm)
STD 240-339715/21 IC		08/07/2018 17:22	1		DB-624 0.18 (mm)
MRL 240-339715/22 MDLV		08/07/2018 17:45	1		DB-624 0.18 (mm)
MRL 240-339715/23 MDLV		08/07/2018 18:07	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica CantonJob No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX11Start Date: 11/09/2018 09:19Analysis Batch Number: 354546End Date: 11/09/2018 20:06

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-354546/1		11/09/2018 09:19	1	BFB1109A.D	DB-624 0.18 (mm)
CCVIS 240-354546/2		11/09/2018 09:45	1	UXJ6204.D	DB-624 0.18 (mm)
LCS 240-354546/4		11/09/2018 10:07	1	UXJ6205.D	DB-624 0.18 (mm)
CCV 240-354546/3		11/09/2018 10:29	1	UXJ6206.D	DB-624 0.18 (mm)
MRL 240-354546/5 MDLV		11/09/2018 10:52	1		DB-624 0.18 (mm)
MB 240-354546/6		11/09/2018 11:14	1	UXJ6208.D	DB-624 0.18 (mm)
ZZZZZ		11/09/2018 11:58	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 12:20	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 12:42	25		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 13:05	2		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 13:27	50		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 13:49	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 14:12	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 14:34	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 15:18	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 15:40	50		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 16:02	5000		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 16:24	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 16:46	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 17:08	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 17:30	1		DB-624 0.18 (mm)
240-103610-1		11/09/2018 17:52	1	UXJ6226.D	DB-624 0.18 (mm)
ZZZZZ		11/09/2018 18:15	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 18:37	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 18:59	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 19:21	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 19:44	1		DB-624 0.18 (mm)
ZZZZZ		11/09/2018 20:06	2		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX8 Start Date: 10/18/2018 01:59

Analysis Batch Number: 350647 End Date: 10/18/2018 13:54

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-350647/1		10/18/2018 01:59	1	BFB8753.D	DB-624 0.18 (mm)
CCVIS 240-350647/3		10/18/2018 02:31	1		DB-624 0.18 (mm)
STDA9 240-350647/4 IC		10/18/2018 02:52	1	UX80006.D	DB-624 0.18 (mm)
STDA9 240-350647/5 IC		10/18/2018 03:14	1	UX80007.D	DB-624 0.18 (mm)
STDA9 240-350647/6 IC		10/18/2018 03:37	1	UX80008.D	DB-624 0.18 (mm)
STDA9 240-350647/7 IC		10/18/2018 04:00	1	UX80009.D	DB-624 0.18 (mm)
STDA9 240-350647/8 IC		10/18/2018 04:21	1	UX80010.D	DB-624 0.18 (mm)
STDA9 240-350647/9 IC		10/18/2018 04:43	1	UX80011.D	DB-624 0.18 (mm)
STDA9 240-350647/10 IC		10/18/2018 05:05	1	UX80012.D	DB-624 0.18 (mm)
STDA9 240-350647/11 IC		10/18/2018 05:27	1	UX80013.D	DB-624 0.18 (mm)
STDA9 240-350647/12 IC		10/18/2018 05:49	1	UX80014.D	DB-624 0.18 (mm)
ICV 240-350647/13		10/18/2018 06:12	1		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 06:34	1		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 06:56	1		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 12:05	1		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 12:26	1		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 12:48	1		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 13:09	2		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 13:32	2.5		DB-624 0.18 (mm)
ZZZZZ		10/18/2018 13:54	1		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX8 Start Date: 11/06/2018 06:11

Analysis Batch Number: 353820 End Date: 11/06/2018 16:43

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-353820/1		11/06/2018 06:11	1	BFB8776.D	DB-624 0.18 (mm)
STD8260 240-353820/3 IC		11/06/2018 06:49	1	UX80595.D	DB-624 0.18 (mm)
STD8260 240-353820/4 IC		11/06/2018 07:11	1	UX80596.D	DB-624 0.18 (mm)
STD8260 240-353820/5 IC		11/06/2018 07:34	1	UX80597.D	DB-624 0.18 (mm)
STD8260 240-353820/6 IC		11/06/2018 07:56	1	UX80598.D	DB-624 0.18 (mm)
ICIS 240-353820/7		11/06/2018 08:18	1	UX80599.D	DB-624 0.18 (mm)
STD8260 240-353820/8 IC		11/06/2018 08:40	1	UX80600.D	DB-624 0.18 (mm)
STD8260 240-353820/9 IC		11/06/2018 09:02	1	UX80601.D	DB-624 0.18 (mm)
STD8260 240-353820/10 IC		11/06/2018 09:24	1	UX80602.D	DB-624 0.18 (mm)
STD8260 240-353820/11 IC		11/06/2018 09:45	1	UX80603.D	DB-624 0.18 (mm)
ICV 240-353820/13		11/06/2018 10:30	1	UX80605.D	DB-624 0.18 (mm)
ZZZZZ		11/06/2018 11:13	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 12:19	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 12:41	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 13:03	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 13:25	3.333		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 13:47	3.333		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 14:08	5		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 14:30	4		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 14:52	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 15:14	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 15:36	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 15:58	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 16:21	1		DB-624 0.18 (mm)
ZZZZZ		11/06/2018 16:43	12.5		DB-624 0.18 (mm)

GC/MS VOA ANALYSIS RUN LOG

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Instrument ID: A3UX8 Start Date: 11/07/2018 04:45

Analysis Batch Number: 354032 End Date: 11/07/2018 16:38

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
BFB 240-354032/1		11/07/2018 04:45	1	BFB8777.D	DB-624 0.18 (mm)
CCVIS 240-354032/4		11/07/2018 05:19	1	UX80625.D	DB-624 0.18 (mm)
CCV 240-354032/5		11/07/2018 05:41	1	UX80626.D	DB-624 0.18 (mm)
LCS 240-354032/6		11/07/2018 06:02	1	UX80627.D	DB-624 0.18 (mm)
MB 240-354032/7		11/07/2018 06:24	1	UX80628.D	DB-624 0.18 (mm)
ZZZZZ		11/07/2018 06:47	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 11:13	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 11:34	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 11:56	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 12:18	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 12:40	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 13:02	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 13:24	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 13:45	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 14:07	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 14:29	1		DB-624 0.18 (mm)
ZZZZZ		11/07/2018 14:50	1		DB-624 0.18 (mm)
240-103610-2		11/07/2018 15:12	1	UX80652.D	DB-624 0.18 (mm)
240-103610-3		11/07/2018 15:33	1	UX80653.D	DB-624 0.18 (mm)
240-103610-4		11/07/2018 15:54	1	UX80654.D	DB-624 0.18 (mm)
240-103610-4 MS		11/07/2018 16:16	1	UX80655.D	DB-624 0.18 (mm)
240-103610-4 MSD		11/07/2018 16:38	1	UX80656.D	DB-624 0.18 (mm)

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 339715 Batch Start Date: 08/07/18 09:44 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	vm50is_stk_A 00001	vm50ss_stk 00077	vm50ss_stk 00078	VMAROLISTDW 00258
BFB 240-339715/1		8260B		5 mL	5 mL				
STD8260 240-339715/2 IC		8260B		5 mL	5 mL	2 uL	32 uL		32 uL
STD8260 240-339715/3 IC		8260B		5 mL	5 mL	2 uL	16 uL		16 uL
STD8260 240-339715/4 ICIS		8260B		5 mL	5 mL	2 uL	8 uL		8 uL
STD8260 240-339715/5 IC		8260B		5 mL	5 mL	2 uL	4 uL		4 uL
STD8260 240-339715/6 IC		8260B		5 mL	5 mL	2 uL	1.6 uL		1.6 uL
STD8260 240-339715/7 IC		8260B		5 mL	5 mL	2 uL	0.8 uL		0.8 uL
STD6 240-339715/8 IC		8260B		5 mL	5 mL	2 uL			
STD5 240-339715/9 IC		8260B		5 mL	5 mL	2 uL			
STD4 240-339715/10 IC		8260B		5 mL	5 mL	2 uL			
STD3 240-339715/11 IC		8260B		5 mL	5 mL	2 uL			
STD2 240-339715/12 IC		8260B		5 mL	5 mL	2 uL			
STD1 240-339715/13 IC		8260B		5 mL	5 mL	2 uL			
ICV 240-339715/14		8260B		5 mL	5 mL	2 uL		2 uL	
ICV 240-339715/15		8260B		5 mL	5 mL	2 uL		2 uL	

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	VMFASA9W 00196	VMFASAW 00243	VMFASGW 00269	VMFASPW 00261	VMRA9W 00260
BFB 240-339715/1		8260B		1 uL					
STD8260 240-339715/2 IC		8260B							

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 339715 Batch Start Date: 08/07/18 09:44 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	vmbfb 00020	VMFASA9W 00196	VMFASAW 00243	VMFASGW 00269	VMFASPW 00261	VMRA9W 00260
STD8260 240-339715/3 IC		8260B							
STD8260 240-339715/4 ICIS		8260B							
STD8260 240-339715/5 IC		8260B							
STD8260 240-339715/6 IC		8260B							
STD8260 240-339715/7 IC		8260B							
STD6 240-339715/8 IC		8260B							32 uL
STD5 240-339715/9 IC		8260B							16 uL
STD4 240-339715/10 IC		8260B							8 uL
STD3 240-339715/11 IC		8260B							4 uL
STD2 240-339715/12 IC		8260B							1.6 uL
STD1 240-339715/13 IC		8260B							0.8 uL
ICV 240-339715/14		8260B				8 uL	8 uL	8 uL	
ICV 240-339715/15		8260B			8 uL				

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00256	VMRPRIMW 00295				
BFB 240-339715/1		8260B							
STD8260 240-339715/2 IC		8260B		32 uL	32 uL				
STD8260 240-339715/3 IC		8260B		16 uL	16 uL				
STD8260 240-339715/4 ICIS		8260B		8 uL	8 uL				

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 339715 Batch Start Date: 08/07/18 09:44 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00256	VMRPRIMW 00295				
STD8260 240-339715/5 IC		8260B		4 uL	4 uL				
STD8260 240-339715/6 IC		8260B		1.6 uL	1.6 uL				
STD8260 240-339715/7 IC		8260B		0.8 uL	0.8 uL				
STD6 240-339715/8 IC		8260B							
STD5 240-339715/9 IC		8260B							
STD4 240-339715/10 IC		8260B							
STD3 240-339715/11 IC		8260B							
STD2 240-339715/12 IC		8260B							
STD1 240-339715/13 IC		8260B							
ICV 240-339715/14		8260B							
ICV 240-339715/15		8260B							

Batch Notes	
pH Indicator ID	HC746949

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 354032 Batch Start Date: 11/07/18 04:45 Batch Analyst: Lata, Todd

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	VM568718 00012	VMAROLISTDW 00271	vmbfb 00020	VMFASAW 00255
BFB 240-354032/1		8260B		5 mL	5 mL			1 uL	
CCVIS 240-354032/4		8260B		5 mL	5 mL	1 uL	2 uL		
CCV 240-354032/5		8260B		5 mL	5 mL	1 uL			
LCS 240-354032/6		8260B		5 g	5 mL	1 uL			2.5 uL
MB 240-354032/7		8260B		5 g	5 mL	1 uL			
240-103610-B-2-A	SB-SEMW-10D-10-15	8260B	T	5 g	5 mL	1 uL			
240-103610-B-3-A	SB-SEMW-10D-20-28	8260B	T	5 g	5 mL	1 uL			
240-103610-B-4-A	SB-SEMW-10D-DUP	8260B	T	5 g	5 mL	1 uL			
240-103610-B-4-B MS	SB-SEMW-10D-DUP	8260B	T	5 g	5 mL	1 uL			2.5 uL
240-103610-B-4-C MSD	SB-SEMW-10D-DUP	8260B	T	5 g	5 mL	1 uL			2.5 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMFASGW 00281	VMFASPW 00274	VMRA9W 00272	VMRGAS 00268	VMRPRIMW 00307	VMUX8SS 00029
BFB 240-354032/1		8260B							
CCVIS 240-354032/4		8260B					2 uL	2 uL	1.1547 uL
CCV 240-354032/5		8260B				2 uL			
LCS 240-354032/6		8260B		2.5 uL	2.5 uL				1.1547 uL
MB 240-354032/7		8260B							1.1547 uL
240-103610-B-2-A	SB-SEMW-10D-10-15	8260B	T						1.1547 uL
240-103610-B-3-A	SB-SEMW-10D-20-28	8260B	T						1.1547 uL
240-103610-B-4-A	SB-SEMW-10D-DUP	8260B	T						1.1547 uL
240-103610-B-4-B MS	SB-SEMW-10D-DUP	8260B	T	2.5 uL	2.5 uL				1.1547 uL
240-103610-B-4-C MSD	SB-SEMW-10D-DUP	8260B	T	2.5 uL	2.5 uL				1.1547 uL

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 354032 Batch Start Date: 11/07/18 04:45 Batch Analyst: Lata, Todd

Batch Method: 8260B Batch End Date: _____

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 354057 Batch Start Date: 11/07/18 06:51 Batch Analyst: Lata, Todd

Batch Method: 5030A Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount				
240-103610-B-2	SB-SEMW-10D-10-1 5	5030A, 8260B	T	5.33 g	5 mL				
240-103610-B-3	SB-SEMW-10D-20-2 8	5030A, 8260B	T	5.07 g	5 mL				
240-103610-B-4	SB-SEMW-10D-DUP	5030A, 8260B	T	5.18 g	5 mL				
240-103610-B-4 MS	SB-SEMW-10D-DUP	5030A, 8260B	T	5.42 g	5 mL				
240-103610-B-4 MSD	SB-SEMW-10D-DUP	5030A, 8260B	T	5.02 g	5 mL				

Batch Notes	
Balance ID	B035
Blank Matrix ID	178797

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 354546 Batch Start Date: 11/09/18 09:19 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date: _____

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	Initial pH	VM50IS 00073	vm50is_stk_A 00001	vm50ss_stk 00079
BFB 240-354546/1		8260B		5 mL	5 mL				
CCVIS 240-354546/2		8260B		5 mL	5 mL			2 uL	2 uL
CCV 240-354546/3		8260B		5 mL	5 mL		2 uL		
LCS 240-354546/4		8260B		5 mL	5 mL			2 uL	2 uL
MB 240-354546/6		8260B		5 mL	5 mL			2 uL	2 uL
240-103610-A-1	TB-102918	8260B	T	5 mL	5 mL	<2 SU		2 uL	2 uL

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMAROLISTDW 00272	VMBFB 00020	VMFASAW 00255	VMFASGW 00282	VMFASPW 00274	VMRA9W 00272
BFB 240-354546/1		8260B			1 uL				
CCVIS 240-354546/2		8260B		8 uL					
CCV 240-354546/3		8260B							8 uL
LCS 240-354546/4		8260B				8 uL	8 uL	8 uL	
MB 240-354546/6		8260B							
240-103610-A-1	TB-102918	8260B	T						

Lab Sample ID	Client Sample ID	Method Chain	Basis	VMRGAS 00269	VMRPRIMW 00308				
BFB 240-354546/1		8260B							
CCVIS 240-354546/2		8260B		8 uL	8 uL				
CCV 240-354546/3		8260B							
LCS 240-354546/4		8260B							
MB 240-354546/6		8260B							
240-103610-A-1	TB-102918	8260B	T						

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.

GC/MS VOA BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 354546 Batch Start Date: 11/09/18 09:19 Batch Analyst: Evans, Laura

Batch Method: 8260B Batch End Date: _____

Batch Notes	
pH Indicator ID	HC746949

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

COVER PAGE
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton

Job Number: 240-103610-1

SDG No.: _____

Project: MRC Block F Deepwell

Client Sample ID
SB-SEMW-10D-10-15
SB-SEMW-10D-20-28
SB-SEMW-10D-DUP

Lab Sample ID
240-103610-2
240-103610-3
240-103610-4

Comments:

9-IN
DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton

Job Number: 240-103610-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

RL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	RL (%)	
Percent Moisture		0.1	
Percent Solids		0.1	

9-IN
CALIBRATION BLANK DETECTION LIMITS
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton

Job Number: 240-103610-1

SDG Number: _____

Matrix: Solid

Instrument ID: NOEQUIP

Method: Moisture

XRL Date: 01/28/2010 09:24

Analyte	Wavelength/ Mass	XRL (mg/L)	
Percent Moisture		10	
Percent Solids		10	

13-IN
ANALYSIS RUN LOG
GENERAL CHEMISTRY

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Instrument ID: NOEQUIP Analysis Method: Moisture

Start Date: 11/01/2018 15:29 End Date: 11/01/2018 16:41

Lab Sample Id	D/F	Type	Time	Analytes																			
				% S	M o i s t																		
ZZZZZZ			15:42																				
ZZZZZZ			15:42																				
ZZZZZZ			15:42																				
ZZZZZZ			15:42																				
ZZZZZZ			15:42																				
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ZZZZZZ			16:38																				
ZZZZZZ			16:38																				
ZZZZZZ			16:41																				
ZZZZZZ			16:41																				

Prep Types: _____
T = Total/NA

GENERAL CHEMISTRY BATCH WORKSHEET

Lab Name: TestAmerica Canton Job No.: 240-103610-1

SDG No.: _____

Batch Number: 353192 Batch Start Date: 11/01/18 15:29 Batch Analyst: Weimer, Joshua W

Batch Method: Moisture Batch End Date: 11/02/18 13:23

Lab Sample ID	Client Sample ID	Method Chain	Basis	DishWeight	SampleMassWet	SampleMassDry			
240-103610-A-2	SB-SEMW-10D-10-1 5	Moisture	T	4.3251 g	16.2186 g	14.1574 g			
240-103610-A-3	SB-SEMW-10D-20-2 8	Moisture	T	4.3251 g	12.3721 g	10.9698 g			
240-103610-A-3 DU	SB-SEMW-10D-20-2 8	Moisture	T	4.3251 g	10.5248 g	9.4692 g			
240-103610-A-4	SB-SEMW-10D-DUP	Moisture	T	4.3251 g	19.8332 g	17.1399 g			




Batch Notes	
Balance ID	B047
Date samples were placed in the oven	11/01/2018
Oven Temp In	104.4 Degrees C
Time samples were place in the oven	17:00
Date samples were removed from oven	11/02/2018
Oven Temp Out	104.4 Degrees C
Time Samples were removed from oven	05:04
Oven ID	002
Thermometer ID	Tempguard Box-C #6

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.

Shipping and Receiving Documents


Regulatory Program: DW NPDES RCRA Other:

Company Name: TECNA TERN INC Address: 10751 Century Blvd. Ste. 200 City/State/Zip: Gaithersburg, MD, 20878 Phone: 301-528-3021 Fax:		Client Contact Project Name: MAL SEMW-10D Site: MAL SEMW-10D PO #: 117-ECO8667		Project Manager: Mike Martin Tel/Fax: 301-528-3021 Analysis Turnaround Time <input type="checkbox"/> CALENDAR DAYS <input type="checkbox"/> WORKING DAYS TAT if different from Below <input type="checkbox"/> 2 weeks <input type="checkbox"/> STANDARD <input type="checkbox"/> 1 week <input type="checkbox"/> 1 day <input type="checkbox"/> 2 days <input type="checkbox"/> 1 day		Site Contact: J. Mills Lab Contact: J. Mills Date: 10/29/18 Carrier: TRC Samples: 1 of 1 COCs For Lab Use Only: Walk-in Client: Lab Sampling: Job / SDG No.:			
Sample Identification TB-102918 SB-SEMW-10D-10-15 SB-SEMW-10D-20-28 SB-SEMW-10D-DUP		Sample Date 10/29/18 1120 1230 0000		Sample Type (C=Comp, G=Grab) G ↓ ↓ ↓		Matrix Ag Sr.1 ↓ ↓		# of Cont. 2 1 1 1	
Filtered Sample (Y/N) <input type="checkbox"/> Y <input type="checkbox"/> N Perform MS / MSD (Y/N) <input type="checkbox"/> Y <input type="checkbox"/> N Sample Specific Notes: <div style="text-align: center;">  240-103610 Chain of Custody </div>									
Preservation Used: <input checked="" type="checkbox"/> Ice, <input type="checkbox"/> 2= HCl, <input type="checkbox"/> 3= H2SO4, <input type="checkbox"/> 4= HNO3, <input type="checkbox"/> 5= NaOH, <input type="checkbox"/> 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.									
Special Instructions/QC Requirements & Comments: Sol samples from SB-SEMW-10D possible well installation									
Relinquished by:  Date/Time: 10/30/18 17:50		Relinquished by:  Date/Time: 10-31-18 1000		Relinquished by: Date/Time:		Relinquished by: Date/Time:		Relinquished by: Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temp. (°C): Obs'd:		Corrd:		Therm ID No.:	

TestAmerica Canton Sample Receipt Form/Narrative
Canton Facility


Login # : 103610

Client Tetra Tech Site Name _____
 Cooler Received on 10-31-18 Opened on 10-31-18
 FedEx: 1st Grd Exp UPS FAS Clipper Client Drop Off TestAmerica Courier Other _____

Cooler unpacked by:


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 +0.9 °C) Observed Cooler Temp. 1.2 °C Corrected Cooler Temp. 2.1 °C
 IR GUN #36 (CF +0.6 °C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 1 Yes No
 -Were the seals on the outside of the cooler(s) signed & dated? Yes No NA
 -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes No
 -Were tamper/custody seals intact and uncompromised? Yes No NA
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 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No NA pH Strip Lot# HC849161
13. Were VOAs on the COC? Yes No
14. Were air bubbles >6 mm in any VOA vials?  ← Larger than this. Yes No NA
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes No
16. Was a LL Hg or Me Hg trip blank present? Yes No

Tests that are not checked for pH by Receiving:
 VOAs
 Oil and Grease
 TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other _____

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES

Samples processed by:
NS

18. 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)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
 Time preserved: _____ Preservative(s) added/Lot number(s): _____

APPENDIX E—SHELBY TUBE GEOTECHNICAL REPORT



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

10696 Deereco Road
Lutherville Timonium, MD 21093
T 410-825-4131 | F 321-7384

F&R Project Number: 75W0091

December 3, 2018

Tetra Tech Inc.
20251 Century Blvd Suite 200
Germantown, MD 20874

Attention: Mike Martin

Reference: SB-SEMW-10D (30-32')
Various Lab Testing
F&R Lab No: 20180176

Dear Mr. Martin,

Froehling & Robertson, Inc. is pleased to submit the test results for the Shelby Tube we received for various testing including Natural Moisture Content, Grain Size Analysis, Hydrometer Analysis, Atterberg Limits, Organic Content, Specific Gravity, Bulk Density, Hydraulic Conductivity, and Total Organic Carbon. Results for completed testing can be seen below:

Lab Tests	Results	Lab Tests	Results
Natural Moisture	21.70%	Specific Gravity	2.76
USCS Classification	Sandy Lean CLAY (CL)	Bulk Density	163.96 pcf
USDA Classification	Clayey Loam	Hydraulic Conductivity	1.56x10 ⁻⁷ cm/s
Atterberg Limits	LL=30 PL=20 PI=10	Total Organic Carbon	2,070 mg/kg
Organic Content	2.22%		

Should you have any questions concerning this letter report, please contact the undersigned at your earliest convenience. We appreciate the opportunity to serve you.

Sincerely,
FROEHLING & ROBERTSON, INC.

Robert Griesbach
CMT and Lab Manager



Froehling and Robertson
 9596 Deereco Rd
 Lutherville Timonium, MD 21093

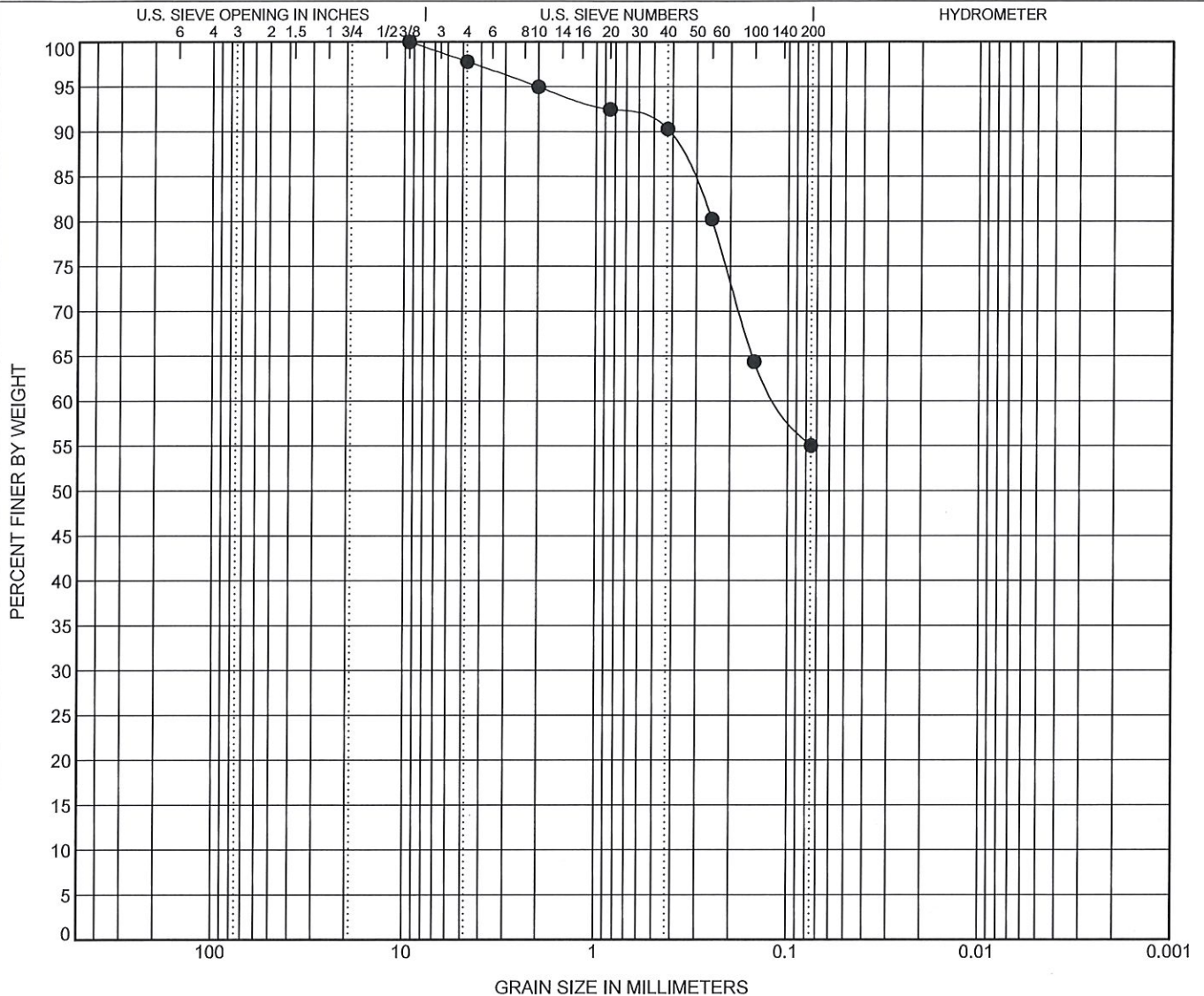
GRAIN SIZE DISTRIBUTION

CLIENT Tetra Tech

PROJECT NAME Tetra Tech- MRC Sample SEMW-10D

PROJECT NUMBER 75W0091

PROJECT LOCATION _____



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● SEMW-10D	32.0	SANDY LEAN CLAY(CL)	30	20	10		

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● SEMW-10D	32.0	9.5	0.108			2.2	42.8	55.0	

GRAIN SIZE - GINT STD US LAB.GDT - 11/20/18 12:10 - F:\PROJECTS\75W5W0091 TETRA TECH- MRC SAMPLE SEMW-10D\LAB\WORK\2018017620180176.GPJ



Froehling and Robertson
 9596 Deereco Rd
 Lutherville Timonium, MD 21093

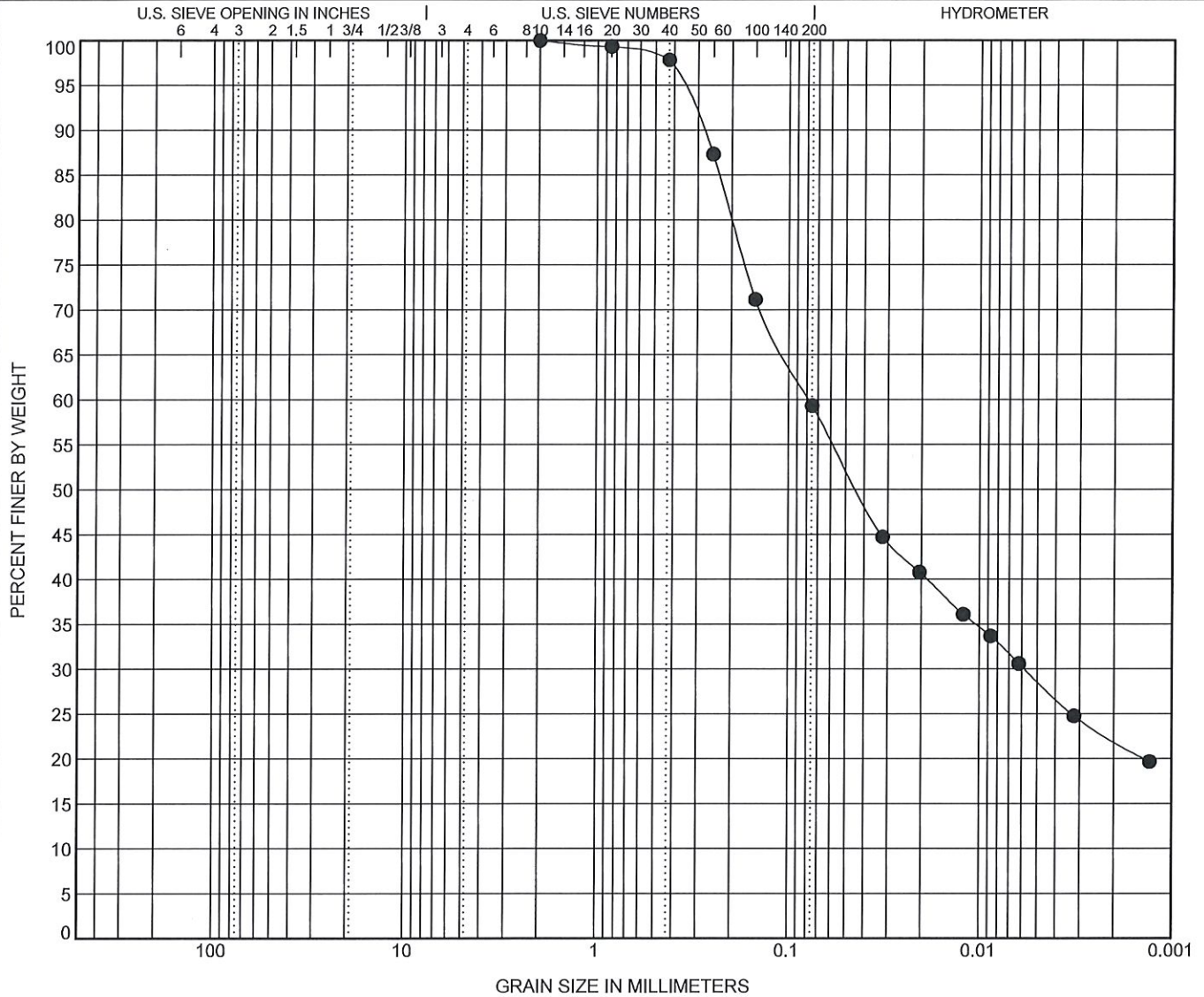
GRAIN SIZE DISTRIBUTION

CLIENT Tetra Tech

PROJECT NAME Tetra Tech- MRC Sample SEMW-10D

PROJECT NUMBER 75W0091

PROJECT LOCATION _____

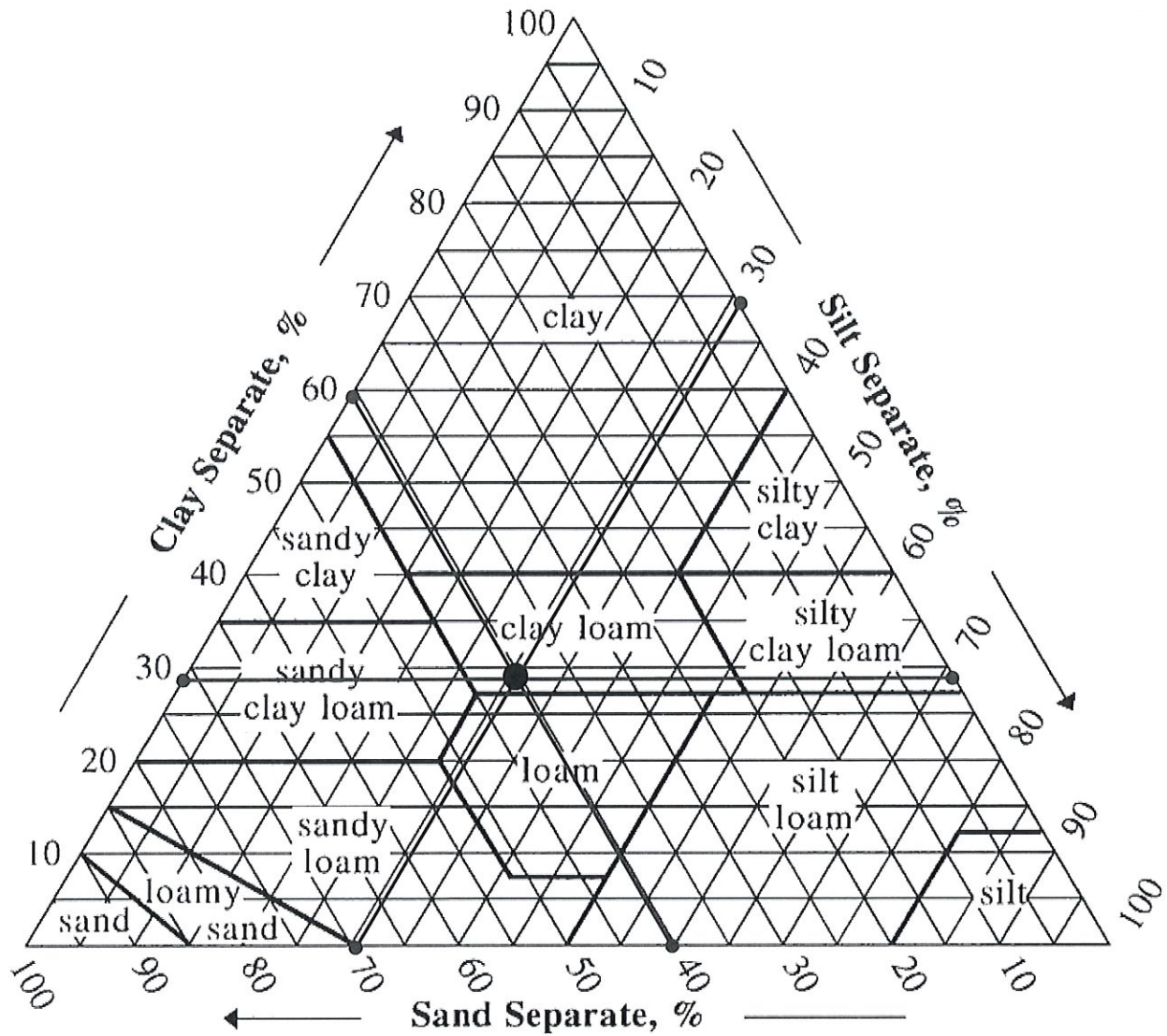


COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

BOREHOLE	DEPTH	Classification	LL	PL	PI	Cc	Cu
● SEMW-10D (H)	32.0						

BOREHOLE	DEPTH	D100	D60	D30	D10	%Gravel	%Sand	%Silt	%Clay
● SEMW-10D (H)	32.0	2	0.078	0.006		0.0	40.7	30.6	28.7

GRAIN SIZE - GINT STD US LAB.GDT - 11/21/18 11:35 - F:\PROJECTS\75W0091\TETRA TECH-MRC SAMPLE SEMW-10D\LABWORK\20180176\20180176.GPJ



% Sand	% Silt	% Clay	USDA Classification
40.7	30.6	28.7	Clay Loam



FROEHLING & ROBERTSON, INC.

Engineering Stability Since 1881

9596 Deereco Rd

Lutherville Timonium, Maryland 21093

T 410.825.4131 | F 410.321.7384

USDA Textural Triangle: SEMW-10D (30'-32')

Client: Tetra Tech

Project: MRC Sample SEMW-10D

F&R Project No. 75W0091

Date: November 21, 2018

THE ROBERT B BALTER COMPANY

HYDRAULIC CONDUCTIVITY, ASTM D5084, Method A

Project: Information not provided
Client: F and R
Project Number: 17203-0
Sample ID: SEMW-10D
Classification: Visual classification: Red, moist, stiff to medium stiff CLAY
 LL= NT PL = NT Passing #200= NT

Date Tested:	11/16/2018	
Average Length	5.362	inches
Average Diameter	2.838	inches
Initial Moisture Content	17.7%	
Initial Dry Density	139.3	pcf
Final B-value (saturation)	>0.95	
Total Back Pressure	84.2	psi
Final Moisture Content	16.5%	
Effective Consolidation Pressure	25.0	psi
Measured Specific Gravity	2.763	
Average Test Temp	25.0	° C
Final Hydraulic Gradient	12.0	
*Measured Hydraulic Conductivity at Test Temperature	1.72×10^{-7}	cm/sec
**Hydraulic Conductivity at Standard Temperature, 20°C	1.56×10^{-7}	cm/sec

Testing Notes:

* Measured hydraulic conductivity at test temperature based on the last four readings in accordance with ASTM D5084-16a, section 9.5.4.1

**Hydraulic Conductivity at Standard Temperature in accordance with ASTM D5084-16a, section 10.3

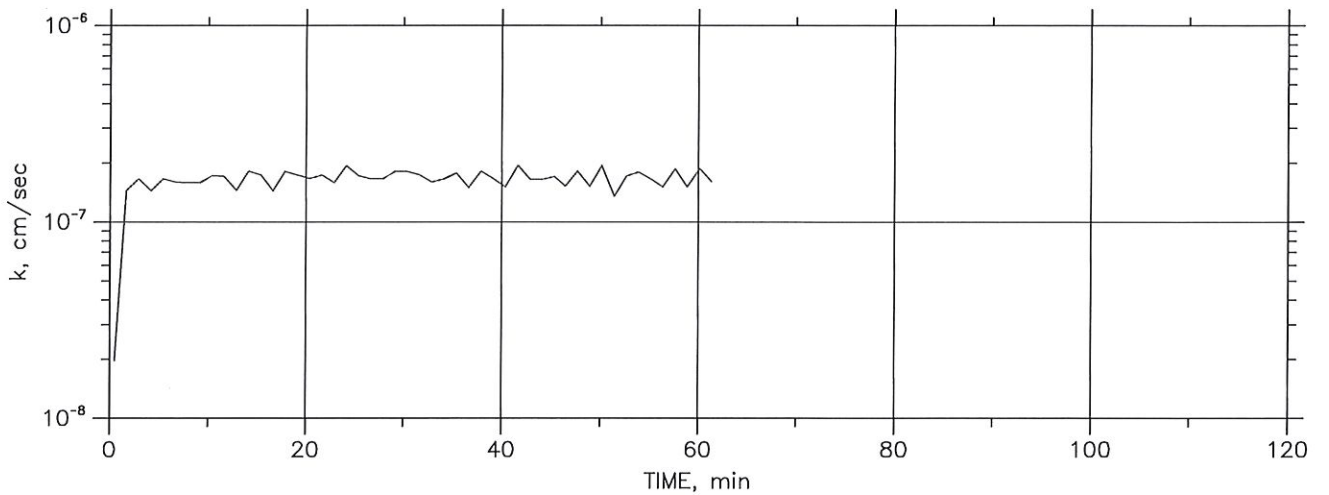
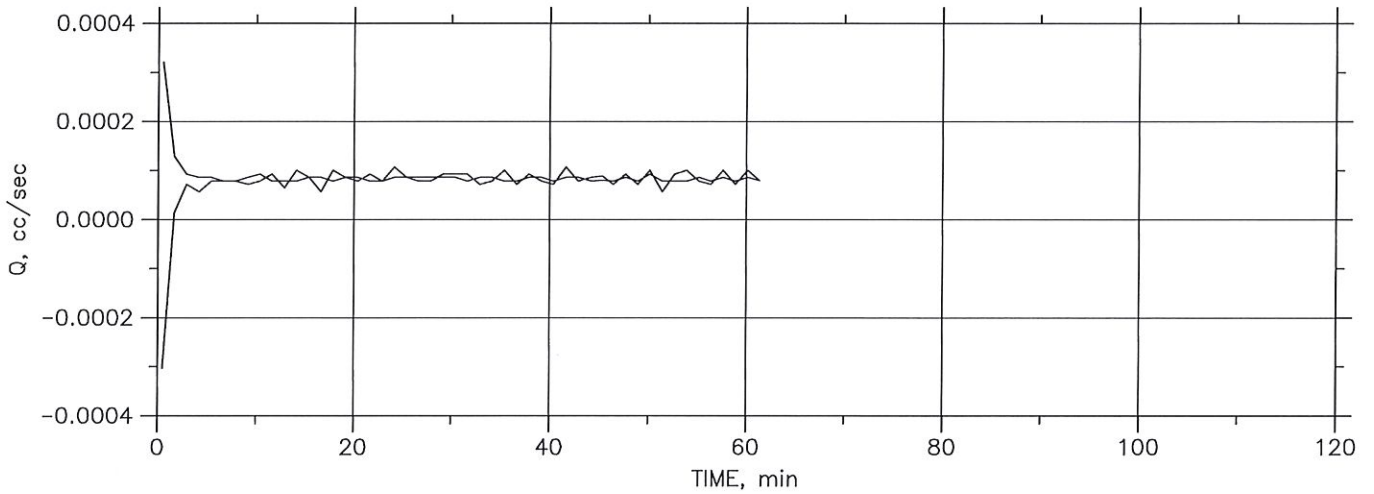
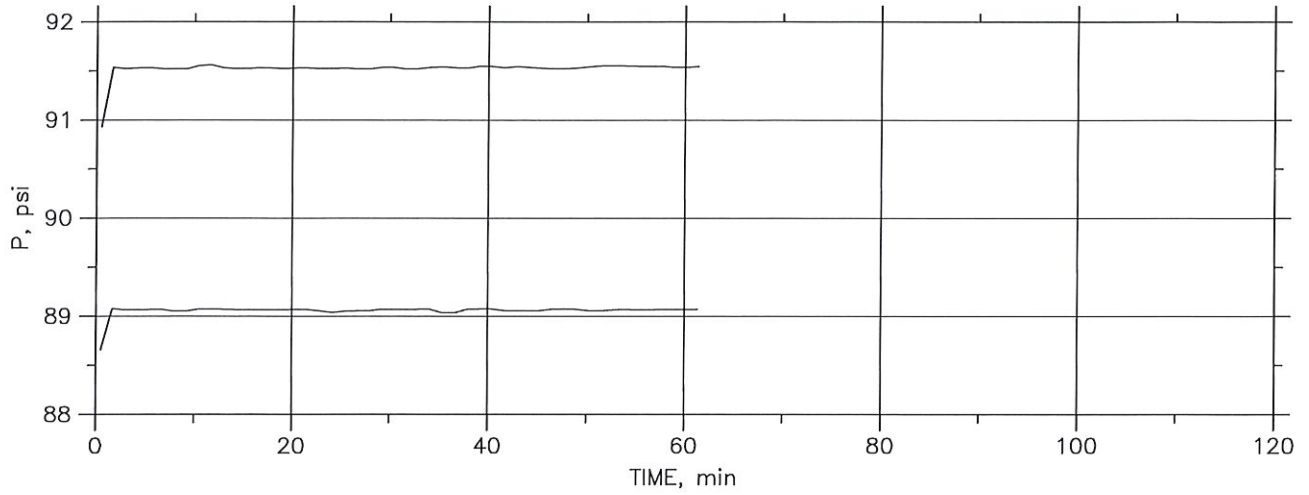
Test performed at multiple increasing gradients. Data presented shows permeation at final gradient that meets criteria specified in section 9.5.4.2

NT = Not Tested

Submitted by: S. Kimani
Laboratory Manager

PERMEABILITY TEST DATA

Step: 12 of 12



Project: Lab Testing for F and R	Location:	Project No.: 16703-0
Boring No.: SEMW-10D	Tested By: S. Kimani	Checked By: K. Crist
Sample No.: Shelby Tube	Test Date: 11/7/18	Depth:
Test No.: 1	Sample Type: Undisturbed	Elevation:
Description: Visual Classification: Red, moist, stiff to medium stiff CLAY		
Remarks: ASTM D5084, Method A		

PERMEABILITY TEST DATA

Project: Lab Testing for F and R
 Boring No.: SEMW-10D
 Sample No.: Shelby Tube
 Test No.: 1

Location:
 Tested By: S. Kimani
 Test Date: 11/7/18
 Sample Type: Undisturbed

Project No.: 16703-0
 Checked By: K. Crist
 Depth:
 Elevation:

Soil Description: Visual Classification: Red, moist, stiff to medium stiff CLAY
 Remarks: ASTM D5084, Method A

Step: 12 of 12

	T min	Pb psi	Pt psi	Qb cc/sec	Qt cc/sec	i	k cm/sec
1	0.50203	90.933	88.659	3.2046E-004	-3.0266E-004	10.999	1.9636E-008
2	1.629	91.537	89.079	1.2872E-004	1.4302E-005	11.969	1.4496E-007
3	2.8789	91.524	89.062	9.2963E-005	7.1510E-005	11.991	1.6641E-007
4	4.1287	91.528	89.062	8.5810E-005	5.7207E-005	12.012	1.4444E-007
5	5.3786	91.532	89.066	8.5809E-005	7.8658E-005	12.012	1.6610E-007
6	6.6285	91.524	89.07	7.8660E-005	7.8660E-005	11.948	1.5974E-007
7	7.8784	91.52	89.05	7.8660E-005	7.8660E-005	12.034	1.5860E-007
8	9.1283	91.52	89.05	8.5810E-005	7.1509E-005	12.034	1.5860E-007
9	10.378	91.553	89.07	9.2961E-005	7.8660E-005	12.098	1.7209E-007
10	11.628	91.565	89.07	7.8658E-005	9.2960E-005	12.163	1.7118E-007
11	12.878	91.532	89.07	7.8661E-005	6.4359E-005	11.991	1.4470E-007
12	14.128	91.524	89.066	7.8660E-005	1.0011E-004	11.969	1.8120E-007
13	15.378	91.524	89.062	8.5810E-005	8.5810E-005	11.991	1.7364E-007
14	16.628	91.532	89.066	8.5809E-005	5.7206E-005	12.012	1.4444E-007
15	17.877	91.528	89.062	7.8660E-005	1.0011E-004	12.012	1.8055E-007
16	19.127	91.524	89.062	8.5810E-005	8.5810E-005	11.991	1.7364E-007
17	20.377	91.528	89.07	8.5809E-005	7.8658E-005	11.969	1.6670E-007
18	21.627	91.528	89.066	7.8661E-005	9.2963E-005	11.991	1.7364E-007
19	22.877	91.524	89.054	7.8660E-005	7.8660E-005	12.034	1.5860E-007
20	24.127	91.524	89.038	8.5810E-005	1.0726E-004	12.12	1.9326E-007
21	25.377	91.528	89.05	8.5809E-005	8.5809E-005	12.077	1.7240E-007
22	26.627	91.52	89.054	8.5810E-005	7.8660E-005	12.012	1.6611E-007
23	27.877	91.52	89.054	8.5810E-005	7.8660E-005	12.012	1.6611E-007
24	29.126	91.537	89.07	8.5810E-005	9.2961E-005	12.012	1.8055E-007
25	30.376	91.537	89.066	8.5809E-005	9.2960E-005	12.034	1.8022E-007
26	31.626	91.52	89.066	7.8661E-005	9.2963E-005	11.948	1.7427E-007
27	32.876	91.524	89.07	8.5809E-005	7.1508E-005	11.948	1.5974E-007
28	34.126	91.537	89.07	8.5812E-005	7.8661E-005	12.012	1.6611E-007
29	35.376	91.541	89.034	7.8660E-005	1.0011E-004	12.227	1.7737E-007
30	36.626	91.532	89.034	7.8658E-005	7.1508E-005	12.184	1.4952E-007
31	37.876	91.528	89.07	8.5810E-005	9.2961E-005	11.969	1.8120E-007
32	39.126	91.549	89.075	8.5810E-005	7.8660E-005	12.055	1.6551E-007
33	40.375	91.545	89.075	7.8660E-005	7.1509E-005	12.034	1.5139E-007
34	41.625	91.532	89.058	8.5809E-005	1.0726E-004	12.055	1.9429E-007
35	42.875	91.545	89.054	8.5810E-005	7.8660E-005	12.141	1.6434E-007
36	44.125	91.537	89.054	7.8661E-005	8.5812E-005	12.098	1.6493E-007
37	45.252	91.528	89.058	8.0113E-005	8.9014E-005	12.034	1.7050E-007
38	46.379	91.524	89.07	7.8660E-005	7.1509E-005	11.948	1.5248E-007
39	47.629	91.524	89.075	8.5810E-005	9.2961E-005	11.926	1.8185E-007
40	48.879	91.528	89.07	7.8660E-005	7.1509E-005	11.969	1.5221E-007
41	50.129	91.541	89.058	9.2961E-005	1.0011E-004	12.098	1.9361E-007
42	51.379	91.553	89.054	7.8658E-005	5.7206E-005	12.184	1.3528E-007
43	52.628	91.553	89.062	7.8661E-005	9.2963E-005	12.141	1.7149E-007
44	53.878	91.553	89.07	7.8660E-005	1.0011E-004	12.098	1.7926E-007
45	55.128	91.549	89.062	8.5810E-005	7.8660E-005	12.12	1.6463E-007
46	56.378	91.545	89.062	7.8658E-005	7.1508E-005	12.098	1.5058E-007
47	57.628	91.549	89.07	8.5810E-005	1.0011E-004	12.077	1.8677E-007
48	58.878	91.537	89.066	7.8658E-005	7.1508E-005	12.034	1.5139E-007
49	60.128	91.537	89.066	8.5812E-005	1.0011E-004	12.034	1.8744E-007
50	61.367	91.545	89.07	7.9977E-005	7.9977E-005	12.055	1.6097E-007